DOBERMANN

The Finnish Dobermann Club's BREEDING PROGRAMME

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I INTRODUCTION

A breed specific goal-oriented programme for is a necessity when a breed club is applying for the approval of the Finnish Kennel Club for any exceptional measures to guide breeding.

The most common of this type of measures are different programmes or regulations which aim to help the breed club prevent hereditary diseases spreading within a given breed (the program in Finland is called: PEVISA). Formulating and applying such programmes and guidelines for a given breed is well advised much for this and many other reasons.

This programme for breeding replaces the previous programme for breeding accepted in 1992 by the Finnish Doberman Club and the Finnish Kennel Club.

The aim of a breed-specific programme is to gather together all information of importance on the breed itself, its history and all the background information required by breeders when planning and carrying out breeding. With the help of such a programme, the development of a breed can be guided with determination and over a long period of time.

Familiarizing oneself to and knowing the programme is most important to the breeders and devotees of the breed. The programme should also enable all other interested parties outside the breed club to obtain information on the status of the breed, the breed organisation and its ability to take care of the tasks it is trusted with.

By breeding, we mean an improvement in the genetic quality of a specific breed. This improvement is achieved via reliable information on which a breeder can base selection and planned matings. The improvement in the quality thus results solely from genetic factors.

The feeding, type of care or training may improve animals' physical status but this is not breeding; improvements are obtained and are not hereditary.

This breed-specific programme for breeding should provide answers to the following questions. Where we are now = SITUATIONAL ANALYSIS? What we are aiming at = THE BREED SPECIFIC GOALS FOR BREEDING? How we are planning to get there = THE EXECUTIVE GUIDELINES OF THIS PROGRAMME? What rules and regulations we must follow = THE BREED SPECIFIC RULES AND REGULATIONS FOR BREEDING (PEVISA) and BREED SPECIFIC GUIDELINES? This programme aims to demonstrate the goals that Doberman breeding should strive for. This programme is not meant to last for eternity. It must be revised and its' emphases altered when necessary.

II BREED SPECIFIC GOALS FOR BREEDING

II A ANATOMY

II A 1 Breed standard

The standard of the Dobermann breed is the only internationally defined guideline for breeding. Following the breed standard is the most important guideline for all national Dobermann Clubs worldwide when planning and setting guidelines for breeding. Depending on the situation in each individual country its central organisation must make the choices and define the focuses for breeding at each given period of time.

The breed standards usually date from the times when a given breed was being developed. This is why their main field of interest is often on the anatomy of the breed. The same goes for the standard of the Dobermann, which - besides anatomy - includes only a few comments on the required temperament of the dog. The breed standards rarely discuss the health issues related to the breed. However nowadays health issues are far more important than both structure (anatomy) and character of a given breed. Outstanding structure or temperament is of no comfort if the dog is sick.

The breed standards are not meant to be eternal either, they are meant to give guidelines for breeding and to be altered when necessary.

The actual standard for the Dobermann has been approved by the FCI on February 14th 1994.

FCI Standard No 143 / 14.02.1994 / D
DOBERMANN

Origin: Germany

Utilization: Companion, protection and working dog

Classification FCI: Group 2: Pinscher and Schnauzer type-Molossian type and Swiss Mountain and Cattle Dogs. Section 1 Pinscher and Schnauzer type. With working trial.

Brief historical summary

The Dobermann is the only German breed which bears the name of its original breeder, Friedrich Louis Dobermann (02.01.1834 – 09.06.1894).

He was believed to be a tax collector, offal abbatoir manager (knacker) and a part time dog catcher, legally able to catch all stray dogs. He bred with animals from this reservoir that were particularly sharp. The so called "butcher's dogs" which were already considered a relatively pure breed at that time, played a most important role in the origination of the Dobermann breed. These dogs were an early type of Rottweiler, mixed with a type of shepherd which existed in "Thüringen" as a black dog with rust red markings. Herr Dobermann bred with this mixture of dogs in the 1870's. Thus he obtained "his breed": not only alert, but highly protective working and housedogs. They were often used as guard and police dogs. Their extensive use in police work led to the nickname "Gendarme dog". They were used in hunting to control large vermin. In these circumstances it was a matter of course that the Dobermann was recognized officially as a Police Dog by the beginning of the century.

The Dobermann breed requires a medium sized, powerful, muscular dog. Despite his substance he shall be elegant and noble, which will be evident in his body line. He must be exceptionally suitable as a companion, protection and working dog and also as a family dog.

General appearance

The Dobermann is of medium size, strong and muscularly built. Through the elegant lines of its body, its proud stature, and its expression of determination, it conforms to the ideal picture of dog.

Important proportions

The body of the Dobermann appears to be almost square, particularly in males. The length of the body measured from the point of the shoulder to the point of the buttock shall not be more than 5% longer than the height from the withers to the ground in males, and 10% in females.

Behaviour/temperament

The disposition of the Dobermann is friendly and calm; very devoted to the family it loves children. Medium temperament and medium sharpness (alertness) is desired. A medium threshold of irritation is required with a good contact to the owner. Easy to train, the Dobermann enjoys working, and shall have good working ability, courage and hardness. The particular values of self confidence and intrepidness are requied, and also adaptability and attention to fit the social environment.

Head

Cranial region: Strong and in proportion to the body. Seen from the top the head is shaped in the form of a blunt wedge. Viewed form the front the crown line shall be almost level and not dropping off to the ears. The muzzle line extends almost straight to the top line of the skull which falls, gently rounded, into the neck line. The superciliary ridge is well developed without protruding. The forehead furrow is still visible. The occiput shall not be conspicuous. Seen from the front and the top the sides of the head must not bulge. The slight bulge between the rear of the upper jawbone and the cheek bone shall be in harmony with the total length of the head. The head muscles shall be well developed.
Stop: Shall be slight but visibly developed.

Facial region

Nose: Nostrils well developed, more broad than round, with large openings without overall protrusion. Black – on black dogs; on brown dogs, corresponding lighter shades.
Muzzle: The muzzle must be in the right proportion with the upper head and must be strongly developed. The muzzle shall have depth. The mouth opening shall be wide, reaching to the molars. A good muzzle width must also be present on the upper and lower incisor area.
Flews: They shall be tight and lie close to the jaw which will ensure a tight closure of the mouth. The pigment of the gum to be dark; on brown dogs a corresponding lighter shade.
Jaws/Teeth: Powerful broad upper and under jaw, scissor bite, 42 teeth correctly placed and normal size.
Eyes: Middle sized, oval and dark in colour. Lighter shades are permitted for brown dogs. Close lying eyelids. Eyelids shall be covered with hair. Baldness around the rim of the eye is highly undesirable.
Ears: The ear, which is set high, is carried erect and cropped to a length in proportion to the head. In a country where cropping is not permitted the uncropped ear is equally recognized. (Medium size preferred and with the front edge lying close to the cheeks).

Neck

The neck must have a good length and be in proportion to the body and the head. It is dry and muscular. Its outline rises gradually and is softly curved. Its carriage is upright and shows much nobility.

Body
Withers: Shall be pronounced in height and length, especially in males and thereby determine the slope of the topline rising from the croup to the withers.
Back: Short and tight, of good width and well muscled.
Loin: Of good width and well muscled. The bitch can be slightly longer in loin because she requires space for suckling.
Croup: It shall fall slightly, hardly perceptible from sacrum to the root of the tail, and appears well rounded, being neither straight nor noticeably sloping, of good width and well muscled.
Chest: Length and depth of chest must be in the right proportion to the body length. The depth with slightly arched ribs should be approximately 50% the height of the dog at the withers. The chest has got a good width with especially well developed forechest.
Underline and belly: From the bottom of the breastbone to the pelvis the underline is noticeably tucked up.

Tail
It is high set and docked short whereby approximately two tail vertebrae remain visible. In countries where docking is legally not permitted the tail may remain natural.

Limbs, forequarters
General: The front legs as seen from all sides are almost straight, vertical to the ground and strongly developed.
Shoulders: The shoulder-blade lies close against the chest, and both sides of the shoulder-blade edge are well muscled and reach over the top of the thoracic vertebra, slanting as much as possible and well set back. The angle to the horizontal is approximately 50%.
Upper arm: Good length, well muscled, the angle to the shoulder-blade is approximately 105° to 110°.
Elbow: Close in, not turned out.
Lower arm: Strong and straight. Well muscled. Length in harmony with the whole body.
Carpus (Carpal joint): Strong.
Metacarpus (Pastern): Bones strong. Straight seen from the front. Seen from the side, only slightly sloping, maximum 10°.
Forefeet: The feet are short and tight. The toes are arched towards the top (cat like). Nails short and black.

Limbs, hindquarters
General: Seen from the back the Dobermann looks, because of his well developed pelvic muscles in hips and croup, wide and rounded off. The muscles running from the pelvic towards the upper and lower thigh result in good width development, as well as in the upper thigh area, in the knee joint area and at the lower thigh. The strong hind legs are straight and stand parallel.
Upper thigh: Good length and width, well muscled. Good angulation to the hip joint. Angulation to the horizontal approximately between 80° to 85°.
Knee: The knee joint is strong and is formed by the upper and lower thigh as well as the knee cap. The knee angulation is approximately 130°.
Lower thigh: Medium length and in harmony with the total length of the hindquarter.
Hock joint: Medium strength and parallel. The lower thigh bone is joined to the metatarsal at the hock joint (angle about 140°).
Metatarsus (Rear pastern): It is short and stands vertical to the ground.
Hind feet: Like the front feet, the toes of the back feet are short, arched and closed. Nails are short and black.

Gait/movement
The gait is of special importance to both the working ability as well as the exterior appearance. The gait is elastic, elegant, agile, free and ground covering. The front legs reach out as far as possible. The hindquarter gives far reaching and necessary elastic drive. The front leg of one side and back leg of the other side move forward at the same time. There should be good stability of the back, the ligaments and the joints.

Skin
The skin fits closely all over and is of good pigment.

Coat
Hair: The hair is short, hard and thick. It lies tight and smooth and is equally distributed over the whole surface. Undercoat is not allowed.
Colour: The colour is black or brown, with rust red clearly defined and clean markings. Markings on the muzzle, as a spot on the cheeks and the top of the eyebrow, on the throat, two spots on the forechest, on the metacarpus, metatarsus and feet, on the inside of the back thigh, on the arms and below the tail.

Height / Weight

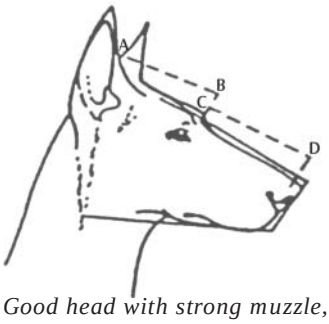
Height at withers: males 68-72 cm; females 63-68 cm.
Medium size desirable.
Weight: males about 40-45 kg; females about 32-35 kg.

Faults

Any departure from the foregoing points should be considered a fault and the seriousness with which the fault should be regarded should be in exact proportion to its degree.
General Appearance: Reversal of sexual impression; little substance; too light; too heavy; too leggy; weak bones.
Head: Too heavy, too narrow, too short, too long, too much or too little stop; Roman nose, bad slope of the top line of the skull; weak underjaw; round or slit eyes; light eye; cheeks too heavy; loose flews; eyes too open or too deepset; ear set too high or too low; open mouth angle.
Neck: Slightly short; too short; loose skin around the throat; dewlap; too long (not in harmony); ewe neck.
Body: Back not tight; sloping croup; sway back; roach back; insufficient or too much spring of rib; insufficient depth or width of chest; back too long overall; too little forechest; tail set too high or too low; too little or too much tuck up.
Limbs: Too little or too much angulation front or hindquarters; loose elbow; deviations from the standard position and length of bones and joints; feet too close together or too wide apart; cow-hocks, spread hocks, close hocks; open or soft paws, crooked toes; pale nails.
Coat: Markings too light or not sharply defined; smudged markings; mask too dark; big black spot on the legs; chest markings hardly visible or too large; hair long, soft, curly or dull. Thin coat; bald patches; large tufts of hair particularly on the body; visible undercoat.
Character: Inadequate self confidence; temperament too high; sharpness too high; too high or too low a threshold of irritation.
Size: Deviation of size up to two centimetres from the standard should result in a lowering of the quality grading.
Gait: Wobbly; restricted or stiff gait; pacing.

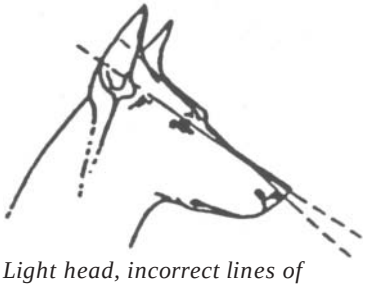
Disqualifying faults

General: Pronounced reversal of sexual impressions.
Eyes: Yellow eyes (bird of prey eye); wall eye.
Dentition: Overshot; level bite; undershot; missing teeth.
Coat: White spots; pronounced long and wavy hair; pronounced thin coat or large bald patches.
Character: Fearful, nervous and aggressive animals.
Size: Dogs which deviate more than two centimetres over or under the standard.
Any dog clearly showing physical or behavioural abnormalities shall be disqualified.
N.B.: Male animals should have two apparently normal testicles fully descended into the scrotum.



Good head with strong muzzle, correct proportions and lines.

Light head, incorrect lines of skull.


Light head, incorrect lines of skull.

