

Differentiation of dog breeds / application of tests for dogs predisposition to work with human

Modul no. 4: Precision Livestock Farming

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Domestication of the dog

- 14 000 years ago.
- In the past, it was thought that the dog had multiple ancestors (coyotes, jackals).
- Single ancestor of all breeds - wolf.
- Human and wolf were competing species.
- There are different theories of domestication.



- The first use of dogs was for hunting game, where human used the original innate qualities (tracking, trapping and holding game)



Development of exterior and psychological characteristics

- Environment and type of hunted game determine morphological and psychological characteristics of dogs.
- Humans weed out dominant and aggressive individuals (monitoring of nature, selection of genes).
- Exploitation of instincts and characteristics of dogs.

- The progressive use of dogs for other activities besides hunting, by different peoples, in different geographical and climatic conditions, has given rise to different groups of dogs.



- Becomes in the course of evolution:

- hunter,
- protector of human habitation,
- protector of the herd and shepherd,
- the beast of burden,
- used in warfare,
- serves for entertainment (dog fights, dog fights with other animals, bulls, bears, etc.)
- serves for slaughter purposes,
- serves as a pet.

- It is believed that the second use of the dog after hunting was as a herd protector and herding animal. Herding dogs belong to groups of dogs that are trained to herd or belong to breeds that have these characteristics innately.
- To protect livestock herds and herding, man uses the weakened hunting qualities of dogs.



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Middle Ages

- The most widespread dogs were hunting dogs - dogs looking for big game, along with them there were also tracking dogs.
- Fighting dogs, herding dogs, guarding dogs are also developed.
- Selection of desirable genotypes.



Modern times

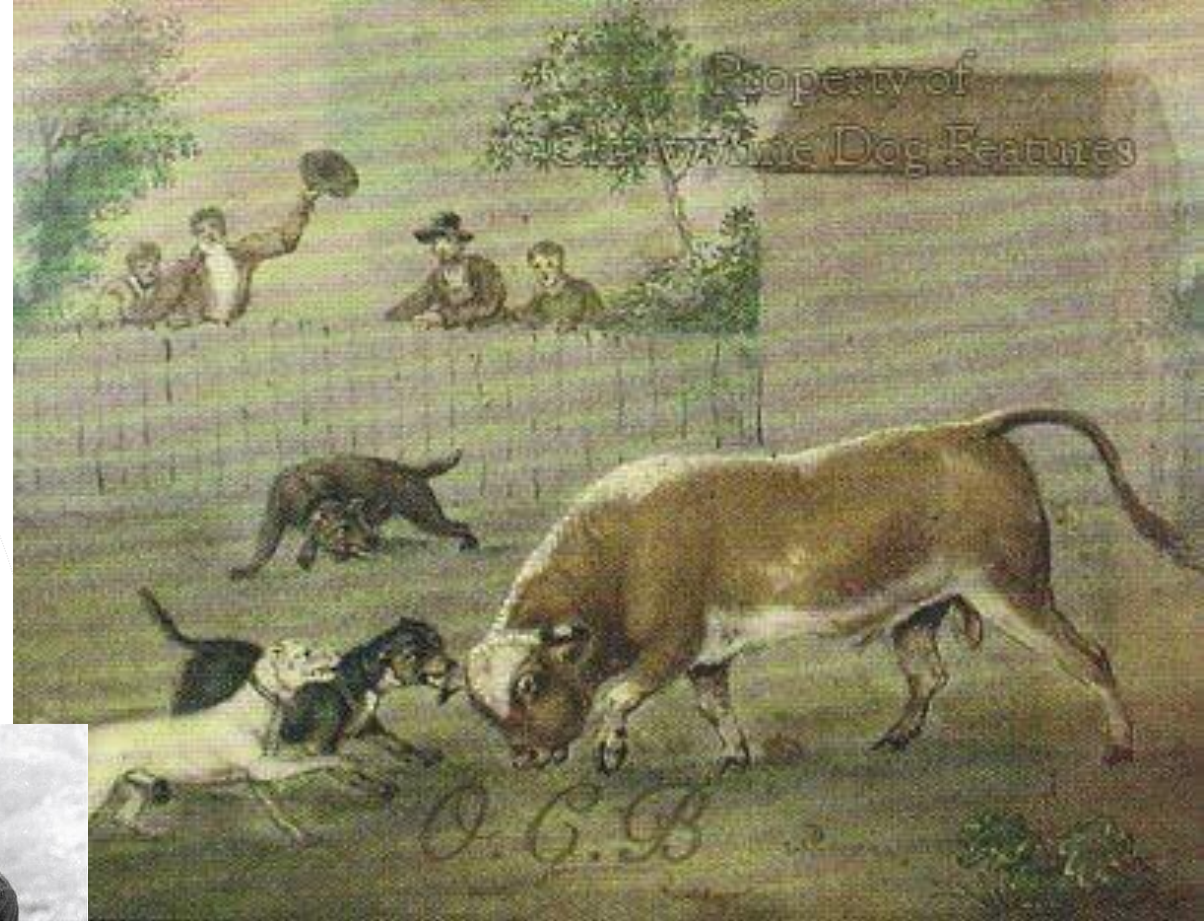
- 17th and 18th century stabling of dog breeds

