

Directions of use of dogs and their importance on agritourism farms

Modul no. 4: Precision Livestock Farming

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Development of herding

- Humans have used the qualities of dogs since time immemorial
- The first use of dogs was for game hunting, where humans used their original innate qualities (tracking, searching, sniffing, hunting and holding game).
- The right of the "last strike" in hunting was inherited by man through training and selection of genotypes.
- Humans use the genetically suppressed hunting characteristics of dogs to protect livestock herds and herding.
- The use of herding by different peoples, in different geographical and climatic conditions, led to the emergence of different breeds working with animals.



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- All herding behavior is modified predatory behavior. Through selective breeding, humans have been able to minimize the dog's natural inclination to treat cattle and sheep as prey while simultaneously maintaining the dog's hunting skills, thereby creating an effective herding dog.

- A herding dog, also known as a stock dog, shepherd dog, sheep dog or working dog, is a type of dog that either has been trained in herding or belongs to breeds that are developed for herding.



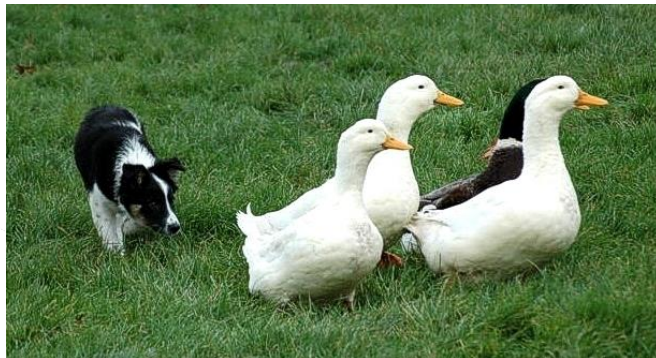
Characteristics of dogs used in farms

- Herding (sheepdog)
 - Livestock guardian dog (sheepdog)
 - Driving dog (cattledog)
- Suppressed hunting qualities, attempting to chase animals in front of an ALFA individual (similar to wolves). The ALFA individual is represented by a human (handler).
- Suppressed trait last stage of hunting - killing.



Talent characteristics

- Genetically determined traits.
- They need to be awakened in the individual by the right stimuli.
- The awakening of qualities is sometimes a longer process.
- The awakening of the qualities of the will influences:



- the character of the individual (a firm character is important in working dogs),
- training maturity (influenced by many other factors such as health, nutrition, sufficient stimulus, etc.),
- socialisation (it is more difficult the weaker the character of the individual),
- experience (positive or negative),
- correct sequence,

Livestock guardian dog

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- Protection of Livestock.
 - Exploiting the innate behaviour of sheepdogs.
 - Exploitation of innate sharpness (against predatory game).
 - Guarding the flock against predatory animals (bear, wolf, lynx, ravens, etc.).
 - Guarding the herd against thieves.
- Dogs that move freely in the herd are best suited. They are friendly with sheep. The herd is used to these dogs and they react immediately in the presence of predatory game.
 - In recent years, in addition to large carnivores, the sheep industry has also been plagued by problems caused by ravens (especially the raven), which can kill a lamb after it has been fleeced, or even damage adult sheep by, for example,
 - pecking out an eye.



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Driving dogs



- Known as heelers or driving dogs.
- The heelers or driving dogs keep pushing the animals forward. Typically, they stay behind the herd.
- The purpose of herding - to regulate the movement of herd animals (cattle, sheep).
- Exploiting the innate behaviour of dogs - to drive animals by pinching their legs, especially the heels (Heeling) and barking.
- They have an excellent feel for putting pressure on animals.
- They move closely behind animals on the edge of danger.
- They work behind the herd regardless of where the ALPHA is.
- They use pinching individuals in the legs to move the herd.
- Characteristically smaller stature on shorter legs, no distinct stalk and supraorbital arches, eliminating kicking from cattle.
- They are also able to learn to some extent the work typical of sheepdog breeds.



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Herding dog

- Known as headers.
- It is the use of the innate behaviour of herding dogs, which is enriched by learned procedures according to the needs and conditions of man.
- The aim of herding is to regulate the movement of herd animals (sheep, cattle, ducks, etc.)
- Herding itself consists of several instincts.