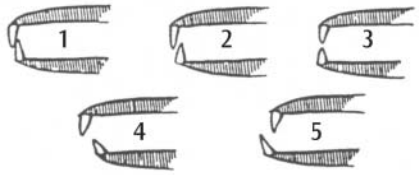
Light muzzle, missing under jaw.

II A 2 Guidelines for interpretation of breed standard No 143/ 14.2.1994

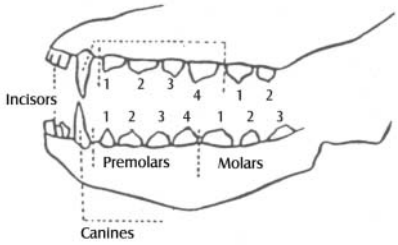
The main concern when judging a Dobermann in the show ring should be that this is a WORKING BREED. Faults that may have a negative effect on the working abilities should be penalised more severely than faults that have purely to do with external appearance.

General appearance

In general appearance one word tells a lot: medium sized means exactly what it expresses and the height 63-68cm for females and 68-72cm for males is exact in centimetres. The growth in size is a general problem amongst various breeds and so it is also for the Dobermann. An exceeding by 2cm or falling short of by 2 cm from the mentioned standard is accepted. For such an individual to be given EXC (excellent) it must be ideal in proportions and not having any major faults.



1 correct scissor bite
2 loose bite
3 even bite
4 overshot bite
5 undershot bite



Dobermann has 42 normal size teeth, which are divided in incisors, canines, premolars and molars.

A dog that is dry, elegant, elastic and muscular is certainly more efficient in its work than an oversized or excessively large dog. We must also remember that a good working dog is certainly different from a beautiful to watch, light boned "toy dog".

The Finnish Dobermann Club requires consideration when judging dogs that deviate from the standard by their size or other features. Sometimes even lowering the quality grading might be appropriate.

Head

When judging the head we would like to see judges placing higher dogs whose head viewed from the side as well as from above, resembles a long blunt wedge. The under jaw must be so strong that it forms its own line crossing with the upper headlines. We can see in show ring dogs who's under jaw seems to disappear under the lips or even within the upper jaw. This type of head is not in accordance to the standard and such dogs should not be rewarded.

Penalising faults in bite or dentition has in our opinion kept the Dobermann quite healthy on this part. We do not recommend the German type of penalising with a quality grade 0 when and if there is even one tooth missing. For missing teeth we recommend a lowering of quality grading by one grade for each missing tooth. Clear overshot or undershot bite can be judged even more severely. A case of a near even shot bite (orthognathism) does not deserve an "excellent". If the dog is otherwise of excellent quality is a quality grading 1 EH/VG (Ex/vg) still understandable.

Light coloured eyes may lower the quality grading. If a black-coated dog has very light eyes they disturb the general appearance. The eyes of a brown-coated dog are usually brown, darker or lighter in colour but sometimes we can see eyes that are more yellow in shade and then we must consider the impression they give. The eyes may also be disturbing if they are protruding or if they are very narrow. In all of these cases the impact on the general appearance must be considered.

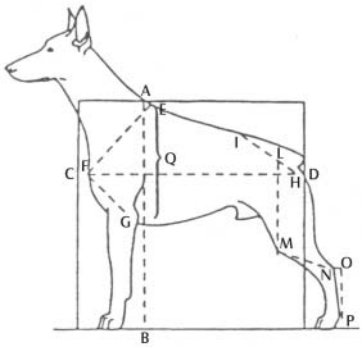
Penalising for the setting of the ears in quality judging is justifiable only in extreme cases. When placing dogs aestheticism can be of importance in judging bearing in mind that a little scattered set ears do not keep a dog from working. We would appreciate mentioning the settling of uncropped ears in the judging.

Neck

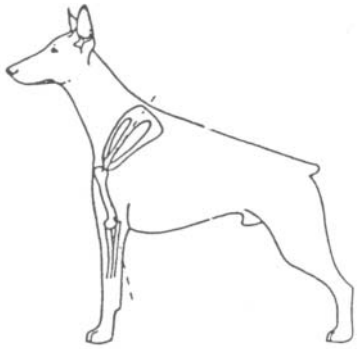
The word dry refers to the breed on the whole. A Dobermann should in all its features be dry as opposing to loose and puffy. We do not want any excessive skin hanging underneath the jaw nor on the neck. The position of the neck is also of importance. We want to see it stretching diagonally forward at an angle of approx. 45 degrees. A vertically erected neck is often related to other problems in the dog's structure but it can as such already lower the quality grading.

Body

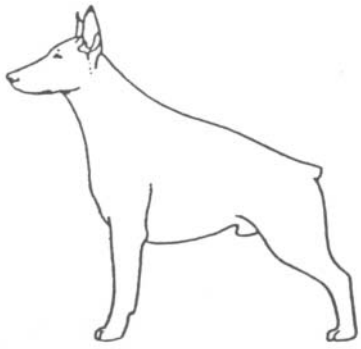
Every dog that moves well has a slightly sloping croup. The croup being a direct linear continuum of the back has to be considered a clear fault as well as a vertically set and often too short pelvis.



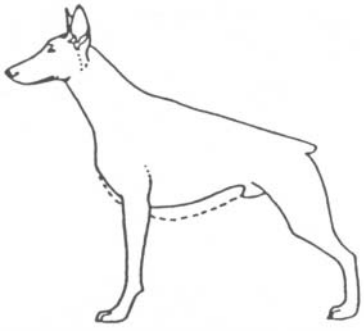
Square body, good shoulder and knee angulation, deep chest, correct croup.



Straight shoulder often gives beautiful topline, but effect in movement is negative.

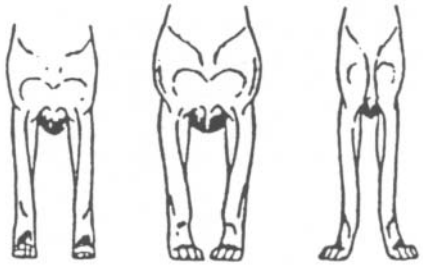


Too short and too heavy type is undesireable.

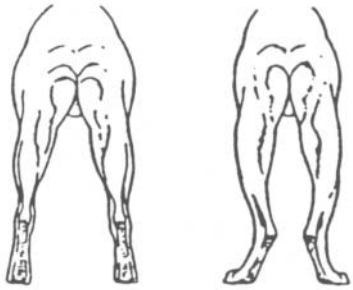


Too light and 'elegant' body, inadequate depth of chest.

Withers are on the vertical the highest point of the dog's back. The spinous processes of the dorsal vertebras form the basis where the muscles are attached and thus one can say that if this part is not clearly visible it implies that the muscles of the front cannot be, as they should. Looking at the pictures hereby one can easily understand how and why the shoulders, limbs and the general proportions of the body should be as described. Note that the artist has exaggerated a little the withers and the top line in general but otherwise the picture serves well its purpose and aim.



L-R: Correct stand, front legs turning in, front legs turning out.



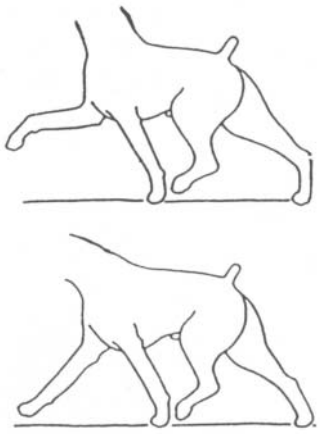
L-R: Correct stand, cow hocks.

Limbs, forequarters

One must notice the straightness of the forequarters. The carpus must be flexible enabling steady movement; thus, on a Dobermann, a little flexible angle is permitted here. Striving for straightness of the forequarters the genes have at times played tricks on the breeders and one can see dogs whose carpus seems even to bend outwards. This, as well as pasterns angulated in a way to give an impression of softness, are faults to be noticed.

Limbs, hindquarters

We hope to see long, strong thigh muscles on a Dobermann and the thigh to be wide. Here is where comes the power to move forward. Good angulations in the knees linked to thigh and shinbones of equal length form a harmonious ensemble. If the shinbone (tibia) is longer than the thighbone, the hind legs will reach far beyond the body in standing. We may then see an exaggerated top line or a careful judge may remark on exaggerated angulations - the reason for such an appearance being really in the non-even proportion of the mentioned bones. If the shinbones (tibiae) are considerably shorter than the thighbones, we will see straighter angulations of the hock and we can speak of poor angulations in the rear. Look at the explanatory pictures hereby.



Correct angulation gives good gait.

Gait

A healthy working dog's movement must be quick (swift), lasting and powerful at the same time its movement must be breed specific and express easiness. Gait should be the decisive factor when choosing apart the dogs that shall be granted an excellent and when placing such dogs.

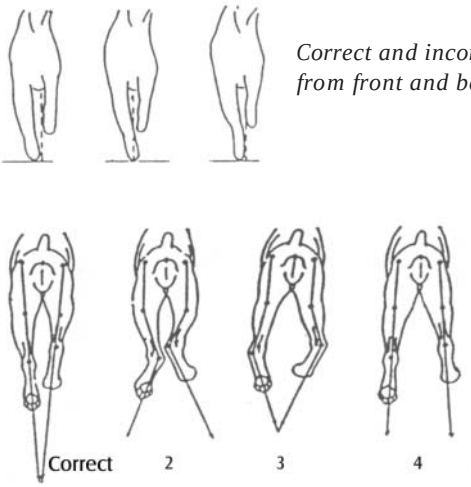
Basics of sound gait

- Long neck, when in movement erected in forward position, is the basis of attachment to the long muscles of the forequarters. When the dog tends its neck forward it also places the body's centre of gravity forward thus enabling steps of maximum length.
- The carpus acts as a shock reducer and it should be angulated just enough to be differentiated from the line formed by the bones.
- The 30 degree angle in the pelvis is required for two reasons:

1) Because of it the hind leg can swing further back than on a dog that has a more erected pelvis. Most of the power comes from the leg when thrust backwards and it is thus easy to understand why we want it to be able to reach as far as possible.

2) A dog with such a pelvis can also have muscles reaching from the pelvis to the hock that are longer; these are the muscles that give the power to the movement.

- The angle of the shoulder and the upper arm should be as close to 90 degrees as possible. This in turn would then enable a maximum length in the step of fore legs. If the shoulder is more erected in angle it leads to noticeably shorter step.
- Only a specimen angulated as described above is able to move at maximum power. If the hindquarters are more angulated than the forequarters, there will be problems that the dog will attempt to correct but this will show in its movement.



Correct and incorrect gait from front and behind.

- For the forelegs to remain in air the same time during the push by the hind legs, a dog that has too erected shoulders will lift its forelegs elegantly but inefficiently high. While doing this remedial function the dog uses muscles unnecessarily and it will have a negative effect on lasting movement.
- In the same way a dog can waist energy on other remedial functions. An ideal gait and trajectory of the limbs would be one where the limbs, both front and rear, would move in trot as closely as possible on as direct line as possible in quick step.
- If a dog moves, looking from front and rear, its limbs being in direct line to one and other, but when observing from the ground level, largely apart, it is not a dog with sound physique. It wastes energy to this stray stepping. On the other hand one must remember to observe if one is really able to draw a direct line from the shoulder to the ball of the foot (thenar). If there are strange angles in that line, one must look elsewhere for weaknesses in the structure of the dog.

Coat

If there is to be found 2-3 white hairs on the toes or on the chest, we wish the dog to be granted no more than good or satisfactory, and if there is more white hair the dog should be given not accepted. If the markings on the chest are too light in colour, the dog's grading should also be lowered by one grade. Unclean (sooty) markings must be considered according to each case but never to be left unnoticed.

Sources: ALÉN, Keijo: The breed standard and some remarks on judging, The Dobermann magazine 3/1990 (Finland).
The breed standard for the Dobermann 14.2.1994 and remarks by the Finnish Dobermann Club.

II B THE CHARACTER

II B 1 The breed specific standard of the character

The breed specific standard gives quite an overall statement on the character of the Dobermann as breed standards often do. According to the standard, the general appearance of the dog is calm, friendly, attached to its family and kind towards children. It must have a lively temperament and medium sharpness. The degree of irritability must be of medium level. The capability to function, dirigibility, courage and hardness are desired features. Self-assurance and fearlessness must be given special attention.

Faults mentioned in the breed standard can be identified: lack of self assurance, too high temperament, excessive sharpness, too high or too low level of irritation. Faults that could lead to disqualification include cowardice, nervousness and aggressiveness.

II B 2 Guidelines for interpretation of the character

The Finnish Dobermann Club Breeding Committee has interpreted the desired character of the Dobermann according to the (Finnish) character test acknowledged by the Finnish Working Dogs Association (Suomen palveluskoiraliitto Ry) as follows:

CAPABILITY TO FUNCTION	+ 2 high
SHARPNESS / tendency to aggressive behaviour	
	+ 3 moderate without post-attack aggression
	+ 1 small without post-attack aggression
DESIRE FOR DEFENCE ACTION	+ 3 moderate, controlled
DESIRE TO FIGHT	+ 3 high
	+ 2 moderate
NERVE CONSTRUCTION	+ 3 calm and self-assured
	+ 2 moderately calm
TEMPERAMENT	+ 3 high
	+ 2 moderately high
MENTAL HARDNESS	+ 3 moderate
ACCESSIBILITY	+ 3 accessible, kind, open
GUN SHOT	+ secure to shots
	+ unfamiliar to shots
	+ moderate reactiveness to shooting

II C WORKING ABILITIES

According to the latest breed standard, the Dobermann is a companion (family), protection and working dog. The Dobermann is the only breed that has originally been bred solely for protection work. Many other fields where the Doberman can be used have developed, however. For example, in Finland there are several types of working trials: search, tracking, messenger dog, guide dog, protection, there are also therapy dogs, obedience trials, and agility, family dogs, rescue dogs, a handicapped person's assistance dog, etc.