Working use of dogs:

- hunting
- warfare
- protection of dwellings (against thieves, beasts, rodents)
- herd protection

Dogs are used for entertainment:

- wrestling
- hunting
- sporting use of dogs
- pet



Present

- The world's top dog breeding organisation - FEDERATION CYNOLOGIQUE INTERNATIONALE (FCI) (in Belgium).
- targets around the world in accordance with the rules and regulations of each country:



- support and promote 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 a 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;
- the promotion and encouragement of canine science and dog care throughout the world within the competence of each Member or Contractor and to the extent practicable for each Member or Contractor



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Dog breed groups according to FCI

- Organizationally, dog breeds are divided into 10 FCI groups.
- 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 possible, subject to the „procedural procedure for recognition of a new breed“.
- The classification of all breeds can be found on <https://fci.be/en/Nomenclature/>



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FCI groups / breeds

1. Herding and cattle dogs
(excluding Swiss Mountain Dogs)
2. Pinschers and Beardies -
Molosoid breeds - Swiss
Mountain and Shepherd Dogs
3. Terriers
4. Dachshunds
5. Spitz and primitive (native)
breeds
6. Scent hounds and related
breeds
7. Pointing dogs
8. Retrievers - Sliders - Water dogs
9. Companion and guide dogs
10. Sighthounds



Characteristics of Group 1 Herding and cattle dogs (excluding Swiss Mountain Dogs) and its most important breeds

- They were bred to protect the herd from wild animals, to protect the dwelling, they do not have a developed hunting instinct.
- The body structure is adapted to daily work, they are tenacious and hardy.
- Adapted to adverse climatic conditions - they have a thick undercoat and a thick layer of subcutaneous fat.
- They are also service breeds, which are characterised by docility, innate distrust of strangers, industriousness and an excellent sense of smell.

The group has 2 sections:

Sheepdogs - Australian Kelpie, Pyrenean Shepherd, Komondor, Slovak Shepherd, German Shepherd, Belgian Shepherd
Herding Dogs (excluding Swiss Shepherd Dogs) - Australian Cattle Dog, Ardennes Bouvier, Puli, Border Collie, Bearded Collie



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Characteristics of Group 2 *Pinschers, Beardies, Molossoids and Swiss Mountain Dogs* and its most important breeds

Dog breeds were bred for dog fighting, their body structure is adapted for fighting - wide stance of the front legs and well-muscled chest, strong jaws with a strong bite.

They have a lymphatic constitution with a lot of loose skin.

- The group has 3 sections:

Pinschers and Beardies - Doberman, Deutscher Pinscher, Zwergpinscher, Affenpinscher

Molosoid dogs - Neapolitan Mastiff, English Mastiff, Fila Brasileiro, Deutscher Boxer, Great Dane, Dogo Argentino, Dogue de Bordeaux, Tosa,

Swiss Mountain dogs – Newfoundland, Hovawart, Leonberger, Bernese Mountain Dog, Large Swiss Mountain Dog, Entlebuch Mountain Dog, Appenzell Mountain Dog



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Characteristics of Group 3 terriers and its most important breeds



- A fairly diverse group. They are lively, vocal, tenacious and independent workers. Originally bred to hunt game (foxes, 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, rough-haired and long-haired breeds.
- However, many breeds have lost their hunting qualities and use as pet.

The group has 4 sections:

High-legged terriers - Irish Wheaten Terrier, Parson Russell Terrier, Airedale Terrier

Low-legged Terriers - American Hairless Terrier, Czech Terrier, Norwich Terrier, Scottish Terrier, Jack Russell Terrier

Bull Terriers - Bull Terrier, Staffordshire Terrier, American Staffordshire Terrier

Dwarf Terriers - English Dwarf Terrier, Australian Silky Terrier, Boston Terrier, Toy Fox Terrier



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Characteristics of Group 4 Dachshunds and its varieties



- Bred for denning, they have shortened tubular bones - short limbs and a rectangular body frame with a 1:1.7-1.8 ratio. An excessively long body frame with a ratio above 1:2 is not desirable.
- Germany is considered to be the country of origin.
- They are very bold hunting dogs, bred to work underground (denning) and above ground. Excellent tracking qualities, searching, loudness on the warm trail of game, orientation, tracking and tracking of game.
- According to the type of coat we divide them:
 - Short-haired Dachshunds
 - Rough-haired Dachshunds
 - Long-haired Dachshunds



We divide them according to the chest circumference measured at the age of at least 15 months:

Standard Dachshunds: chest circumference: males 37 - 47 cm, females 35 - 45 cm

Miniatur Dachshunds: chest circumference: dogs 32 -37 cm bitches, 30 - 35 cm

Rabbit Dachshunds: chest circumference: dogs 27 - 32 cm, bitches 25 - 30 cm

Combining coat and size, we have 9 varieties in Dachshunds.



