

## **Topic 2: Differentiation of dog breeds / Application of tests for dogs predisposition to work with human**

### **Lecture**

Domestication of the dog.

The life paths of two animal species, the protohuman and the wolf, crossed about 14 000 years ago. To this day, no one has fully explained how this happened. The protohuman and the wolf were competing species. As we know, competing species don't have much love for each other in nature. There are only theories. Probably these two species found that they could complement each other in hunting game.

Man has been taking advantage of the characteristics of dogs since time immemorial. Wolves and later dogs, compared to man when hunting, excelled in speed and the ability to track game. Man, on the other hand, was able to kill game more quickly with primitive weapons.

The first use of dogs was for hunting game, where man used the original innate qualities such as tracking, searching, trapping and holding game.

In the past, it was thought that the dog had multiple ancestors besides the wolf, such as coyotes and jackals.

Genetic analyses have confirmed that the only ancestor of all dog breeds is a single species and that is the wolf.

The hunting qualities of dogs are not only used in actual hunting but the weakened hunting qualities are also used in herding.

The environment in which man lived and the type of prey hunted determined the morphological and psychological characteristics of prehistoric dogs. The use of traits and instincts is always closely related to the basic needs of humans. For the first time in history, man enters into the selection of animal population genes in dogs. He weeds out dominant and aggressive individuals that do not respect man as the leader of the pack. He begins to trace character traits and influences the next generation of dogs.

Over time, dogs begin to be used for other activities besides hunting. The use of dogs by different peoples, in different geographical and climatic conditions, and with different working or social purposes, has led to the emergence of many breeds with different focuses of their work.

In the course of evolution, the dog becomes almost everything that man is. It becomes a hunter and protector of human habitation. It is interesting that the dog that hunts game becomes a protector of the herd and a shepherd who merely drives away grazing animals. It is used to pull mainly sledges in the snow. It is used in war expeditions. It is also used for entertainment, especially dog fights between each other but also with other species of animals. Dog fights with bulls, bears and other species are popular. To this end, even breeds specific to bullfighting, such as the bull terrier, are being created. Since the beginning of the domestication of this species, the dog has been used as a slaughter animal by some peoples practically until today. Some peoples have been using the dog for social purposes since ancient times.

The second use of dogs by humans is considered to be as a helper in protecting herds and herding.

Herding behaviour in dogs is a modified predatory behaviour. Selective breeding of dogs has minimized the natural tendency to regard livestock as potential prey, while retaining some of the hunting qualities towards predators, resulting in a very effective herding dog.

In the agrarian sector, we mainly use the characteristics of dogs for livestock, which help us in various working operations with the animals, replacing human labour.

This includes :

- herding, where we are talking about herding dogs,
- herd guarding, where we are talking about sheepdogs,

- and herding, where we use cattle dogs.

In all cases, these are suppressed hunting characteristics, with an attempt to chase animals in front of the ALFA individual, similarly to wolf hunting. The ALPHA individual is represented by the human handler.

The last phase of the hunt - killing the prey is suppressed in these dogs. Occasionally it appears in some individuals. It is undesirable. Weaker manifestation of this trait can be suppressed by training. Such individuals should not be used in reproduction.

Hunting game in the Middle Ages without dogs was unthinkable. People then had guns that could hunt effectively only within a few dozen metres. Dogs were used to track game, specifically tracking dogs. They worked on a long tracking line. They were able to concentrate on an old game trail. If they tracked the game to where it had escaped from, then a pack of duries would be released on the warm trail of the game. The duries caught up with the game, holding it until the hunters were able to get a hold of it.

Fighting dogs, herding dogs and guard dogs were also developed. Man is already intervening in dog breeding. He is beginning to breed desirable genotypes.

The modern age is characterised by the stabilisation of breeds.

The working use of dogs can be divided into hunting dogs, dogs used in war and dogs used in service. Dogs protecting the dwelling against thieves, against game and rodents. Dogs used for herding and herd protection.