The use of the Dobermann in the above fields must be supported by efficiency.

The objective is to increase activity inall aspects of trials. At least 20% of the overall population of dogs should be presented in trials.

II D HEALTH

II D 1 Diseases which are serious, leading easily to death

Liver disease,chronic active hepatitis (CAH), Dobermann hepatitis (DH)

CAH/DH is included in the Finnish Kennel Club's program to control inherited diseases, PEVISA. CAH/DH is a very serious problem which, when with clinical symptoms, always has a fatal outcome in Dobermanns. The cause and mode of inheritance are unknown. It is most probable that yet unknown environmental factors contribute to the progression of the disease from the subclinical to the clinical stages. However, many Dobermanns may have DH without showing clinical symptoms (subclinical cases), hopefully never progressing to the point of severe sufferance.

It is possible to suspect DH if the laboratory value of ALT (serum alanine aminotransferase) is consistently above the normal limits. The final diagnosis can only be made after examining the liver biopsy. The typical signs can include excessive drinking (polydipsia), excessive urination (polyuria), loss of appetite, weight loss, jaundice (icterus) and accumulation of fluid within the abdominal cavity (ascites).

It is our goal in Finland that 25% of our population should have serum ALT levels examined in one laboratory to have comparable values (Vetlab, Tampere, Finland), and at least one value is checked when the dog is over 6 years.

Heart Disease, dilated Cardiomyopathy (DCM)

DCM in Dobermanns is a myocardial (heart muscle) illness which almost always leads to quick death. There is no effective treatment and there are no reliable diagnostic methods. There is a possibility that in a short time before the clinical signs can be seen to discover changes with a Holter test (24 hour ECG) and sonographic readings. Normally there are no murmurs. This type of cardiomyopathy can be found in Dobermanns all over the Europe as well as in the USA. The typical symptoms include sudden fainting or weakness, sudden coughing, tiredness and general complacency. At the moment, medications are only available to ease the symptoms of the disease but not to slow down its progression.

Volvulus/torsion of the stomach (GDV, gastic dilatation and volvulus)

A sudden collection of gas in a dilated ventricle can lead within 1-6 hours to a volvulus/torsion of the stomach. This is a combination of an anatomical and environmental problem which needs emergency veterinary care. It is known that the Dobermann is a typical breed to suffer from this dilation/volvulus complex. Excessive exercise closely connected to feeding, unsuitable food or continuous changing of the diet, and many other not yet well known factors contribute to the progression of this complex disease.

When the ventricle dilates, the animal starts to feel pain. It is very typical that the animal starts to drink heavily. The gas and the liquid materials make the situation worse. The animal then becomes restless, starts to pant, tries to vomit, salivate or may stand stiffly with a partly lowered head. It is possible to find swelling at the end of the rib cage or at the cranial part of the abdomen as the ventricle is filling up and pushing away from behind the ribs.

Abdominal pressure is relieved by passing a tube into the stomach. If that is not successful an emergency operation is needed. There is a great risk of recurrence of the dilatation/volvulus in the previously affected patients.

II D 2 Serious diseases which can be treated/or successfully monitored

v Willebrandt disease (tendency for excessive bleeding)

V. Willebrandt disease is a hereditary bleeding disease. There are three types of this disease. The type 1 that is most relevant to Dobermanns is characterized by the production of a reduced amount of normal v.Willebrandt factor even with homogenously affected individual. In this instance with a still existing normal factor, the occurrence of abnormal bleeding would be low.

Sometimes, however, in a worse case scenario, the dog might die because of excessive bleeding.

This disease is the first one among Dobermanns' problems which could be detected via DNA testing. V. Willebrandt disease is quite common in Dobermanns in America and the situation seems to be nearly the same in Europe. With increased DNA testing, we will know more about its actual prevalence. There are three laboratories in the world which conduct this test (Finnzymes/Finland, Laboklin/Germany, Vetgen/USA, 2004).

Wobbler (instability of the cervical vertebrae)

In addition to the Dobermann, Rottweilers and Great Danes are typical breeds for this disease. There are no reliable diagnostic methods since changes seen in x-rays and clinical symptoms are not completely parallel. A proper examination with normal and contrast x-ray is always needed for the diagnosis. The symptoms include pain, limping, movement disturbances of the hind legs, and paralysis. Wobbler is a disease that causes the most problems in dogs that are working. The extent of the problem within the population is at the moment unknown.

According to research in the USA and Europe, the disease could be quite common in the both populations.

Other problems with the vertebrae

Spondylosis (bridging of vertebrae) and cauda equina syndrome (the nerve root compression at the lumbal area) cause pain and neurological problems in Dobermanns.

II D 3 Less serious diseases

Hip dysplasia (HD)

HD is included in the Finnish Kennel Club's program to control inherited diseases, PEVISA. The extent of this disease in Finland affects around 20% of the Dobermann population but since x-rays are a primary way for diagnosis, environmental factors (feeding, overweight during growth period, wrong physical excercise, trauma and diseases) may skew the actual statistics. One must also keep into consideration the influence of other environmental factors such as the techniques of taking x-rays and the subjectivity of evaluating the disease. The problem will never be entirely eradicated from the breed since those affected do not necessarily give the big picture of genetic structures. Dysplasia is inherited polygenetically, many gene couples will affect the development of the hips. The seriousness of dysplasia within the breed can be controlled via monitoring through x-rays and with actions on breeding. Individual results may not help breeding by themselves. The best method to combat the problem would be to x-ray the hips of those dogs being used for breeding as well as their relatives. This way it is possible to count statistical indexes for breeding individuals. The breeding value of an individual dog is affected addition to its own status by the results of its offsprings, sibling and parents' hip results. Hip dysplasia very rarely causes clinical problems in Dobermans. Abnormal loosening of the joint as a result of the incompatibility between the acetabulum and femoral head can lead to arthroses. The signs of arthroses include limping and stiffness/difficulty getting up following hard exercise.

Our goal has been set that 35% of the population should be x-rayed for hip dysplasia. If this target is reached, the percentage of individuals affected should be lowered to 13% of the population. Cases designated as D and E should be limited to only rare occasions.

Eye disease, PHTVL/PHPV Persistent Hyperplastic Tunica Vasculosa Lentis and Persistent Hyperplastic Primary Vitreous

Included in the Finnish Kennel Club's program to control inherited diseases, PEVISA. The extent and the seriousness of this disease varies between breeds. The prevalence rate of Dobermanns is around 35%. The disease occurs due to the presence of blood vessels in the backside of the lens remaining from fetal development. The blood vessels that are supplying the lens normally disappear or reabsorb before birth. In affected cases, the reabsorption mechanism fails and the existing tissue mass can be seen during an eye examination. The levels of severity of the disease are described as follows:

Grade 1: This is the mildest form in which the blood vessels can be seen only as points in the back surface of the lens. The changes will not go worse throughout the dog's life.

Grades 2-5: If there are more remnants of the blood vessels, an irritation will develop and the lens' back capsule will react via increasing opacity. The lens itself can also be deformed because of the disease.

Grade 6: The dog will already be blind because of the severity of the disease.

Grade 1 is the mildest form where only tiny spots are seen on the back capsule of the lens. The spots are very difficult to see and a great skill and special equipment is needed. Some veterinarians argue the significance of few spots which causes differences in the statistics in different countries and among veterinarians. Since sight is not the most important sense in the dog, it can be assumed that only the most severe changes affect the dog's quality of life (such as becoming more fearful).

A realistic goal should be established that 35% of our population should be examined with a slit lamp (biomicroscope). By satisfying such a level, the affected population rate should drop to 25% and the incidence of cases within grades 2-6 would become more rare.

Skin diseases

Dobermanns are affected by many kinds of skin problems. However, as in other dog breeds, there could be several reasons for such conditions.

Allergies and over-sensitive dogs may show symptoms through constant scratching. In some instances, these cases may be in a disease group which is easily seen but have difficulties in a diagnoses.

Alopecia - hair defects and balding – are another form easily seen though still partly an unknown disease complex. Blue Dobermanns often suffer from this problem. There are other causes as well.

Hormone disturbances such as hypothyroidism, can also show signs on a Dobermann's skin and hair coat.

Demodex and staphylococcus infections sometimes tend to aggravate problems other than skin-classified diseases.

Skin diseases almost always demand an individual's thorough examination via blood tests, skin scrapings and biopsies. The correct treatment method will naturally depend on a precise diagnosis and the availability of viable existing treatment. However, in some cases like of blue Dobermanns balding, only alleviating managements are possible.

Hypothyroidism

It appears that the breed has a tendency to develop hypothyroidism like many other breeds. The clinical signs of the disease are both numerous and diverse:

Varying types of skin problems, hormonal disturbances, obesity, lethargy, sensitivity to cold, loss of capacity to participate in hard exercise.

Diagnosis is possible to be made by measuring thyroxine (T4) and thyroxine stimulating-hormone (TSH) levels from the blood. However, by only measuring thyroxine levels, misdiagnosis can occur since other diseases can also affect the values. As a treatment, replacement thyroxine is given in which the symptoms will typically subside or be controlled.

Vestibular syndrome and other neurological problems

Occasionally puppies are born that are restless, cry much, have difficulties in nursing and have neurological abnormalities. The disorder does not progress and if capable to suck, these puppies usually develop to normal individuals. The cause is unknown.

Congenital vestibular disease is seen in young puppies with or without deafness. The puppies are affected from birth to 3-4 months of age and have head tilt, and difficulties in moving. The signs can disappear but the deafness if present is permanent. There is no treatment.

Young and adult animals sometimes develop idiopatchic head tremor. There is a sudden up and down or side to side head movement. The dog is conscious and can move but there is no method to stop the tremor which normally lasts few minutes. The dog will not develop other neurological signs. The cause is unknown and there is no treatment.

Panosteitis

Fast growing, heavy-built, and strong-boned individuals have an increased risk of developing growth disturbances called panosteitis. Panosteitis is an acquired inflammatory condition of unknown etiology affecting long bones in front and/or hind legs causing limbing and pain. Nutritional disturbances and genetics can be involved.

The diagnoses is based on an x-ray examination. The disease is self-limiting and the treatment includes correction of diet and anti-inflammatory medication.

III GENERAL RULES AND GUIDELINES FOR BREEDING

III A GENERAL RULES

III A 1 Registration

The Finnish Kennel Club's council has accepted on October 2nd 2000 a gradiated registration fee system that has come into force from July 1st 2001. The registration fees are divided into four categories and the necessary requirements are as follows:

Registration fee, category 1 / 20 euros per puppy (2005)
The breeder has a kennel name and has signed the Breeder's Agreement with the Finnish Kennel Club; the breeder is a member of the breed club. In Working/Utility breed litters both parents have merits from show and breed specific working trials.

Registration fee, category 2 / 30 euros per puppy (2005)
The breeder has a kennel name and has signed the Breeder's Agreement with the Finnish Kennel Club; one of the parents has merits in breed specific working trials and the other has merits in show or both have merits only from show.

Registration fee, category 3 / 40 euros per puppy (2005)
The breeder or the parents of the litter do not meet all the requirements stated in categories 1 and 2.

Registration fee, category 4 / 60 euros per puppy (2005)
The breeder/owner of the dog to be registered is not a member of the Finnish Kennel Club; a dog imported to Finland.

III A 2 Dog shows

The Dobermann is entitled to participate in dog shows arranged according to the rules for dog shows by the Finnish Kennel Club. The Finnish Kennel Club's council has accepted the actual rules for dog shows on May 11th 1991.

Docked and /or cropped dogs born after January 1st 2001 are not allowed to participate in dog shows arranged under the official show rules by the Finnish Kennel Club. An exception to this are World Winner and European Winner shows.

III A 3 Character tests

The Dobermann is entitled to participate in the (Finnish) character test arranged according to the rules for the character test by the Finnish Kennel Club. The Finnish Kennel Club's council has accepted the actual rules on December 11th 1976 and they have come into force on June 1st 1977.

The test marking sheet has been modified on January 1st 1996. All dogs registered in the Finnish Kennel Club's register are entitled to participate in the character test. Docked and /or cropped dogs born after January 1st 2001 are not allowed to participate in the character test.

III A 4 Working trials

The Dobermann is entitled to participate in working trials arranged by the Finnish Working Dogs Association and its member organisations. The rules for the working trials have been accepted by the Finnish Kennel Club's council on November 24th 1990 and have come into force on April 1st 1991.

Docked and/or cropped dogs born after January 1st 2001 are not allowed to participate in working trials. An exception to this are World Championship working trials.

III A 5 Rules for the Champion titles

The rules for the Champion titles for the Dobermann have been accepted by the Finnish Kennel Club's council on autumn 2003 and have come into force on January 1st 2004.

FINNISH CHAMPION (Fin CH – Fin MVA)
Three certificates (CAC) from shows in Finland, from three different judges. At least one of the CACs must be obtained after 24 months of age. The Doberman must also have a working trial title: FH1, IPOR-A, SchH1, IP1 or from class 2 in national working trials (e.g. JK2, HK2).