- The headers or fetching dogs keep livestock in a group. They consistently go to the front or head of the animals to turn or stop the animal's movement.



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Herding instinct complex



- Gathering of herding animals into a compact whole.
- Flanking - using the "innate feeling" to keep the herd moving - so called behind the "escape zone" but at the same time to get into a position from which the herd can move in the desired direction.
- Getting the herd to move (Lifting) as required by ALFA - a very important instinct - it is a feeling of what pressure to apply to keep the herd from spooking.
- Leading the herd in a straight direction (Wearing), the direction is determined by the ALFA, the dog eliminates the herd's deflection from the desired direction.
- Heading, the dog runs to the heads of the first animals in the herd to slow them down and especially to regulate the direction of movement of the herd towards the ALFA.
- Balancing - keeping the animals close to the ALFA - the dog moves constantly on the opposite side of the herd from the ALFA (considered the most important instinct).
- Shedding (singling) - separation of an individual from the herd - for its "catching" by ALFA - this role is genetically fixed especially in Border Collies.



ALPHA

- A dog is a social animal living in a pack in a strict hierarchy.
- This fact carries over into cohabitation with humans.
- Human is not necessarily ALPHA.
- The ALPHA position is reinforced from puppyhood, by training, by respect, sometimes by punishment.
- The BETA position is held by the individual who is trying to get to the ALPHA position.
- The ALPHA individual directs the hunt.
- The ALPHA has the right of "last strike" in the hunt.
- The basis of herding is to work for the ALPHA !!!
- The ALPHA handler must have an excellent FEELING FOR WORKING with dogs.
- The ALPHA must show a certain superiority, but at the same time he must also give.
- Part of the ALPHA's FEELING FOR WORKING WITH DOGS is innate and part is acquired through knowledge and experience.



Herding styles

- Traditional style (TS) - the most commonly used, the traits for this style are shared by most herding breeds.
- Collecting style (CS) - only recognised by FCI in 2008, only Border Collies and Australian Kelpies have the traits for this style.



Traditional style (TS)

- The goal is to take the herd together with ALFA to a specific location (grazing location, confinement location).
- By running, the dog defines the boundaries that the herd must not cross.
- By using multiple dogs in a traditional style of herding, a space is created in which the herd can move (graze).



Collecting style (CS)

- In the past used mainly in the UK and Australia.
- Recognized by FCI only in 2008.
- Only Border Collies and Australian Kelpies have a role for this style.
- The goal of CS style herding is to gather the herd scattered over the pasture by circling around in a large arc, move to the ALFA and balance around to keep the herd close to the ALFA.
- In practice, the term Gathering is used.



Morphometric aspects of dogs used in working with herd animals

- Body coat (protects the body from rainwater, mechanical damage, reflects light, etc.).
- Body substance - the correct body substance affects fitness, endurance and movement mechanics.
- Limb angulation - correct limb angulation affects the mechanics of movement in dogs.
- Movement mechanics - correct movement mechanics makes it easier for the dog to move. It affects endurance. The most natural movement for a dog is the trot.
- Ears position - upright ears command more respect.
- Colour distribution and proportion - there is no evidence, but it has been suggested that too much white reduces the respect animals have for dogs (in Border Collies).



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Physiological aspects of dogs used in working with herd animals

- Health status
- Fitness status
- Vocational traits
- Character traits
- Reactivity
- Sharpness



Manifestation of the talent of shepherd dogs

- Use of eye contact (Eye).
- Posture and body movement.
- Sense of taking an appropriate position in relation to the animals (Balance point).
- Sense of estimating the necessary distance from the animals (Zone point, Bubble, Personal space).
- Sense of the type of pressure exerted and the intensity of the pressure towards the animals (Power).
- Sense of pace and change of pace (Pace).
- Sense for the use of the moment (Time).
- Ability to anticipate - 6 sense (Predict).
- Ability to make quick decisions to influence the direction of the herd or individual (Pick out, Choose).
- The use of one's power, one's influence (Grip).