Dogs used for the entertainment of people are also bred. Practically until the 20th century, dog fights are popular. Hunting uses of dogs are still popular today. Since the beginning of the modern era, the sporting use of dogs appears. For betting dogs, it was field trials, which are still popular today. Today we know many sporting uses of dogs. Agility is very popular. Sport cynology is also very popular today. More and more, dogs are establishing a social status among people, in which no work is required of the dog, just playing the role of a companion. Many breeds used for work in the past are losing their working qualities as society becomes more interested in their exterior characteristics.

Today, cynology is governed by the world's top dog breeding organization known as the FCI. Selected countries are either members, associate members, may be bound to the FCI by various treaties or have no connection with the FCI.

The objectives of dog breeding worldwide are in accordance with the rules and legislation of each country. These include encouraging and promoting the breeding, registration and use of purebred dogs with a pedigree certificate, ensuring that their functional, health and physical characteristics meet the standard set for each respective breed, enabling them to work and perform a variety of functions in accordance with the specific characteristics of their breed. Protecting the use, ownership and breeding of purebred dogs with pedigree certificates in countries where the Association has a Member or Contracting Partner; promoting the non-profit exchange of dogs and information about cynology between Members and Contracting Partners; and initiating the organization of dog shows, trials, tests, conferences, sporting and educational events, the use of dogs in rescue operations and for other special purposes such as therapy, assistance and other dog-related activities. To promote and support cynology and the care of dogs throughout the world within the jurisdiction of each Member or Contractor and to the extent practicable for each Member or Contractor.

Maintaining the original working characteristics of the breeds plays a huge role nowadays, as in the last period there has been a decline in the working characteristics of many working breeds and a preference mainly for their exterior characteristics.

Almost 400 recognized dog breeds are classified into 10 FCI groups from the organizational point of view.

The breeds are classified in the groups according to certain common characteristics. Reassignment of breeds between groups is possible but exceptional, subject to a complex

process. The creation of new breeds is also possible, subject to the "new breed recognition procedure". Breeding and recognition is carried out, first at national level and later at international level. The whole process is strictly described.

The naming and ordering of dog breed groups has a precise order and wording.

1. Groups are Sheepdogs and Cattle dogs (except Swiss Cattle dogs).
2. Group are Pinschers and Schnauzer - Molosoid breeds and Swiss Mountain and Cattle dogs.
3. Group are Terriers.
4. Group are Dachshunds.
5. Group are Spitz and primitive types.
6. Group are Scent hounds and related breeds.
7. The group is Pointing dogs.
8. Group are Retrievers, Flushing dogs - Water Dogs
9. Companion and toy Dogs.
10. Sighthounds

Sheepdogs and Cattle dogs except Swiss Cattle dogs, are dogs that have been bred to protect the herd from wild animals, protect the dwelling, they do not have a fully developed hunting instinct. The body structure is adapted to everyday work, they are tenacious and hardy. Adapted to adverse climatic conditions. In the coat of the little dogs have a protective function, water runs down them well. They have a dense undercoat and a thick layer of subcutaneous fat, which protects them against heat loss.

Service breeds are also included in this group, which are characterized by docility, innate distrust of strangers, diligence and excellent sense of smell.

The second group are Pinschers and Schnauzer - Molosoid breeds and Swiss Mountain and Cattle dogs.

The canine breeds have been bred for dog fighting, by their body structure they are adapted for fighting. They have a wide stance of the forelegs and a well-muscled chest, strong jaws with a strong bite. They have a lymphatic constitution with a lot of loose skin.

This group is divided into 3 sections: Pinschers and Beardies, Molosoids and Swiss Mountain Dogs.

The terrier group is quite a diverse group. They are temperamental, vocal, tenacious and independent. Originally bred to hunt game, mainly foxes and badgers underground in dens. Breeds with a height at withers of up to 40 cm work in dens, others work on the surface, stalking and coursing game. They are divided into smooth-coated, rough-coated and long-coated breeds. Quite a large number of originally hunting breeds have already lost their hunting qualities. They find their use as pet breeds.

The group has 4 sections: Large and medium sized Terriers, Small sized Terriers, Bull type Terriers and Toy Terriers.

Dachshunds are a fairly balanced group, characterized by a long body shape, with a 1 to 1.7 to 1.8 ratio of height at withers to body length. The latter is caused by a genetic growth disorder of long tubular bones called achondroplasia. An excessively long body frame with a ratio above 1 to 2 is not desirable. The first records of dachshund-like dogs date back to 5000 BC. Unfortunately nowadays there are also opinions about a complete ban on the breeding of dachshunds. The reason for this is that it is promoting a genetic anomaly. Dachshunds, however, are one of the relatively healthy and long-lived dog breeds.