FINNISH WORKING CHAMPION (Fin W CH – Fin KVA)
The dog must have obtained in show at least a grading of "good" after 15 months of age.

The Dobermann must also have obtained all together at least three times a V / 1-result from champion class (class III) in the working trials of the same trial; the working results must be spread over at least two different calendar years.

III A 6 The sale of dogs

The Finnish Doberman Club recommends the use of the Finnish Kennel Club's rules on agreements concerning the selling, giving a puppy to an owner for free with a contractual, and paying in installments. The rules were accepted by the Finnish Kennel Club's board on April 9th 1992. The Finnish Dobermann Club Breeding Committee recommends in addition the following guidelines for reimbursing a puppy that has a fault:
- TESTICULAR FAULT (chryptorchid): A third of the original price of the puppy is returned to buyer as demanded by the Finnish Kennel Club.
- DENTAL FAULT (missing tooth/teeth): 10 % of the original price of the puppy is returned to the buyer.
- HIP DYSPLASIA: If the dog has a HD-C or worse, no money is to be returned to the buyer if the dogs both parents have HD-A or HD-B. If one of the parents or both parents have HD worse than A or B, 10-20% of the original price of the puppy is to be returned to the buyer considering the gravity of the hip dysplasia of the dog in question.
- EYE ILLNESS: PHTLV/PHPV grades II-VI, 10-20% of the original price of the puppy depending on the severity is to be returned to the buyer regardless of the eye examination results of the parents.
- FAULT IN COLOUR: If the dog has such a fault in colour which will considerably affect its grading in show; 20% on the original price of the puppy is to be returned to the buyer.

These recommendations do not apply to dogs older than three (3) years.

III B BREED SPECIFIC RULES AND REGULATIONS

III B 1 Measures in force to prevent hip dysplasia (HD)

The Finnish Dobermann Club has agreed during its meetings held on October 20th 1991 and February 29th 1992 specifications in the general rules for breeding regarding hip dysplasia in Dobermann. The board of the Finnish Kennel Club has acknowledged this specification and it has come into force on January 1st 1995 and has been continued to be in force from January 1st 2001 to December 31st 2005.

In order to register a puppy or several puppies (a litter) both the sire and the dam must have been x-rayed for hip dysplasia and have at least HD- C.

III B 2 Measures in force to prevent eye disease (PHTLV / PHPV)

The Finnish Dobermann Club has agreed during its meetings held on February 29th 1992 and November 8th 1992 specifications in the general rules for breeding regarding the eye disease (PHTLV/PHPV) in Dobermann. The board of the Finnish Kennel Club has acknowledged these specifications and they have come into force on January 1st 1995.

From January 1st 2001, an age limitation for the official testing for the eye diseases (PHTLV/PHPV) has come into force. The Dobermann puppy must be at least six (6) months old to be officially examined and an official document be given of this examination.

In order to register a puppy or several puppies (a litter), the sire and/or dam used for breeding that are owned solely by a Finnish citizen or that are co-owned by a Finnish citizen and registered in the Finnish Kennel Club, must have been examined with a biomicrosope. Only dogs that have been graded free, border case or 1-grade can be used for breeding.

III B 3 Measures in force to prevent Chronic Active Hepatitis (CAH)

The Finnish Dobermann Club has set agreed during its meeting held on March 7th 1993 a specification in the general rules for breeding regarding Chronic Active Hepatitis (CAH) in Dobermanns. The board of the Finnish Kennel Club has acknowledged these specifications and they have come into force on January 1st 1995.

The specifications have been continued to be in force from January 1st 2001 to December 31st 2005.

In order to register a puppy or several puppies (a litter), the sire and/or dam used for breeding that are owned solely by a Finnish citizen or that are co-owned by a Finnish citizen and registered in the Finnish Kennel Club, must have been examined no longer than 12 months before the mating for the serum ALT-level in the blood sample in order to prevent the hereditary liver disease (CAH).

In addition, the Finnish Kennel Club has stated, regarding the specifications for the Chronic Active Hepatitis (CAH) and the eye disease (PHTLV/PHPV), that dogs that are staying temporarily in Finland to be used as stud dogs or dams in breeding must measure up to the breed-specific requirements, rules and guidelines.

III C BREED SPESIFIC GUIDELINES

III C 1 The scoreboard for acceptable combinations (litter requirements)

The Finnish Dobermann Club Breeding Committee has accepted on February 9th 1993 a scoreboard for acceptable combinations (litter requirements). The Finnish Dobermann Club's board has accepted these guidelines on April 7th 1994 and these came into force on September 1st 1993.

This updated breed specific programme for breeding replaces the original scoreboard.

The index based scoreboard for acceptable combinations (litter requirements)

Points	Character test	Hips HD	Eyes PHTLV	Liver CAH	Anatomy > 15 months
1 point	< 75 points	C			G
2 points	< 75 points; nerve construction -1, accessibility +1, sharpness +1, gun shot +	B	1 or border case	M1 (< 250)	VG
3 points	> 75 points	A	Free (0)	M0 (< 136)	V

1 extra point each is accorded if the dog is also tested for the v. Willebrandt and/or DCM (cardiomyopathy) test.

1) In order to be accepted on the Finnish Dobermann Club matings list (litter announcements) both the sire and the dam of the future litter must both get at least 12 points or at least 25 points together.
The sire and dam must not have a 1 point result on the same requirement (e.g. HD) and they must get a minimum of 1 point on each requirement.
The Finnish character test is not required of a dog younger than 30 months.
A foreign dog (a dog that is registered in a foreign country and lives with its owner in a foreign country) is only required to meet the requirements for the registration of the puppies as imposed by the Finnish Kennel Club. It is however recommended that the dog should fulfill as many as possible of the requirements imposed upon dogs in Finland.
2) The breeder must be a member of the Finnish Dobermann Club.
3) The price for the litter announcement is defined separately for the announcement on the Finnish Dobermann Club's homepage in the Internet, the telephone service (Litters' Info) and the magazine (Litter announcements).
4) An accepted ZTP test or a working title from an official working trial in class III can replace the Finnish character test.
5) The evaluation of a dog's anatomy in the ZTP can replace the evaluation of anatomy from show.
For anatomy VG (H) or G (T) must not be due to a missing tooth or an incorrect bite.

III C 2 Other rules for breeding

Breeding theory and practical rules

Today, it is the task of the breeding committees and breeders to further understand advanced genetics. Populations and the laws governing their genetics have become more and more important in dog breeding. Key questions include how to analyse the population and how to use the information correctly. Individual results should be compared to all Dobermanns in one country, in Europe and in the whole world.

Inbreeding coefficient

The inbreeding coefficient (COI) is a statistical value, which describes the individual's chances to inherit the genes from their ancestors. The COI is the statistical probability that two alleles at a randomly chosen gene locus are identical by descent (ie. inherited from an ancestor common to both parents).

A high COI in the breed indicates that the breed is loosing its genetic diversity. The strong growth of COI values counted per generation can be a sign of imminent problems, especially if the growth is connected to other issues such as small population size, limited gene migration (low numbers of imports) and genetic bottleneck effect (a sudden, uncontrolled diminished size of a population).

When counting the COI, it is possible to use a 5 generation's pedigree, if one only wants to compare the growth of the COI in a given population on a yearly basis. A 10 or more generation's pedigree tells more about the true inbreeding as the ancestors' inbreeding coefficient also affects on the individuals COI value.

According to the experts, the COI of the population shouldn't rise over 0.5% on a yearly basis or over 2.5% in five years time. It is also recommended that an individual's COI should not exceed 6% counted from the 5 generation pedigree, which is about the same as breeding among cousins, and 9% counted from the 10 generations pedigree.

The COI in litters born in Finland has yearly been quite high compared to the recommendations. The average COI on a yearly basis (counted from 10 generations pedigree) has been:
1980 15.4%
1985 12.2%
1990 10.7%
1995 12.7%
2000 10.8%

The average rise in the COI, which is marked as deltaF, can be counted also with the help of the effective population size = N_e (N_e means the number of dogs used in the breeding counted from the mathematical equation $N_e = 4 \times N_{males} \times N_{females} / N_{males} + N_{females}$). The effective breeding population can never be greater than four times the number of sires (no matter how many females there may be).

Using effective population size the equation for the rise of the COI, deltaF = $1 / 2N_e$.

DeltaF is also $1/8\ N_{males} + 1/8\ N_{females}$. N_{males} and $N_{females}$ = the number of breeding individuals during counting time.

The genetic build-up of the population can be evaluated also by means of mean kinship (MK) values. MK value describes the individuals kinship to all other living members in the population. The MK value is not stable but changes as the population changes (animals die, new animals are born or imported). The most valuable individuals for the breeding are those with low MK values.

The heritability value

The great proposition of the traits we breed for are inherited but they are polygenic and quantitatively inherited. The inheritance of the quantitative traits do not follow the simple Mendelian laws. There are other laws (statistical) governing the genetics of these traits. The environment greatly affects the expression of the phenotype in quantitatively inherited traits.

The heritability value indicates that the proportion of the differences seen between individuals is due to genetical influences. The heritability value can also be considered as a measurement of the reliability of the test used to validate a quantitatively inherited trait. The heritability value is not stable but depends on the reliability and repeatability of the valuation method which is also different in the different populations. With a more precise and reliable method, the higher the heritability value will be.

The traits which have high heritability values are easier to use in breeding. If the traits have low heritability values the progeny's and near relatives' results should also be taken into account, rather than having a sole reliance on the individual's own phenotypical test result. Breeding with selections based on an individual's result only, when the trait has a low or medium heritability value, gives poor results or no progress in breeding.

The heritability values in breeding
Lower than 0.2 low heritability values
0.2-0.4 medium heritability values
over 0.4 high heritability values
Fertility, defense against diseases, viability, heritability values are normally 0-0.1.
An animal's heritability values for temperament and behaviour are often between 0.1-0.3.
The growth rate and some behaviour traits connected to hunting and guarding are between 0.3-0.6.
The traits connected to outlook are usually higher than before mentioned.

The breeding value of a dog

It is important to try to find out the animal's true breeding value for the traits we want to use in selection. Unfortunately the true breeding values are impossible to see and breeders must use estimations (= selection criteria). These estimations of the true breeding values are results from measurements we do when testing and examining the animal itself and/or its relatives. They are phenotype values (= genotype + enviromental factors).

We try to rank animals using these estimations of its true breeding value. Of course, the more precise and reliable the estimations are, the more precise the ranking will be. We need to test and make examinations but we need to understand that they are tests based on the animals's phenotype. At the moment there, is only one test for a Dobermann which tests true genotypical value (v.Willebrandt's DNA test).
An animal's breeding value depends on several components:
-the popularity of the test (how many dogs take part in a certain test type)
-the genetic reliability of the tests (heritability values and environmental influences)
-the importance of the trait which is tested
-the order of importance of all traits which are used for selection

The selection

Selection is the basis of all breeding. It is however possible to select only if :
-there is enough differences between the animals in the population for the trait in focus (= selection difference),
-the difference is truly based on a genetical difference,
-the trait can be distinguished from the animals phenotype,
-there is as great accuracy in tests as possible and so a high heritability value.

A selection difference means that the animals which are selected for breeding are better than the average population. The better the selection criteria, the faster the success in breeding. If we can't influence the trait's heritability value, we can try to influence selection differences.
1. Accuracy of selection. Most traits are influenced by the environment. Not all observable animal differences are genetic. Traits which are highly influenced by the environment (low heritability value) are not possible to select and the estimation of the animal's breeding value is random. Also the need for a strong selection based on the traits which are not harmful for the breed must be questioned, even if the reliability of the test result would be good (for example v.Willebrandt test). It may be necessary to lower the selection criteria in tests for problems of less importance or traits of less reliable results to lower the risk of spreading difficult diseases because of a small effective population size.
2. In the selection, only the good or best animals should be used in breeding. With strict selection, we easily lower the number of animals left in breeding. The animals become too close relatives and the COI of the population increases. There is also a danger that the selection is based on success which has no genetic influence.
3. The success in breeding is affected also by the number of the traits we are selecting for. If only a few traits are used in selection, the breeding is successful during some generations. The speed is further better if the traits have high a heritability value. Quite the opposite happens if there are many selection criteria and the traits in question have low heritability values. In the worst case, the progress is random.
4. It may be wise to favor shorter generation intervals and breed the animals earlier. This way it is possible to get useful information of the animal's breeding value through its offspring using progeny tests. The test which analyze behaviour would be more reliable if they could be done at the earlier age than today. The environmental affects on the test results is smaller and the results can be taken into use earlier. Early results make it possible to stop the use of a sire temporarily and to continue later after analyzing the progeny results.

The selection can be done using three different methods:
Tandem
Independent selection
Index selection

In tandem breeding, selected animals are ranked, for example, according to one trait in a year and this is continued until the trait in question is stabilized enough into the population. Next year or another time a new trait is taken into the selection. This method is not practical to use.

An independent selection is a selection based on the limit values which the animals must reach in each trait. The animal is rejected from breeding if one of the limits is not reached, even if other values are passed.

In index breeding, the animals proposed for breeding are ranked according to their total breeding value. The total breeding value is the sum of the individual traits values.

When comparing these three selection methods, we can say that the index breeding is as good as or better than independent selection which in turn is as good as or better than tandem breeding.

It is important that breeders understand the pros of independent selection compared to its cons. The disadvantage of independent breeding is that a breed too easily can loose top quality individuals for one trait because the limit is not met in the other trait. This method favors individuals having medium quality genes.