Differences in herding dog talents between breeds

- The biggest differences between breeds are in the use of eye contact.
- Breeds with a strong use of eye contact (Strong-eye) almost exclusively use this trait in Border Collies.
- They move in a crouched stance with the head stretched forward.
- The position of the back hardly changes, but the legs oscillate rapidly.
- The work is characterized by circling around the herd and moving the herd towards the ALPHA (Collecting).
- Breeds with poor use of eye contact (Loose-eye) do not seem to observe the herd with the dogs' eyes at all.
- The style is characteristic of all other herding dogs (except Border Collies and Australian Kelpies).
- The dogs trot beside or behind the herd with their heads held high.
- These dogs control the movement of the herd.
- The dogs work mainly with ALPHA (Traditional).



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Testing for inborn characteristics

- FCI Natural Herding Traits Test (NHAT)
- The aim is to assess whether an individual has a predisposition to herding.
- The test has been used in FCI countries since 2016.
- The age of the dog on the test is min. 9 months.
- The first part of the test focuses on the socialisation of the dog with sheep.
- The second part of the exam is focused on testing the actual behavioral traits related to the dog's interest in sheep.
- It is tested at the pen with the sheep, in case of disinterest directly in the pen with the sheep.
- The dog should not be too eager in contact with the sheep, should not try to bite the sheep, should keep its balance.
- Aggressiveness towards sheep and fear of sheep is undesirable.



Herding Working Test (HWT)

- In addition to inborn qualities, it also makes considerable use of learned abilities.
- This test assesses the dogs ability to work with a flock of sheep (herding skills, obedience, initiative, working sense).
- The test should be a prerequisite for the selection of dogs for breeding in breeds with the original work - herding.

- Types of HWT :

- Herding Working Test - Collecting style, HWT CS
- Herding Working Test - Traditional style, HWT TS



HWT (Herding Working Test) CS subjects:

- Test exclusively for Border Collie and Australian Kelpie breeds.
- Exit from a pen.
- Drive together.
- Run around the bend to the sheep (gathering) - outrun (gathering).
- Run out not less than 75 m.
- Taking the sheep and setting them in motion – lift.
- Fetch the sheep to the line - fetchdriving the sheep in a specified direction - drive away.
- Drive the sheep in a specified direction - drive away.
- The dog must work in a manner appropriate to the breed. The dog shall behave appropriately towards people and Sheep. Ferocious sheep snapping - disqualification.



HWT (Herding Working Test) CS subjects:

- Test for other breeds except Border Collie and Australian Kelpie.
- Expelled from the pen.
- Herding back into the pen.
- Control of the herd.
- One stop. Grazing in a square (15 x 15 m).
- Except in exceptional circumstances, the dog should not bite the sheep and any display of roughness is penalised. A short bite will only be tolerated if necessary to maintain control of the flock. Conspicuous and out of place biting are grounds for disqualification.



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Use of herding dogs for demonstrations

- Nowadays it is popular to present especially the Border Collie breed in the form of various demonstrations that use their inborn characteristics.
- This includes demonstrations mainly on smaller animals (sheep, ducks).
- The dogs have to get a group of animals over various obstacles or get them to a specific place, for example a circle on the ground.



Partners:



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https://en.wikipedia.org/wiki/Herding_dog#/media/File:Kelpie_walking_across_the_backs_of_sheep.jpg

https://en.wikipedia.org/wiki/Herding_dog#/media/File:Highland_games_dog_herding_1.JPG

https://en.wikipedia.org/wiki/Herding_dog#/media/File:Roman_Relief_of_a_Herdsman_-_Walters_2319.jpg

[https://en.wikipedia.org/wiki/Herding_dog#/media/File:Border_Collie_\(View_Dan\)_9_semaines_sur_canards.jpg](https://en.wikipedia.org/wiki/Herding_dog#/media/File:Border_Collie_(View_Dan)_9_semaines_sur_canards.jpg)

<https://www.k9ofmine.com/herding-dog-breeds/>

<https://www.loveyourdog.com/herding-dog-breeds/>

germanshepherddoggreekfans.blogspot.com/2015/09/from-high-to-schutzhund-schutzhund-and.html

<https://www.pinterest.com/pin/herding-german-shepherd--753367843894108429/>

<https://www.rover.com/blog/train-herding-dog/>

<https://www.pinterest.com/pin/260927372147096049/>

<https://www.pinterest.com/pin/731131320730088530/>

<https://www.doggybrace.com/an-in-depth-look-at-herding-dogs/>



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