They were originally bred to hunt foxes, badgers but also otters, beavers and rabbits underground.

The country of origin is thought to be Germany. They are very courageous hunting dogs, suitable for working above ground. They have excellent tracking qualities, searching, volume on the warm trail of game, orientation, tracking and tracking of game.

According to the type of hair they are divided into: short-haired dachshunds, coarse-haired dachshunds and long-haired dachshunds.

Dachshunds are divided into three sizes. In the past the indicator was weight, from 2019 it is chest circumference. This is measured at a minimum age of 15 months. There is a precisely defined measuring point. According to the girth, we divide them into Standard Dachshunds with a chest girth of 37 to 47 cm for males and 35 to 45 cm for females. Medium size are Miniature Dachshunds with a chest circumference in dogs from 32 to 37 cm and in bitches from 30 to 35 cm. The smallest are Rabbit dachshunds with a chest girth of 27 to 32 cm for males and 25 to 30 cm for females.

By combining the three coat types and three sizes, we have 9 varieties of Dachshunds.

Within the 4th FCI group of Dachshunds we are talking about 9 varieties. For hunting mainly standard Dachshunds are used. Miniature Dachshunds and Rabbit Dachshunds races of Dachshunds find limited use in hunting. Their tracking qualities may be an advantage. The working use of the rabbit and dwarf varieties in badgers has been, in addition to fox-hunting, also otter, beaver and rabbit-hunting. Nowadays, Dachshunds are popular breeds all over the world, but they are only used for hunting purposes in Europe.

Spitz and primitive types are breeds relatively little changed from the wolf's wild ancestor. They bear a striking resemblance to it in head, ears and coat.

Spitz have a square body frame, wedge-shaped head, small standing ears, dense undercoat, a band of thicker fur around the neck, the tail is curled and carried over the back.

From the working point of view, a rather diverse group within which there are hunting, traction and herding dogs.

This fifth FCI group has 7 sections. It is divided into Nordic sledge dogs, Nordic hunting dogs, Nordic Watchdogs and Herders, European spitz, Asian spitz and related breeds, Primitive type and Primitive type – Hunting dogs.

Scent hounds were very much preferred hunting dogs in the past. Breeding was focused on finding game and driving it out of the woods and thickets. Important innate qualities in scent hounds are courage in the face of game, loudness on the warm trail of game, orientation in the woods, tracking and interest in game.

Leash Hounds are dogs that excel in tracking qualities. They can concentrate on working out a trail that is often over 20 hours old. They are specialists in tracking mainly deer, but also fallow deer and mouflon.

The group is divided into 3 sections: the Scent hounds, Leash (scent) Hounds and the Related Breeds.

Pointers are relatively modern hunting dogs.

Man has genetically fostered the trait of displaying game, whereby the canid, after locating its prey, stands motionless for a short time and waits for the right moment to pounce on the prey with a subsequent leap. Man specialized the pointers to work with small game. In some countries they are also used to work with big game.

Pointers are dogs that are typically used to systematically search for small game in the field. They work with a high nose. They take in the scents brought to them by the wind.

They have the genetic trait of exhibiting game. If they see game in the undergrowth, they expose it by standing still, If the game is retreating or is quite far away, they follow it by slowly approaching. They maintain scent contact with the game.

Their main work is in the field, where they excel at systematically searching the undergrowth, but they also work well in the water and in the woods.

They are also required to apor hunted game up to the size of a fox.

The group has 2 sections namely Continental pointing dogs and British and Irish Pointers and Setters originating from the British and Irish Isles. Breeds from the second section of the pointers are distinguished by their speed, excellent sense of smell and display of game. In the

original country they were mainly used for finding and exhibiting game birds. The so-called pre-shot work. Continental pointers excel more in post-shot work.

FCI Group 8 are breeds of dogs originally bred in the past for hunting, but many of them have lost their hunting qualities completely and are used only as companion dogs. Some of these breeds, due to their characteristics, find use as seeing-eye and assistance dogs. Alternatively, they can also be used as service dogs, either in the army or the police.