In the index breeding, every trait which we want to use in selection should have a weighted value according to the importance and reliability of the test result of a trait. The benefit of the index breeding is, that we can try to save the top genes in the population. It is also possible by giving a new weight to one trait to change the direction of the breeding quickly. This method enables us to selectively breed several traits.

Index breeding is the modern breeding method. In the true index breeding, we must use computers, special programs and specialized persons to count the indexes. It is though good to understand the benefits of this method compared to independent breeding method.

Population

A big population allows the breed to have genetic diversity. The organizations and persons who are responsible for breeding must not only understand the importance of selection but only the maintenance of the population size as well. Breeders look for a homozygosy of certain wanted and admired genes. When the homozygosy in good genes grow, the homozygosy of unwanted and deletorious genes will unevitably grow too. When the homozygosy in the whole population grows, genes will be lost and the genetical diversity will be lost. The risk of stabilizing unwanted genes will grow. This way the inherited diseases will become more extensive and fertility and resistance will diminish. As a result, there will be smaller litter sizes, dying puppies and decreased resistance to infections.

There are some recommendations for the overuse of popular males. One male should not have more that 5% of offspring during its own generation (about 5 years). On the other hand, the total number of offspring of a male should not exceed 25% of the registrations in one year. As an example of the registrations of 200 dogs in a year, one male should not have more than 50 puppies in total. The numbers are about the same if counted per year or per generation (5 years usage).

The overuse of males is not the only way to increase the homozygosy in the population. At the same time, other facts already mentioned above must be taken into consideration. Breeding committees must try not to make mistakes and favor too strict and one-sided breeding in the population.

Good breeding strives to maintain a large effective population size and a large gene pool. The amount of sires should be big but so should the number of females. To maintain diversity, individuals from many different litters should be used for breeding and practices which rely only on a few leading or respectful breeders or lines should be discouraged. The use of individuals from unknown or less used lines should be encouraged. The dogs who have possibly low relationship (mean kinship value MK) to other members in the population are valuable in the breeding. Through international cooperation, it is possible to import dogs - new gene material (migration) and this should be encouraged by the breeding organizations. Selection which is based on traits with low heritability values can lead to random breeding or diminishing of the effective population size.

Practical use of theories in Dobermann breeding

Our breed has faced a strong bottleneck effect and the material we have today is randomly diminished and changed. This has happened in Finland as well as in other countries where there is legislation concerning cropping and docking, aggressive dog legislation and new EU regulations. Geographically, some countries such as Finland are isolated. Finland's border with Russia and sea connections to other neighboring countries limits the migration of genes. Other countries may have strict regulations limiting for instance the use of foreign dogs.

The clubs must try to use enough individuals for breeding. If the yearly registration numbers of Dobermanns have diminished, if the use of foreign males is limited because of the geographical or other reasons, breeders must focus more on the maintenance of the effective population size as well as the maintenance of low kinship and inbreeding values.

-The breeding committee should annually check that enough young or new dogs are able to be used in breeding. It is good to have new material for breeding yearly, at least 3-4 males and 10-11 females (in 200-300 registrations).
-The breeding committee should annually measure the effective population size and monitor the changes in the population.
-The breeding committee should annually count the changes in COI.
-The breeding committee should keep an eye on the usage of popular males and give data for breeders of that as well as the quality of the offspring, problems and diseases.
-The breeding committee should specifically check the offspring of the popular males, arranging for instance the progeny evaluations.
-The breeding committee should collect information about the total breeding situation, analyze the health test results and publish all data. The individual breeding with its many different solutions should be left to breeders themselves.
-The understanding of the reliability of the different tests and their accurate use in breeding is the committee's important task.

The import and use of new, unrelated material, possibly not always the top quality dogs, may help to keep the inbreeding coefficient low. It may be useful to favor the use of not very high standard females if this helps to broaden the breeding stock bases. This may someday be an alternative to crossings.

It may be wise to start an individual's use in breeding early and conduct progeny tests. The most important breeding criteria at the moment can be found out already at an early age (HD, PHTVL, behavior, outlook). The disease that causes much problems is Dobermann hepatitis which can be diagnosed sometimes only at the end of the breeding age. The other uncontrollable disease today is cardiomyopathy which also affects dogs at a later age.

-The breeding committee must recognize and look up the existence of cardiomyopathy in the breed for example by keeping records of the dogs who have died because of the disease.
-The breeding committee must follow the existence of other diseases for instance by making inquires and publishing the data and facts about the situation to the members.
-The breeding committee can start up new research concerning, for instance, longevity.
-The breeding committee should publish yearly the Yearbook which contains information at least of show critics, trial results, test results, and official health results as well as activity result of the breeders in analyzing their litter statistics.

Results which are as reliable as possible, comparable with each other, widely carried out and internationally accepted are used in breeding:
-HD: The methods and results approved by the FCI.
-PHTVL/PHPV: The results given by a specialist for eye diseases approved by the Dobermann Club/Finnish Kennel Club, dogs over 6 months of age.
-DH (CAH): The result of a blood analyzes s-ALT by the approved laboratory (in Finland Vetlab). Valid for 1 year.
-Cardiomyopathy: The result given by a veterinarian who has made the examination with echo equipment used for cardiological examinations, according the internationally approved methods for testing cardiomyopathy in Dobermann breed. Valid for 1 year.
-v.Willebrandt disease: DNA result from approved laboratories
-Hypothyroidism: A T4 and TSH test made by an official laboratory (in Finland Vetlab and University laboratory).
-Other examinations possible in the future.

IV SITUATIONAL ANALYSIS

IV A THE BREED CLUB

The Finnish Dobermann Club was founded in Helsinki on October 26th 1950 at the “Messukeskus” restaurant. Mr Lauri A. Lahtinen was elected as chairperson of the first board Mr Niilo Toivonen, Mr Edmund Natunen, Mr Olof Holmström, Mr Erno Kalervo served as members. Furthermore, Mr Kai Lahdelma was secretary of the board and Mrs Irja Kekäläinen was treasurer of the breed club. A total of 22 persons presented themselves as members to the newly founded Finnish Dobermann Pinscher Club (the name was later changed to Finnish Dobermann Club). Amongst these very first members were Mr Lauri Lahtinen and Mrs Mirjam Lahtinen, Mr Sture Carlson and Mrs Tyyne Carlson, Mr Armas Piirainen, Mr Toivo Turtiainen and Mrs Eva Wrede.

As stated in the 1st article of the Finnish Dobermann Club rules in force: The Finnish Dobermann Club office is registered in Helsinki and its territory covers entire Finland.

As stated in the 2nd article of the rules in force: The aim of the Finnish Dobermann Club is to activate kennel work and especially amongst the Dobermann breed; to improve the breeding standards and to give guidance to the members in keeping, raising and training their dogs.

As stated in the 6th article of the rules in force: The Finnish Dobermann Club is a member organisation of the Finnish Kennel Club and the Finnish Working Dogs Association. The club can also become a member of other associations related to cynological interests.

As stated in the 7th article of the rules in force: Both private persons and registered organisations can have membership in the Finnish Dobermann Club. All membership applications are considered and accepted by the board. Private persons may become either members, members via parentage (being members of the family of a member) or so-called “free-members”. Registered associations may only have the status of a member, and individuals that have been members of the club for a period of over 25 consecutive years can receive the status of a “free-membership”.

As stated in the 8th article of the rules in force on resignation and expulsion of a member:
A member has the right to give up his/her membership as stated in the Finnish Law on associations.
A member may be expelled from the club by the board’s ruling if:
-A member breaks the rules of the Finnish Dobermann Club.
-A member has been found to behave and work against the purpose of the club or that has shown clear indifference of good manners in his/her behaviour.
-A member that has by his/her behaviour within the club or outside the club activities caused considerable damage to the club, or that has been expelled from the Finnish Kennel Club.

-A member that has been found to offend the law on animal protection.
-A member that has not paid his/her membership fee by the end of each calendar year is regarded to have terminated his/her membership in the club as confirmed by the ruling of the board.

An expelled member may make a complaint on this ruling at the Finnish Dobermann Club annual meeting for the meeting to come to final decision on his/her case. The complaint must be addressed in writing to the Finnish Dobermann Club board within 3 days from learning about the expulsion.

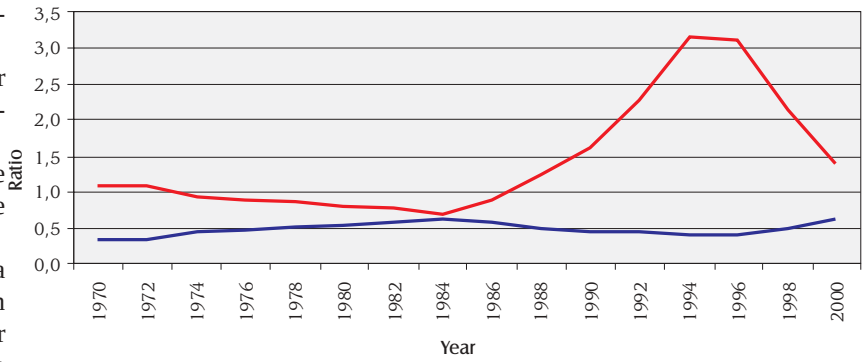


Table 1

Year	Members	Reg. 5 years	Ratio
1970	370	1,088	0,34
1972	380	1,093	0,35
1974	420	0,953	0,44
1976	420	0,905	0,46
1978	450	0,875	0,51
1980	430	0,789	0,54
1982	450	0,773	0,58
1984	430	0,693	0,62
1986	510	0,887	0,57
1988	600	1,235	0,49
1990	710	1,611	0,44
1992	1000	2,292	0,44
1994	1255	3,151	0,40
1996	1199	3,107	0,39
1998	1062	2,137	0,50
2000	852	1,393	0,61

As stated in the 9th article of the rules in force: The club board elected by the club members' autumn meeting to take care of the administration of the club activities, is the lawful representative of the Finnish Doberman Club.

At the end of year 2000 Finnish Dobermann Club had 852 members. During the past five (5) years (1995-2000) 1393 Dobermanns have been registered in the Finnish Kennel Club register. The coefficient of the members to the registrations in the stated years is 0.61.

In the table 1 is represented the development of the coefficient of the memberships to the registrations in the past 30 years.

IV B THE HISTORICAL BACKGROUND AND THE DEVELOPMENT OF THE BREED

The historical background and the development of the breed has been widely studied in an annex by the Finnish Dobermann Club Breeding Committee: "The Dobermann – its origins, development and history". This annex has been published in the Finnish Dobermann magazine no 4/92.

IV C THE DOBERMANN IN THE WORLD - DISTRIBUTION

The Dobermann population is quantitatively the largest in the United States. In Europe, besides Germany, other leading countries are the Netherlands, France, Italy and Belgium. In the recent years we have witnessed the rise in a number of East European countries and Russia along side these "old" Dobermann countries; Russia even holds the record in the annual registrations of Dobermanns in entire Europe. The prohibitions to dock tails and crop ears have come into force or are threatening to come into force in many of these European countries and in the Scandinavian countries. As a result, the number of registrations have dropped considerably.

IV D THE DOBERMANN BREED IN FINLAND – FIRST STEPS

The first Dobermanns were brought to Finland by a Captain of Cavalry, Mr Henrik Calonius. At the beginning of the 1900's (in July 1909), he imported two Dobermanns for the Police Department in the city of Helsinki. The first German Shepherds were also imported at around the same time. The dogs imported from Hagen (Germany) were fully trained duty dogs at their arrival.

The imported Dobermann Pischers were the brown male Benno von Volmethal (Graf Benno v Thüringen - Gradel v Volmethal) born on January 4th 1909, identification SKKR VII 2179 and the black female Zilly von Thüringen (Jonathan v Thüringen - Lady v Landheim) born on February 6th 1908, identification SKKR VII 2187, The female was pregnant at the time arrival.

These Dobermanns were small in size (approx. 55-65 cm in height) and represented the heavy "wrestler" type of dog. The head was more "rounded" in shape, not matching the blunt wedge-like head required nowadays. The way the neck and head were united seemed clumsy rather than elegant and gave an impression far other than that of nobility.

Captain Calonius understood the necessity of breeding and standards and kept himself one female puppy out of Zilly's litter: Vanda av Sörnäs (Kurt vd Mark - Zilly v Thüringen) born on July 11th 1909, identification SSKR VII 2186. "Av Sörnäs" was the kennel name of the Helsinki city Police Department which was located at Pengerkatu, in Sörnäinen (part of the town Helsinki). The Police Department of the city of Kotka also had its own kennel

named, “Koukku”. Other well-known Dobermanns in Finland at the time were the female Cilla v Forsby born on June 6th 1912, identification SKKR VIII 689, Harras v Forsby born on June 16th 1912, identification SKKR VIII 679 and Zilly III born on June 16th 1912, identification SKKR VIII 690. They were all from the same combination Benno von Volmethal - Prinsessin Lasso av Sörnäs, and their breeder was G.K. Bergmann. Amongst the first breeders were the mentioned H. Calonius and together with him in the first decade of the 1900’s , A. Ahlgren from Helsinki (“av Helsingfors”), Sam von Bell from Helsinki (“av Sockenbacka”), Viljo Pietinen from Vyborg (“vom Pelikan”) in the turn of the 1920’s and 1930’s, Lauri Meriläinen form Helsinki (“de Boreli”, identification SKKR XIV 5573). In the 1930’s there was also Emil Jokela in Oulunkylä (“Joen”).