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Varieties of dachshunds

- Standard Dachshund Short-haired
- Standard Dachshund Rough-haired
- Standard Dachshund Long-haired
- Miniature Shorthaired Dachshund
- Miniature coarse-haired
- Miniature long-haired Dachshund
- Rabbit Dachshund Shorthair Dachshund
- Rabbit Dachshund rough-haired Long-haired Dachshund
- Rabbit Dachshund

The working use of rabbit and dwarf varieties in badgers was to den otters, beavers and rabbits in addition to fox.

Nowadays, dachshunds are bred all over the world, but they are only used for hunting in Europe.



Characteristics of Group 5 *Spitz and primitive (native) types* and its most important breeds

- Spices have a square body frame, wedge-shaped head, small standing ears, thick undercoat, a band of thicker fur around the neck, the tail is curled and carried over the back.
- A rather diverse group from the working point of view, within which there are hunting dogs, draught dogs and herding dogs.

The group has 7 sections:

Nordic sledge dogs - Greenland Dog, Alaskan Malamute, Siberian Husky, Samoyed

Nordic Hunting Dogs - East Siberian Lapwing, West Siberian Lapwing, Norwegian Elkhound, Swedish Elkhound

Nordic watchdogs and herders - Icelandic Shepherd Dog, Norwegian Buhund, Swedish Lapland Dog

European Spitz - German Spitz, Wolf Spitz, Dwarf Spitz

Asian Spitz and related breeds - Chow Chow, Akita-inu, Shiba-inu

Primitive type - Canaan Dog, Pharaoh Dog, Basenji

Primitive type - dogs for hunting use - Canary subspecies, Ibizan subspecies, Portuguese subspecies



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Characteristics of Group 6 Scenthounds *and related breeds* and its most important breeds

- Scenthounds were bred by hunters to find game and drive it out of the woods and thickets. Important innate qualities in such dogs are courage towards game, loudness on the warm trail of game, orientation in the woods, tracking and interest in game.
- Bloodhounds 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:

Scent hounds - Beagle, Basset Hound, Artesian-Norman bracke, Brandlbracke, Slovakian hound

Leash (scent) hounds - Hanoverian hounds, Bavarian hounds, Bloodhound

Related Breeds - Dalmatian Dog



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Characteristics of Group 7 Pointer dog and most important breeds

- Pointer dogs are dogs for which the systematic search for small game (hare, pheasant, ducks) is typical, mainly in the field.
- They have the genetic trait of exhibiting game. If they see game in the vegetation they expose it by standing still, if the game is retreating or is quite far away they follow it by slowly approaching.
- Their main work is in the field, but they also work well in the water and in the woods.
- They are also required to retrieve game up to the size of a fox.

The group has 2 sections:

Continental breed - Weimaraner, Hungarian vyzla, Slovak wirehaired pointer, German kurtshaired pointer, German wirehaired pointer.

British and Irish Setters - Pointer, English Setter, Irish Setter, Gordon Setter.



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Characteristics of Group 8 Retrievers – Flushing Dogs – Water Dogs and its most important breeds

- Breeds bred in the past for hunting, but many breeds have completely lost their hunting qualities and are used only as companion dogs or are trained as blind and assistance dogs.
- Hunting dogs were bred by hunters for persistent pursuit of game in thickets.
- They work with tremendous gusto at a relatively short distance in front of the hunter.
- They also have excellent tracking qualities.

The group has 3 sections:

Retrievers - Golden Retriever, Curly Retriever, Labrador Retriever

Flushing Dogs - American Cocker Spaniel, English Cocker Spaniel, Springer Spaniel, Welsh Springer Spaniel, German Quail

Water Dogs - Irish Water Spaniel, American Water Spaniel, Barbet, Friesian Water Dog



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Characteristics of Group 9 and its most important breeds

- Most breeds are miniature. Many were worshipped, kept in castles, castles. Nahaks were bred for allergy sufferers. Use as companion dogs.