Sniffer dogs were bred by hunters for persistent pursuit of game in thickets. They work with tremendous gusto at a relatively short distance ahead of the hunter. They also have excellent tracking qualities.

The group has 3 sections and these are the retrievers, which includes the very popular Labrador retriever. Second is Flushing dogs and water dogs.

Group 9 of the FCI called companion breeds is a relatively diverse group. Most breeds are miniature. Many have been revered, bred in castles, castles. Nahaks were bred for allergy sufferers. They find application only as companion dogs. Many breeds of this group were bred in the past for working use. Society's interest in their characteristic features caused a complete loss of wool for work.

This group has up to 11 sections.

Group 10 of the FCI called Sighthounds is a fairly balanced group.

They are originally fast hunting dogs hunting by sight. They worked in packs and hunted game, their whole body is adapted for fast running. Many of the breeds in this group have completely lost their hunting qualities. They are used only as companion dogs or in sporting use for greyhound racing.

The group has 3 sections, namely long-haired or fringed Sighthounds, rough-haired Sighthounds and short-haired Sighthounds.

As with other farm animals, we use different testing methods for dogs. The tests are aimed at determining the dog's character traits, the degree of training achieved and the dog's behavioural traits. Willpower traits are quite complex in terms of testing because many of them need the correct procedure to awaken a particular trait. For example, with setters, we cannot count on the dog immediately showing the game by exposure at first contact with a pheasant. However, showing pheasants as a trait will awaken in the builder over time. There is also a considerable influence of the negative experience of having the pheasant fly away on first contact with the scent of a pheasant. We have many similar cases of the awakening of the trait in cynology. Within controlled cynology, people have developed many different tests for specific kinds of work. Perhaps the most striking is in hunting cynology, where an individual can only be used in hunting when he has passed the tests for working with a particular species of game.

In all sectors of cynology, there are well-developed testing regulations through which dogs are tested. On the basis of the testing, they are given an assessment which reflects their character traits, the degree of training they have achieved and the degree of development of their behavioural talent. The result of the evaluation also greatly influences their use in dog breeding. The evaluation of the tests is done by certified judges, whose education is methodically managed through the individual member countries of the FCI.

Testing and use of dogs for work is conditioned by obedience training. Obedience training is almost the same in all breeds. The training mainly uses reflex theory or associative learning. Obedience training is composed of exercises: calling the dog, sitting, lying down, walking the dog at the leg, whether pinned or loose. It also consists of stay in place exercises where the dog must remain still in a specific place.

Reflexive theory uses knowledge and commands and stimulations to create a reflex arc.

The formation of reflex arcs is always carried out in a precise sequence. Command and stimulus can never be confused in terms of time.

A command, followed by a stimulus, produces the desired irritation in the organism with the subsequent desired reaction of the organism. If the trainer is satisfied with the result, he will give the dog a reward.

With correct repetition of the given scheme, the desired conditioned reflex arc is produced. The number of repetitions to produce the basic reflex arc depends on several factors. For example, the nature of the individual, the environment, training maturity and others.

We can say that the greatest art of training is to give the dog the right stimulation at the right moment.

Associative learning involves a learned relationship between events, between which connections are made that lead to successful resolution of the situation. The dog can associate a specific action to a particular command. For example, it can associate that the dog's bottom should be near the ground to the command sit. The disadvantage of associative learning is that it involves the dog's consciousness in the process of performing the exercise, which still gives the dog the opportunity to re-evaluate whether it is advantageous for him to perform a particular action.

We know two basic ways of training a dog.

The play way uses the dog's natural ability to play. We consider play to be the gentlest pressure on the dog. The trainer motivates the dog to food or a toy. The bottom line is to end the training when the dog is still enjoying it, at best it should be stopped. We must never get to the point where the dog refuses to do an exercise anymore because of fatigue. We need to find out what will trigger the reaction, what appropriate stimulus will trigger the activity we want to teach. For example, what will provoke a bark, a sit, etc. This form of training is mainly used with puppies and young dogs. The form is suitable for training characteristically weak dogs. The advantages are that we cannot spoil the dog by improper training and the contact between handler and dog is improved. Disadvantages are mainly the unfixity of the reflex arcs, the dog only works if he wants to work. When the dog is not interested in doing the exercise, we cannot force him to do the desired action.