We consider that the most famous amongst these breeders in the beginning of the breed in Finland, was the architect Kaarlo Niverä. He was born under the Russian empire rule on December 7th 1882 in the city of Hanko. His first Dobermann was Bobby von der Vilppula born on August 25th 1915, identification SKKR XII 2913. This dog was out of the female Maija av Sörnäs owned by Göstä Serlachius. Mr Niverä’s second Dobermann was the brown male Lord de Boreli, identification SKKR XIV 5573 born on February 19th 1926. He bred his first litter, born on April 11th 1933, out of Lord de Boreli - Lady Riga v Tauroggen. Kaarlo Niverä was not satisfied with the litter and brought two Dobermanns from Germany as foundation dogs for his own bloodline. These dogs were Graf Götz von der Schanzenhöhe born on April 29th 1935 identification SKKR XXII 13031, and Niddi von der Schwarwaldperle born on May 30th 1938 identification SKKR XXV 15920. He bred under the kennel name “von Unser-Heim”.Toivo Turtiainen from Tapanila in Helsinki continued breeding on the Unser-Heim bloodline in his own “Turtin” kennel.

After the World Wars, Dobermann breeding was very scattered up until the turn of 1940’s and 1950’s when the Finnish Dobermann Pinscher Club was founded. It was under the first chairperson of the club, Lauri A. Lahtinen, that the Dobermann breeding in Finland actually began. He imported a black Dobermann male Rex-Boy from Norway. As a great working dog enthusiast, he achieved 21 V results from the highest class and two Finnish Working Dog Championship medallions with this dog. In addition to Rex-Boy, he also imported a female Luxy from Norway in 1949 and a male Lux the following year. He gave these Dobermanns to his friends Tauno Kyyrö and Sture Carlson. Later on, he also imported two males, Blitz von Ostertor and Nord Germania from Germany; the latter especially represented the elite in the breed in its country of origin and had a positive impact on the quality of the breed in Finland, rising it closer to the quality and type found in Germany. Lauri A. Lahtinen bred in the kennel name “Pellavakasken”.

When he slowly begun to stop his breeding, Günther Groth took his place as the leading Dobermann breeder in the country. Mr Groth had come to Finland from Germany at the beginning of the 1950’s mainly to train German Shepherd dogs at “Marjaniemen,” the German Shephard kennel owned by Margaret Särkkä. As he got to know Lauri A. Lahtinen, it lead him to change from that breed to Dobermanns and to the beginning of what would become a long interest in the Dobermann breed. He bought his first Dobermann, Pellavakasken Ami, from Lauri A Lahtinen in 1955. Günther Groth bred in the kennel name “Gunthersforst” and continued the example given by Lauri A Lahtinen by importing dogs from the breed’s country of origin thus narrowing the gap between the Dobermann population of these two countries both in quality and in standard. He became the leading Dobermann breeder in Finland in the 1960’s and 1970’s due to the many imports that improved the breed in Finland such as Cliff of Fayette Corner, Zar von Forell, Graaf Igor van Neerlands Stam and Kim von Forell. As a German Dobermann judge he had very good connections to the top breeders in Germany.

IV E REGISTRATION STATISTICS

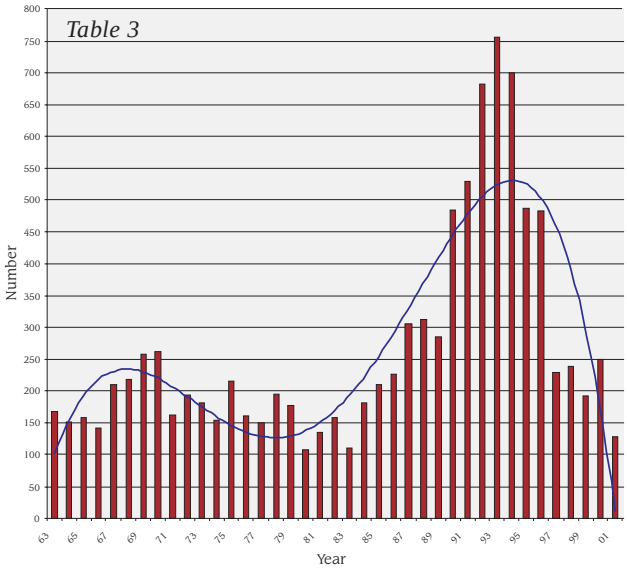
In the past 12 years (1990-2001) 5045 Dobermanns were born and registered; 572 of these were imports representing a total of 11.3%. Finnish breeders registered a total of 4473 puppies from 616 litters. The average litter size during this period was 7.26 puppies per litter.

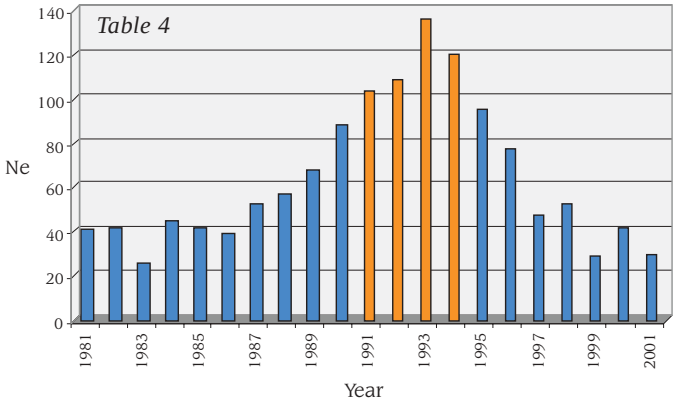
Most of the imported dogs come from our southern neighbour, Estonia, a total of almost 250 dogs. The second largest group of imports during this period of time came from the Netherlands, almost 100 dogs. From Russia there were almost 50 imports and from Germany only 20. A growing field of importation is from the Eastern European countries such as Yugoslavia, Croatia, and Czech Republic, amounting to a total of 150 dogs. In the following statistics, detailed information is given on registrations: Table 2 represents the registrations in 1990-2001, and table 3, the development of registrations from 1963 to 2001.

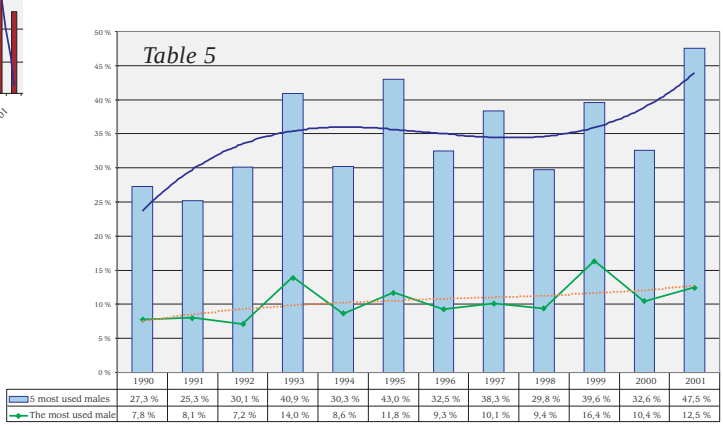
The opening of the borders and the high numbers of registrations that followed increased the effective population above the recommended 100 in 1991 (table 4 shows the effective population from 1981-2001). Our effective population remained above that magical number of 100 only for four years. As the prohibition to show docked/cropped dogs and the prohibition to dock tails came into force, the number of registrations and importation dropped quickly down. In the beginning of the new millennium our effective population was smaller than ever before, only to be compared to the effective population in 1938.

Table 5 represents the impact of the five most used stud males in the overall registrations (progeny) from 1963 to 2001.

Table 2	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Litters	94	114	94	133	98	80	68	48	64	60	73	20	946
Domestic	58	63	74	110	82	69	47	26	29	18	24	16	616
Imports	36	51	20	23	16	11	21	22	35	42	49	4	330
Puppies	498	590	555	833	661	509	400	227	255	207	230	80	5045
Domestic	425	468	521	805	642	494	365	189	199	135	156	74	4473
Imports	73	122	34	28	19	15	35	38	56	72	74	6	572
Litter size, domestic	7,33	7,43	7,04	7,32	7,83	7,16	7,77	7,27	6,86	7,50	6,50	4,63	7,26
Used males, domestic	37	44	43	49	47	36	33	22	24	12	19	14	380
Used females, domestic	56	63	74	110	82	69	47	26	29	18	24	16	614
Used males, imported	31	36	16	20	14	10	18	16	27	31	43	4	266
Used females, imported	33	49	20	23	16	11	21	22	35	41	49	4	324
Effective population	89	104	109	136	120	95	78	48	53	29	42	30	939







IV F SHOW STATISTICS

Dobermann enthusiasts have traditionally been very interested in dog shows. At the end of the 1990's however, the number of Dobermanns entered in shows have relatively decreased. Being of 50% in the mid 1980's, the percentage decreased to only approximately a third by the end of the 1990's.

Table 6 represents the activity to show the Dobermanns and their best results within years 1991-2001. A total of 4467 Dobermanns were registered during that time and their quality has been the following:
1132 x V (25.3%), 391 x SG (8.8%), 64 x G (1.4%), other results 21 (0.5%). A total of 2859 dogs (64%) have not been shown at all.

Table 7 represents the quality of the stud males used in 1991-2000. The percentages have been based on the amount of registered progeny born in Finland. The imported dogs results have not been included in this scheme.

Birth year	Born N	CAC N	EX N	VG N	G N	Disq. N	Year	EX-CAC %	VG/Disq. %	Particip. %
1991	590	66	104	51	7	3	1991	73,6 %	26,4 %	39,2 %
1992	555	43	93	54	6	3	1992	68,3 %	31,7 %	35,9 %
1993	833	65	121	84	17	7	1993	63,3 %	36,7 %	35,3 %
1994	661	56	98	55	11	5	1994	68,4 %	31,6 %	34,0 %
1995	509	59	81	49	10		1995	70,4 %	29,6 %	39,1 %
1996	400	54	72	36	4	1	1996	75,4 %	24,6 %	41,8 %
1997	227	7	40	24	1	1	1997	64,4 %	35,6 %	32,2 %
1998	255	27	40	17	3	1	1998	76,1 %	23,9 %	34,5 %
1999	207	30	39	14	3		1999	80,2 %	19,8 %	41,5 %
2000	230	7	30	7	2		2000	80,4 %	19,6 %	20,0 %
Total	4467	414	718	391	64	21	1608	70,4 %	29,6 %	36,0 %

Table 6

Show	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Sire with CAC	310 66,2 %	389 74,7 %	564 70,1 %	397 61,8 %	350 70,9 %	252 69,0 %	114 60,3 %	77 38,7 %	78 57,8 %	95 60,9 %	56 75,7 %	2682 66,3 %
Sire with EX	59 12,6 %	40 7,7 %	103 12,8 %	120 18,7 %	105 21,3 %	108 29,6 %	41 21,7 %	55 27,6 %	30 22,2 %	41 26,3 %	15 20,3 %	717 17,7 %
Sire with less than EX	32 6,8 %	34 6,5 %	59 7,3 %	63 9,8 %	29 5,9 %	5 1,4 %	15 7,9 %	32 16,1 %	9 6,7 %	0 0,0 %	0 0,0 %	278 6,9 %
Sire without show	56 12,0 %	36 6,9 %	69 8,6 %	62 9,7 %	0 0,0 %	0 0,0 %	12 6,3 %	16 8,0 %	8 5,9 %	12 7,7 %	3 4,1 %	274 6,8 %
Sire's show not known	11 2,4 %	22 4,2 %	10 1,2 %	0 0,0 %	10 2,0 %	0 0,0 %	7 3,7 %	19 9,5 %	10 7,4 %	8 5,1 %	0 0,0 %	97 2,4 %
CAC sire % Other sire % 	66,2 % 31,4 % 100,0 %	74,7 % 21,1 % 100,0 %	70,1 % 28,7 % 100,0 %	61,8 % 38,2 % 100,0 %	70,9 % 27,1 % 100,0 %	69,0 % 31,0 % 100,0 %	60,3 % 36,0 % 100,0 %	38,7 % 51,8 % 100,0 %	57,8 % 34,8 % 100,0 %	60,9 % 34,0 % 100,0 %	75,7 % 24,3 % 100,0 %	84,0 % 13,6 % 100,0 %

Table 7

IV G FINNISH CHARACTER TEST STATISTICS

A little over 10% of Dobermanns in Finland take part in the Finnish character test; the number should be increased.

The test results Dobermanns born from 1991 to 2001 are shown in table 8.

The results of all character tests (a total of 1060) during that period are represented in table 10 with test subsections. The goals presented in the club's breed specific breeding programme are underlined.

There are 15 dogs that could not carry out the character test and the test had to be interrupted.

The character test score distribution is represented in table 10.

In table 11, the character test scores of the stud males used per year are represented. The percentages are based on the registered progeny born in Finland. The imported dogs results have not been taken into account.

Even if only roughly a tenth of the Dobermann population in Finland takes part in the character test, only about a third of the litters have a sire that has not been character tested. About 60 % of the litters have a sire that has been accepted in the character test. Only 4.1% of the litters have a sire that has taken part and has not been accepted in the test.