The group has 11 sections:

Bichons and related breeds - Bichon Frise, Maltese, Levicek, Bolognese

Poodles - Small, medium, large, toi poodle

Small Belgian dogs - Belgian Griffon, Brussels Griffon, Brabant

Hairlees dogs - Chinese Crested Dog

Tibetan breeds - Lhasa-apso, Shih-tzu, Tibetan Spaniel

Chihuahuas - Short-haired and Long-haired Chihuahua

English toy spaniels - Cavalier king charles spaniel, King charles spaniel

Japan Chin and Pekingese - Pekingese Palace Dog, Japanese Chin

Continental toy Spaniels and others - Papillon

Kromfohländer - Cromforland Dog

Small molossian type dogs - French Bulldog, Pug, Boston Terrier



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Characteristics of Group

10 - Sighthounds and its most important breeds

- They are originally fast hunting dogs hunting by sight.
- They worked in packs and hunted game, their whole body is adapted for running (aerodynamic shape).
- Many breeds have completely lost their hunting qualities and are only used as companion dogs or for racing.

The group has 3 sections:

Long-haired Sighthounds - Afghan Hound, Barzoi, Saluki

Rough-haired Sighthounds - Irish Wolfhound, Scottish Deerhound

Shorthaired Sighthounds - Vipet, Sloughi, Polish Greyhound, English Greyhound



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The use of testing dogs for their working use

- The use of dogs for work is subject to obedience training.
- Obedience training is almost the same in all breeds.
- The training mainly uses reflective theory or associative learning.

Obedience training is composed of exercises:

- recall
- sit
- lie down
- walking at the foot
- stay



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Use of reflective theory

- Reflexive theory uses knowledge and commands and cues to create the reflex arc.
- The formation of reflex arcs is always carried out in the following sequence:
- Command - stimulus - arousal - organism response - reward
- The desired conditioned reflex arc is created by repeating the scheme
- The greatest art of training is to give the dog the right stimulus at the right moment.



Use of associative learning

- Associative learning involves a learned relationship between events between which connections are made that lead to the resolution of a situation.
- The dog can associate a specific action to a specific command.
- The disadvantage of associative learning is that the dog also involves consciousness in the process of performing the exercise.



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Ways of obedience training

Playful way

- Uses the dog's natural ability to play.
- Motivates the dog to feed or toy.
- The idea is to end the training when the dog still enjoys it - at best to stop.
- Need to find out what triggers a given response - appropriate stimulus (barking, sitting, etc.).
- Especially in puppies and young dogs.
- Form suitable for training character weak dogs.
- The advantages are that we cannot spoil the dog by incorrect training and the contact between handler and dog is improved.
- Disadvantages are mainly the lack of strength of the reflex arcs, the dog only works if he wants to.

Forced way

- The essence of this method is to make the dog understand that he has to do the exercise (there is no other option)
- Requires some practice and a good knowledge of the individual
- Limited use in characteristically weak dogs
- Able to train a dog at any age
- Disadvantage is the possible betrayal of the dog (breaking the temper)
- Disruption of a good trainer-dog relationship
- Dogs do not work when not exercised properly...



Recall training

- When called, the dog should sit in front of the handler, at the leg or join our left leg by walking.
- Command: to me, announcement by name, whistle (pi-pi).
- We cannot call the dog away from things of interest to the dog without the dog respecting us.



Playful way:

- The dog is away from us, we give the command and then run in the opposite direction from the dog
- Dog runs after us
- Possible use of food (taste-irritating method).

Forced way :

- Light cord - after the command we mechanically pull the dog in front of us.
- Electric training collar - use of correction impulses transmitted remotely.

Training of the sit exercise

- Command „sit" „sssst" raising the index finger



The playful way:

- After the sit command, we show the toy above eye level so that the most appropriate position for the dog is where he looks at the toy after sitting.

Forced way:

- After the command, we wave the leash diagonally upwards towards the back.
- We hold the dog standing up by the collar with the left hand and by the hips with the right hand. After the command, press the dog's hips with the right hand so that he sits up.



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Training of the lying down 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.
- Dimming unwanted activity
- Command „daun" raising hand, long whistle (piiiiiiii) „chchchchchchchch"
- Silencing the dog during unwanted activity (attack reaction, fixing exposure and calmness in front of the beast and the offender)

Playful way:

- In the playful form, we place the toy so that the dog assumes a lying down position.
- It is very unreliable with working dogs.
- It provides reduced reliability.

Forced way:

- Hold the dog by the top of the head with the right hand and by the hips with the left hand after the command, bring the dog into the daun position by hand pressure.



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Training exercise stay

- 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.
- Stay or place command
- Practice only after the lie down exercise has been mastered.
- Initially, the dog should be tied and jogged.
- It is advisable as long as the dog is slightly tired.
- We can leave a backpack or jacket where the dog can smell our scent.

Playful way:

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

Forced way:

- We do not allow the dog to leave the place, we use the lie down exercise for this purpose, always if he would like to leave the place.



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Obedience testing

- 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 with approval for the specific type of trials
- We consider the highest level of obedience testing to be sport cynology, where judges evaluate every small deviation from the desired performance.
- The evaluation of obedience within hunting cynology is not so much 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.



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