The opposite of the playful way of training is the forced way. The essence of this method is to make the dog understand that he has to perform the exercise and there is no other option. This method requires some practice and a good knowledge of the individual's personality traits. We have only limited use with characteristically weak dogs. The advantage is that it is possible to train a dog at any age except up to 6 months. The disadvantage is the possible betrayal of the dog when the dog loses trust towards the trainer. Also a disadvantage is the disruption of a good relationship between the trainer and the dog. If not handled properly, the dogs do not work...

Summoning is considered the most important exercise. By means of recall we can greatly influence the dog's action.

After the call the dog should sit in front of the handler, at the leg or join the walk to our left leg. We use commands such as to me, announcing the dog by his name, or in the case of hunting breeds a double whistle. Without the individual respecting us we cannot call him away from things of interest to the dog. Through a playful form of training in recall, we accomplish this by waiting for a situation where the dog is away from us, giving the command, and then running in the opposite direction away from the dog. We achieve this by having the dog run after us. It is possible to use a reward - food, i.e. a taste-irritant method, which makes the resulting effect even more pronounced.

The forced form of training is implemented in such a way that we influence the individual by means of a light cord. On command, we mechanically pull the dog in front of us. An electric training collar can be used, but it is not the happiest choice. Through the electric training collar, we can use correction impulses over a long distance.

The sit-up is an exercise that will be used in many situations, for example when giving an apport.

The playful form is to show the dog the toy above eye level after the sit command, so that the most appropriate position for the dog is where he is looking at the toy after the sit.

The forced form consists in giving a stimulus after the command such as will ensure that the individual is brought into the sit position. Often the stimulus is not pleasant to the dog, resulting in the formation of a tighter reflex arc. One way of performing the stimulus is by waving the lead obliquely upwards towards the rear after the command. The dog is uncomfortable with this, seeks a position where the action stops until eventually he sits down and the uncomfortable flicking stops. Another option is for the trainer to use the stimulus of hand pressure. He has the dog in a standing position. We hold him by the collar with the left hand and by the loins with the right. On command, he presses the dog's hips with his right hand so that he sits up.

The exercise of lying down, or so-called dauning, is considered the second most important exercise.

A dog in the daun position should have the pelvic limbs under the body and the thoracic limbs straightened in front of the body. For hunting breeds, we require the head to be on the ground between the forelegs. For service breeds, the head should be up. The exercise is used to dampen unwanted dog activity. It is also an auxiliary exercise in more complex training.

Of the acoustic commands, the command daun, or lie down, a long whistle, or the utterance of a low whistle is used. In a playful manner, we position the toy so that the dog assumes a lie down position. The playful form is very unreliable with working dogs.

In the forced manner, we hold the dog by the nape of the neck with the right hand and by the loins with the left hand after the command to bring the dog into the daun position by pressure of the hands.

On the command stay, the dog is to stay in that place until we take him away. We never recall a dog from a stay command remotely. The stay or place command is used. This exercise is principally practised after the lie down exercise has been mastered. With the dog initially tied and run out. It is advisable as long as the dog is slightly tired. When laying down we can leave the dog a rucksack or jacket where the dog can smell our scent.

In a playful way, we try to convince the dog that he will get a toy after he has been still for a while. This is a very unreliable method with working dogs for potty training. It provides reduced reliability.

In the forced method we do not allow the dog to leave the place, for this purpose we use the lie down exercise whenever he would like to leave the place.

This exercise is commonly used when working with dogs. It ensures that if we need to put the dog down we leave it in a specific place and then come back for it.

Dog obedience testing is carried out in many types of trials to test whether dogs are able to perform a given type of work. Obedience is evaluated by certified judges who are approved for the specific type of test. We consider the highest level of obedience testing to be sport cynology, where judges evaluate every small deviation from the required performance. Obedience evaluation within hunter cynology is not so focused on accuracy but rather on reliability. Obedience evaluation in service cynology is also mainly focused on reliability. Obedience is to some extent an innate trait, but it is greatly influenced by training.