Birth year	Born N	+3 N	+2 N	+1 N	-1 N	Interrupted N	Year	Approved %	Rejected %	Testing %
1991	590		31	44	18	2	1991	78,9 %	21,1 %	16,1 %
1992	555		34	38	15	2	1992	80,9 %	19,1 %	16,0 %
1993	833		36	39	20	1	1993	78,1 %	21,9 %	11,5 %
1994	661	1	33	22	15		1994	78,9 %	21,1 %	10,7 %
1995	509		44	28	10	1	1995	86,7 %	13,3 %	16,3 %
1996	400		24	23	12		1996	79,7 %	20,3 %	14,8 %
1997	227		13	9	6		1997	78,6 %	21,4 %	12,3 %
1998	255		16	14	3	2	1998	85,7 %	14,3 %	13,7 %
1999	207		2	4	1		1999	85,7 %	14,3 %	3,4 %
2000	230						2000	0,0 %	0,0 %	0,0 %
Total	4467	1	233	221	100	8	563	80,8 %	19,2 %	12,6 %

Table 8

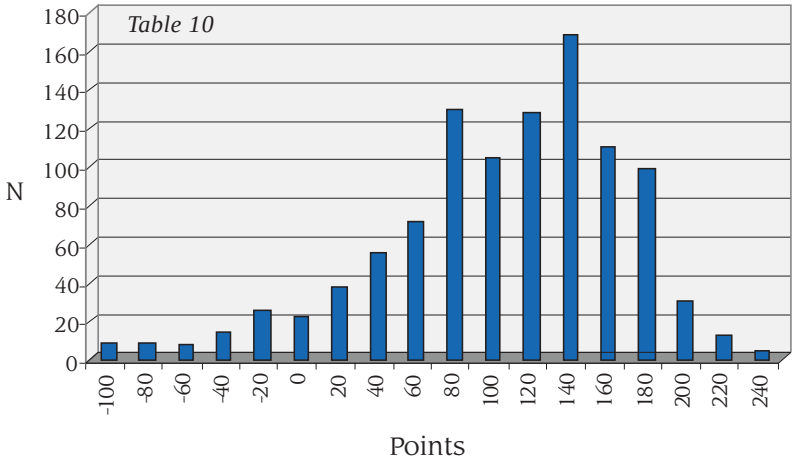
	Tests 9.11.1974 - 31.12.1995						Tests 1.1.1996 - 31.12.2001					
	3	2	1	-1	-2	-3	3	2	1	-1	-2	-3
Capability to function	0 0,0 %	51 7,6 %	362 53,8 %	228 33,9 %	31 4,6 %	1 0,1 %	2 0,5 %	47 12,6 %	214 57,5 %	98 26,3 %	11 3,0 %	0 0,0 %
Sharpness	183 27,2 %	41 6,1 %	441 65,5 %	1 0,1 %	4 0,6 %	3 0,4 %	98 26,3 %	19 5,1 %	253 68,0 %	0 0,0 %	0 0,0 %	2 0,5 %
Desire for defense action	247 36,7 %	55 8,2 %	259 38,5 %	107 15,9 %	5 0,7 %	0 0,0 %	169 45,4 %	38 10,2 %	115 30,9 %	44 11,8 %	1 0,3 %	5 1,3 %
Desire to fight	143 21,2 %	335 49,8 %	24 3,6 %	137 20,4 %	34 5,1 %	0 0,0 %	130 34,9 %	168 45,2 %	16 4,3 %	49 13,2 %	6 1,6 %	3 0,8 %
Nerve construction	0 0,0 %	23 3,4 %	532 79,0 %	97 14,4 %	17 2,5 %	4 0,6 %	1 0,3 %	33 8,9 %	298 80,1 %	37 9,9 %	3 0,8 %	0 0,0 %
Temperament	192 28,5 %	264 39,2 %	96 14,3 %	118 17,5 %	3 0,4 %	0 0,0 %	156 41,9 %	91 24,5 %	91 24,5 %	33 8,9 %	1 0,3 %	0 0,0 %
Mental hardness	101 15,0 %	1 0,1 %	371 55,1 %	1 0,1 %	194 28,8 %	5 0,7 %	62 16,7 %	0 0,0 %	241 64,8 %	0 0,0 %	67 18,0 %	2 0,5 %
Accessibility	267 39,7 %	295 43,8 %	95 14,1 %	15 2,2 %	0 0,0 %	1 0,1 %	275 73,9 %	84 22,6 %	2 0,5 %	9 2,4 %	2 0,5 %	0 0,0 %

Table 9

Character test	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Sire with +2, +3	78 16,7 %	159 30,5 %	287 35,7 %	317 49,4 %	288 58,3 %	131 35,9 %	125 66,1 %	55 27,6 %	51 37,8 %	48 30,8 %	17 23,0 %	1556 38,4 %
Sire with +1	131 28,0 %	146 28,0 %	174 21,6 %	92 14,3 %	85 17,2 %	121 33,2 %	13 6,9 %	36 18,1 %	14 10,4 %	17 10,9 %	13 17,6 %	842 20,8 %
Sire with rejected result	29 6,2 %	3 0,6 %	19 2,4 %	20 3,1 %	42 8,5 %	20 5,5 %	14 7,4 %	4 2,0 %	0 0,0 %	10 6,4 %	4 5,4 %	165 4,1 %
Sire without test	230 49,1 %	213 40,9 %	325 40,4 %	213 33,2 %	79 16,0 %	93 25,5 %	37 19,6 %	104 52,3 %	70 51,9 %	81 51,9 %	40 54,1 %	1485 36,7 %
Sire's result not known	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %
Sire approved % Sire rejected % 	44,7 % 6,2 % 100,0 %	58,5 % 0,6 % 100,0 %	57,3 % 2,4 % 100,0 %	63,7 % 3,1 % 100,0 %	75,5 % 8,5 % 100,0 %	69,0 % 5,5 % 100,0 %	73,0 % 7,4 % 100,0 %	45,7 % 2,0 % 100,0 %	48,1 % 0,0 % 100,0 %	41,7 % 6,4 % 100,0 %	40,5 % 5,4 % 100,0 %	59,2 % 4,1 % 100,0 %

Table 11

Table 10



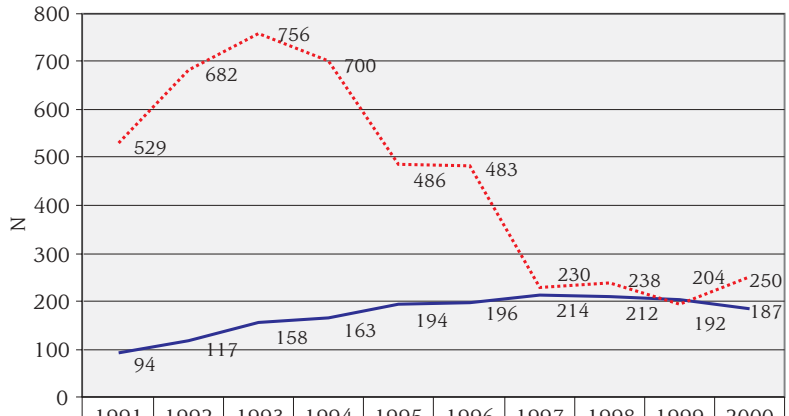
IV H WORKING DOG TRIAL STATISTICS

The Dobermann is slightly underrepresented in the working dog trials. The situation is however improving. Even the decrease in registration numbers (due to the tail docking ban) did not affect the amount of dogs participating in working trials.

The annual amount of dogs per trial is represented in table 12. The same dog is and can thus be included in the total amount of participants over several years. The national obedience trials and agility trials have not been included in this study.

About 10% of Finnish Dobermanns take part in trials and approximately 2/3 of the dogs participating obtain a working title (eg, SchH1, JK2). About 1 % of all Dobermanns registered obtain at some point a result in the highest (champion) class in working trials. The percentage is about the same as with the German Shepherd Dog and the Rottweiler, and a little more than that with the Boxer or the Hovawart, but clearly less than the percentage with the Giant Schnautzer or the Malinois.

Table 12



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Trial entries	94	117	158	163	194	196	214	212	204	187
Registrations	529	682	756	700	486	483	230	238	192	250

IV I HIP DYSPLASIA (HD) STATISTICS

The percentage of HD has been around 15% in the 1990's - with the exception of Dobermanns born in 1998 that have a HD percentage of almost 30%! About 30% of the dogs are examined for HD.

Table 13 represents the HD statistics on Dobermanns born 1991-2001.

The percentage of affected Dobermanns born 1991-2001 and bred in Finland is 16.1% and the percentage of affected imported Dobermanns born during the same period of time is 21.0%. The amount of affected imports is almost a third higher than that of the Finnish bred. We can thus assume that not only is the evaluation of HD more strict in Finland but also that there are more HD affected individuals in the European stock than is revealed by the official statistics.

In table 14, the HD results are represented of the stud males used in years 1991-2001. The percentages are based on the registered progeny in Finland. The percentages have been counted from the amount of registered progeny born in Finland. The imported dog results have not been included in this scheme. In the 1990's only less than 2% of the litters had a HD affected sire.

Birth year	Born N	A N	B N	C N	D N	E N	Year	Free %	HD %	Exam. %
1991	590	101	48	25	11	1	1991	80,1 %	19,9 %	31,5 %
1992	555	108	40	17	6		1992	86,5 %	13,5 %	30,8 %
1993	833	126	44	29	5		1993	83,3 %	16,7 %	24,5 %
1994	661	82	50	18	3	1	1994	85,7 %	14,3 %	23,3 %
1995	509	68	67	26	2		1995	82,8 %	17,2 %	32,0 %
1996	400	42	57	17	2		1996	83,9 %	16,1 %	29,5 %
1997	227	25	18	8	1		1997	82,7 %	17,3 %	22,9 %
1998	255	29	31	18	7		1998	70,6 %	29,4 %	33,3 %
1999	207	25	26	12			1999	81,0 %	19,0 %	30,4 %
2000	230	19	13	1	1		2000	94,1 %	5,9 %	14,8 %
Total	4467	625	394	171	38	2	1230	82,8 %	17,2 %	27,5 %

Table 13

HD	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Sire HD-A	416 88,9 %	451 86,6 %	736 91,4 %	574 89,4 %	460 93,1 %	253 69,3 %	159 84,1 %	178 89,4 %	93 68,9 %	115 73,7 %	37 50,0 %	3472 85,8 %
Sire HD-B	39 8,3 %	31 6,0 %	58 7,2 %	57 8,9 %	34 6,9 %	112 30,7 %	18 9,5 %	21 10,6 %	32 23,7 %	32 20,5 %	37 50,0 %	471 11,6 %
Sire HD-C	13 2,8 %	8 1,5 %	11 1,4 %	0 0,0 %	0 0,0 %	0 0,0 %	11 5,8 %	0 0,0 %	10 7,4 %	9 5,8 %	0 0,0 %	62 1,5 %
Sire HD-D	0 0,0 %	9 1,7 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	9 0,2 %
Sire's HD not known	0 0,0 %	22 4,2 %	0 0,0 %	11 1,7 %	0 0,0 %	0 0,0 %	1 0,5 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	34 0,8 %
Free sire % Affected sire % 	97,2 % 2,8 % 100,0 %	92,5 % 3,3 % 100,0 %	98,6 % 1,4 % 100,0 %	98,3 % 0,0 % 100,0 %	100,0 % 0,0 % 100,0 %	100,0 % 0,0 % 100,0 %	93,7 % 5,8 % 100,0 %	100,0 % 0,0 % 100,0 %	92,6 % 7,4 % 100,0 %	94,2 % 5,8 % 100,0 %	100,0 % 0,0 % 100,0 %	97,4 % 1,8 % 100,0 %

Table 14

IV J PHTLV/PHPV STATISTICS

The percentage of PHTVL/PHPV affected individuals has considerably increased since the use of the biomicroscope in the eye examination (1985 onwards). It is not likely that the illness itself would have spread more widely, rather it is a question on getting more accurate data on the situation.

In table 15 the PHTVL/PHPV- examination results of all dogs born 1991-2001 are presented. In table 16, the PHTVL/PHPV examination results per year of the stud males used in years 1991-2001. The percentages are based on the registered progeny based in Finland. The percentages have been based on the amount of registered progeny born in Finland. The imported dogs' results have not been included in this scheme.

Approximately one fifth of the dogs born in the 1900's have a PHTVL/PHPV affected sire. In order to decrease the prevalence of the illness within the breed more attention should be given to it in the future.

Birth year	Born N	Free N	1grade N	2grade N	3grade N	4grade N	Year	Free %	PHTVL %	Exam. %
1991	590	126	31	3			1991	78,8 %	21,3 %	27,1 %
1992	555	96	24	2	1		1992	78,0 %	22,0 %	22,2 %
1993	833	137	34	3			1993	78,7 %	21,3 %	20,9 %
1994	661	87	42	1	1	2	1994	65,4 %	34,6 %	20,1 %
1995	509	92	41	3			1995	67,6 %	32,4 %	26,7 %
1996	400	59	33	1	1		1996	62,8 %	37,2 %	23,5 %
1997	227	41	14				1997	74,5 %	25,5 %	24,2 %
1998	255	51	34	1			1998	59,3 %	40,7 %	33,7 %
1999	207	35	22	1			1999	60,3 %	39,7 %	28,0 %
2000	230	27	5				2000	84,4 %	15,6 %	13,9 %
Total	4467	751	280	15	3	2	1051	71,5 %	28,5 %	23,5 %

Table 15

PHTVL	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Free	394 84,2 %	436 83,7 %	652 81,0 %	506 78,8 %	346 70,0 %	239 65,5 %	114 60,3 %	139 69,8 %	88 65,2 %	90 57,7 %	64 86,5 %	3068 75,8 %
Sire 1-grade	22 4,7 %	51 9,8 %	132 16,4 %	125 19,5 %	136 27,5 %	126 34,5 %	62 32,8 %	60 30,2 %	37 27,4 %	43 27,6 %	10 13,5 %	804 19,9 %
Sire 2-6 grade	8 1,7 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	0,0 %	8 0,2 %
Sire without result	39 8,3 %	9 1,7 %	0 0,0 %	11 1,7 %	0 0,0 %	0 0,0 %	1 0,5 %	0 0,0 %	0 0,0 %	0 0,0 %	0 0,0 %	60 1,5 %
Sire's result not known	5 1,1 %	25 4,8 %	21 2,6 %	0 0,0 %	12 2,4 %	0 0,0 %	12 6,3 %	0 0,0 %	10 7,4 %	23 14,7 %	0 0,0 %	108 2,7 %
Free sire % Affected sire % 	84,2 % 6,4 % 100,0 %	83,7 % 9,8 % 100,0 %	81,0 % 16,4 % 100,0 %	78,8 % 19,5 % 100,0 %	70,0 % 27,5 % 100,0 %	65,5 % 34,5 % 100,0 %	60,3 % 32,8 % 100,0 %	69,8 % 30,2 % 100,0 %	65,2 % 27,4 % 100,0 %	57,7 % 27,6 % 100,0 %	86,5 % 13,5 % 100,0 %	75,8 % 20,1 % 100,0 %

Table 16

IV K CAH (CHRONIC ACTIVE HEPATITIS) STATISTICS

Our problems appear to have faded after the grim looking situation of the end of the1980's and beginning of the 1990's. Many dogs intended for breeding have been tested with blood tests required by the programme against hereditary diseases (PEVISA) and finally with biopsy. These dogs have not been then used for breeding. Also the gene pool has almost totally changed since the ban of quarantine regulations for imported dogs in Finland. Our old "problem lines" were no longer used for breeding.

With imported breeding material from other European countries we however got new CAH affected dogs. The ALT test effectively prevented the use of such dogs in breeding but at the same time they proved that CAH is not solely a Finnish problem. On the contrary, in a study conducted at the end of the 1990's among Dobermanns showing no clinical signs of the CAH in the Utrecht University in Holland, a larger percentage of affected dogs was found, than was assumed based on the previous Finnish examination material!

Our own control system based on the ALT results is quite effective nowadays but the further control of the elevated ALT results is not done by the owners and thus the relation between high ALT results and a possibility to develop CAH remains unclear. Another point to highlight is that the dog owners are far too reluctant and passive to examine their dogs - especially at older age; young dogs are quite satisfactorily being examined. These factors contribute to hinder the Finnish Dobermann Club from stating the "problem lines" and also gives too positive estimate on the status of the CAH within the breed.

We have now entered a new millennium with this disease, and it is comparable to a ticking time bomb. The severity and aggressiveness we have already experienced in Finland in the 1970's and 1980's was due to our closed population (quarantine) and the distortions (small effective population, popular sires) in the breeding.

IV L V.WILLEBRANDT DISEASE

We may become much wiser on the status of this illness amongst our Dobermann population in the future as an increase in the DNA testing for v.Willebrandt disease will give more data for decision making. According to the statistic on the status of this illness in USA, it seems to be quite widely spread. The situation might be slightly different in Europe due to the differences in the dog population on these two continents.

IV K DCM (DILATED CARDIOMYOPATHY)

The breed club has organised ongoing surveys on the diseases appearing in the dogs. According to these surveys, cardiomyopathy is one of the most serious problems we will be facing in the years to come. Sudden deaths and reported cardiomyopathy cases seem to have increased over the past decade. A separate survey on cardiomyopathy will be organised in the near future.

IV N WOBBLER SYDROME

Wobbler syndrome is a condition that most evidently will be a hindrance to the use of a dog to work. The severity of the problem is unclear. According to some studies conducted in the USA and some European countries, it would seem that the condition is in fact quite widely spread even tough clinical signs may not be easily detectable. Due to the differences in the studied material it is very difficult to make any solid conclusions.

V THE BREEDING ORGANISATION

Appointing of the committee

The board appoints and oversees a committee and determines its tasks.
At the beginning of each year, the board appoints a chairperson for a period of one year and at least three members for a period of two calendar years at a time. The appointed committee elects amongst its members a vice-chairperson and a secretary that needs not to be a member of the committee.

Members of the committee

The board may during its executive period add new members to the committee or appoint new members to replace those who may have resigned or have been expelled. The board may expel members of the committee during its executive period based on strong and grounded arguments.
Members of the committee must attend to their duties in a responsible manner and see to that the club's property trusted to the committee is looked after and used in a proper manner.
The committee can appoint a necessary amount of assistants.

Meetings and minutes

The committee meetings are called by the chairperson and in his/her absence by the vice-chairperson.
Minutes must be taken of every committee meeting and the minutes must be signed by the chairperson and the secretary. The minutes must be identified in numerical order.
A copy of the minutes must be given to the board within a month of the meeting in question.
All applications directed to officials and all applications that would bind the club economically must first be discussed with the board.
No fees are paid for attending the meetings.

Action plan and budget draft

The committee prepares annually an action plan and a budget draft for the following calendar year; these must be presented to the board by the end of September.
The annual reports and the committee budgets from the previous calendar year must be presented to the board by the end of February.
The committee is submitted to the board and function within their action plans, budget drafts and their rules and regulations.

Power of decision and vote

The committee has the power of decision when at least half of its members are present, one of which being the chairperson or the vice-chairperson of the committee.
In the committee meetings decisions are made by vote. If the votes are evenly divided, the chairperson's vote is decisive.

Required qualifications for committee membership

The appointed persons are required to have been members of the Finnish Dobermann Club for a minimum period of five consecutive years.
The appointed persons should represent varied knowledge in the fields of the Dobermann breed (eg show judge, working trials judge, accredited breeder or accredited breed counsellor by the Finnish Kennel Club, a breeder, etc.).

Duties

The duties of the committee are to give guidelines to the breeding in Finland. The aim is to breed Dobermanns that are socially sound and acceptable, healthy and anatomically in accordance to the breed standard.
The committee is responsible for organising the official character tests and ZTP tests of the club.

VI THE EXECUTIVE GUIDELINES

VI A ANATOMY

Anatomy in the Dobermann as in many other breeds is the most controlled area in breeding programmes.

This is why it is beneficial to give the breeders as much as possible personal freedom of choice and actions in this field. To ensure the reliable results of these choices and positive progression, the breeding committee should emphasize the ongoing training of present and future show judges.

VI B CHARACTER

The Finnish Dobermann Club has fully or partially reimbursed the entry fees to the character tests to its member dog owners. This system should be used as much and often as economically possible.

In breeding, dogs that have stable nerves and are friendly and sociable with relatively high stimulus threshold should be favoured. Advances in breeding will not be achieved by just looking at the final score points of the character tests. An extensive study (a large number of dogs tested) and progeny analysis are the only and most reliable methods to achieve a continuously positive and desired development in the behaviour of the Dobermann.

VI C WORKING ABILITIES

Maintaining and improving the working abilities of the Dobermann are directly followed by the overall improvement of the breed's behaviour. A mentally sound dog is also a dog that can be worked with. The Finnish Dobermann Club must promote training for the young dogs and urge its members to participate in activities and training arranged for working breeds.

VI D HEALTH ISSUES

VI D 1 Hip dysplasia

Hip dysplasia (HD) is controlled via the breed specific requirements for breeding programme (PEVISA) validated by the Finnish Kennel Club. It is not necessary to enforce any other requirements for breeding. The breeding committee wishes however that the use of HD-C specimen individuals would be restricted to only some rare cases.

VI D 2 Diseases of the eye, PHTLV/PHPV

Eye disease (PHTVL /PHPV) is controlled via the breed specific requirements for the breeding programme (PEVISA) validated by the Finnish Kennel Club. It is not necessary to enforce any other requirements for breeding.

The breeding committee recommends however that if an individual with a PHTVL/PHPV degree 1 is used for breeding, the other individual would be PHTVL/PHPV free.

VI D 3 Chronic Active Hepatitis (CAH)

Chronic Active Hepatitis is controlled via the breed specific requirements for breeding programme (PEVISA) validated by the Finnish Kennel Club. It is not necessary to enforce any other requirements for breeding.

VI E GENERAL ISSUES

The above set aims and goals for breeding and can be achieved via:

GATHERING as many breeders as possible to follow the rules and guidelines set by the breed specific programme for breeding; signing of the Breeders' Agreement by the Finnish Dobermann Club.

OBEYING AND HONOURING the rules and guidelines set by the Finnish Kennel Club, the Finnish Working Breeds' Association, the Finnish Dobermann Club, and the litter requirements by the Finnish Dobermann Club.

ORGANISING lectures on breeding, also progeny judgings and inspections when necessary.

GIVING the information needed to the breeders and all enthusiasts of the breed.

MAINTAINING a computer based data bank on all issues related to and necessary for the breeding of the Dobermann.

Necessary changes and revisions can be made to this breed specific programme for breeding if suggested by the Breeding Committee and accepted by the board.

Vocabulary

PEVISA - Special requirements enforced by the Finnish Kennel Club to fight against hereditary problems and diseases in a given breed.

CAH - Chronic Active Hepatitis also known as Dobermann Hepatitis (DH); a chronic, actively progressing hepatitis of unknown origin. The condition leads eventually to the destruction of the liver cells and to liver cirrhosis.

ALT - Alaninaminotranferase is an enzyme located in the liver cells. The amount of this enzyme increases in the serum if the dog has Dobermann hepatitis. It may also increase due to other diseases of the liver.

DCM - Dobermanns have dilative type of cardiomyopathy. This is a disease of the heart where the heart muscle's capacity to contract is weakened thus leading to enlargement (dilation) of the heart and insufficiency of function.

PHTVL/PHPV - Persistent hyperplastic tunica vasculosa lentis / Persistent hyperplastic primary vitreous. Permanent, sometimes even aggravating eye disease, due to a disturbance in the resorption of fetal blood vessels.

v.Willebrandt disease - A hereditary haemophilic disease complex that manifests itself in several different stages in clinical bleeding symptoms. The Dobermann has typically the mildest, type I form.

Some Terminology for Genetics

Chromosome: Threadlike structure found in the nucleus of a cell. Stucture that composed of DNA and proteins. Each chromosome contains hundreds or thousands of the genes.

Gene: Segment of DNA on a chromosome that that contains the information necessary to make a protein. Proteins work as enzymes, antibodies etc. and are essential for growth and repair of animal tissue.

Gene locus: Location of a specific gene in a chromosome.

Heterozygote: Being of different heredity, animal that has two different alleles - alternative forms of a gene - at a given locus in a chromosome.

Homozygote: Being of same heredity; animal that has two identical alleles of a specific gene in a chromosome.

Genotype: Genetic constitution of an organism.

Phenotype: Observable characteristics / the external appearance of an organism produced by the organism's genotype interacting with the environment.

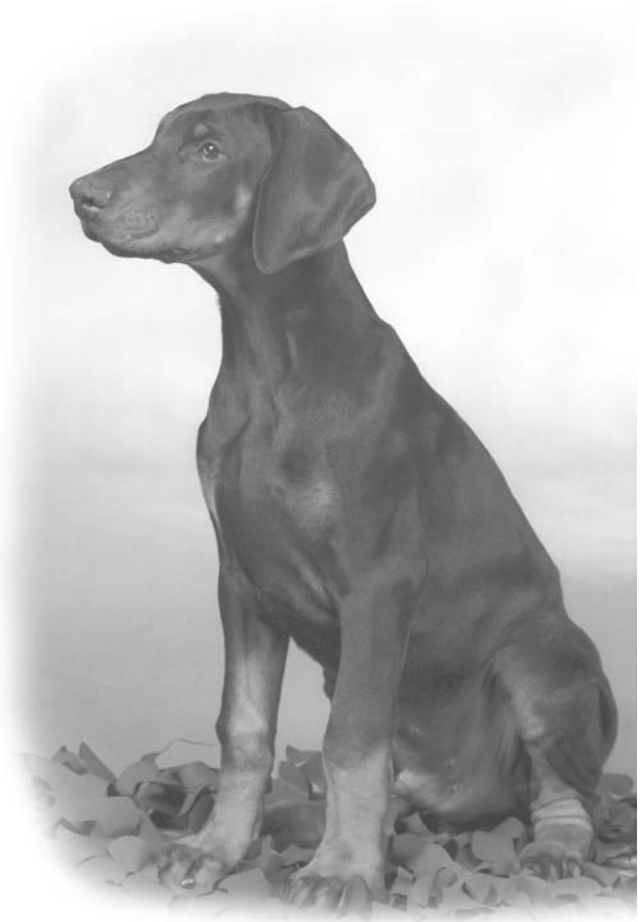
Population: Group of individuals of the same species living in the same area at the same time and sharing a common gene pool.

Gene pool: Sum of genetic information present in a population at any given moment.

Effective population size, in a genetically idealized population, made up mathematically from the individuals number that are breeding in a given population. The number gives an information of the genetical stage of the population.

Population genetics: Study of variation in genes among a group of individuals and factors that determine gene frequencies.

Diversity: The variety of different types of genes in a species or population.



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This program has been accepted in the general meeting of the Finnish Dobermann Club on 14.4.2002.
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