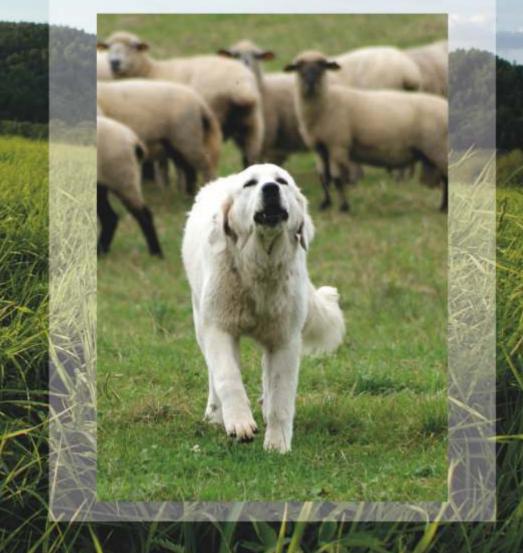
# WOJCIECH ŚMIETANA

# **Livestock Guardian Dog**

# **Raising and Training** the Tatra Shepherd Dog



# **Livestock Guardian Dog**

WOJCIECH ŚMIETANA

# **Livestock Guardian Dog**

Raising and Training the Tatra Shepherd Dog

Fundacja Przyroda i Nauka

Lutowiska 2025

The publication is based on the original work *Pasterski pies stróżujący*. *Wychowanie i szkolenie owczarka podhalańskiego* (in Polish) by Wojciech Śmietana. This English version has been slightly revised by the author to update the content and adapt it for non-Polish readers.

© WWF Poland, 2006 (original Polish edition)

Wojciech Śmietana *Livestock Guardian Dog: Raising and Training the Tatra Shepherd Dog* Fundacja Przyroda i Nauka Lutowiska, 2025

Photographs: All photographs by the author or from the author's private archive.

Translation: Paul Wojciechowski with contributions from the author.

© Fundacja Przyroda i Nauka, 2025 (English edition) All rights reserved.

ISBN 978-83-975636-0-5 (digital publication - PDF)

ISBN 978-83-975636-1-2 (printed publication)

Publisher: Fundacja Przyroda i Nauka (Nature and Science Foundation) Lutowiska 7A 38-713 Lutowiska Poland www.fundacja-przyroda-i-nauka.org

### 1. Introduction

In agricultural areas surrounded by or bordering regions inhabited by large carnivores, such as wolves, bears, and lynxes, conflicts often arise between these predators and livestock farmers. This conflict occurs regardless of whether these predators are currently subject to hunting or are strictly protected species. Wild predators attack farm animals to satisfy their hunger. Livestock is usually easier prey than wild animals, and the places where livestock graze are well known to local predators. As a result of domestication, farm animals have lost their original ability to avoid and defend themselves against predators, making them particularly vulnerable. This is especially true for sheep and goats. In Poland, most of the damage

to sheep and goat herds is caused by wolves. Attacks by bears and lynxes are only occasionally reported. Sheep are primarily killed in the Carpathian Mountains, where shepherding is the dominant form of animal husbandry. Although livestock makes up only a small percentage of a wolves' diet in this region, about 500 sheep fall prey to wolves each year. It often happens that wolves attacking sheep and goats do not stop at killing just one animal but instead kill several, though only one is eaten. This is because killing a single sheep or goat requires little effort, and the panicked herd provokes the predators to continue attacking.



Wild ungulates are the primary source of food for wolves in Poland.

In Poland, since 1998, predation losses caused by wolves have been compensated by the State Treasury. However, financial compensation only addresses the effects, not the root cause of the problem. Additionally, farmers are well aware that the loss of particularly valuable animals cannot be fully compensated. Eliminating predators from a given area does not solve the issue either, as new ones will eventually take their place and, sooner or later, discover that unprotected livestock is an easily accessible food source. Therefore, these animals must be properly protected against predator attacks. There are no measures that can completely eliminate the possibility of predators attacking grazing livestock. However, some methods are more effective than others. An ancient and highly effective method of protecting sheep and goats from predator attacks is the use of a special type of pastoral dog — the livestock guardian dog. This type of dog is still used today by shepherds in some regions of Europe and Asia.

In Poland, almost exclusively the *Górale* (Carpathian Highlanders) still use livestock guardian dogs. This tradition, established over generations, follows an organized approach to protecting sheep from wolves and bears. Livestock guardian dogs play an important role in this protection system.



Gathered in large herds, sheep graze on vast mountain pastures under the constant supervision of shepherds and their dogs. At night, the sheep are corralled in pens ( wooden sheepfolds ) near the huts, while the dogs keep watch nearby. In case of danger, the dogs' barking alerts the shepherds and drives the intrudere away. Since

Remains of a sheep carcass, killed and consumed by wolves. intruders away. Since

the 1970s, livestock guarding dogs imported from Europe and Asia Minor have also been used in the United States, where they primarily protect sheep herds from coyote attacks. Thanks to long-term research and practice, a method for raising and training livestock guardian dogs has been developed there. The effectiveness of this method and the efficiency of using dogs are currently being tested in many European countries. Personally, I have been involved in this field since 1995, not only by introducing livestock guardian dogs to sheep farms but also on my own small farm located in a remote hamlet in the heart of the Bieszczady Mountains.

This publication is intended for farmers who wish to use dogs to protect their livestock. It is based on the author's own experience, as well as observations of dogs used by shepherds in the Podhale and Bieszczady regions and abroad. The advice contained in this guide may help you raise a dog capable of independently guarding a herd of sheep or goats. However, it should be emphasized that this goal is not always fully achiev-able. The methods described here will also contribute to improving the training of livestock guardian dogs, enabling them to work more effectively alongside human shepherds on vast pastures.



A Tatra Shepherd Dog guarding sheep on a Carpathian pasture.

### 2. Types of Pastoral Dogs

The dog is the oldest domesticated animal. The domestication process began in various regions of Eurasia at least 15,000 years ago. The immediate ancestor of the dog is the wolf, from which dogs inherited many innate traits, such as territorial and pack instincts, along with hunting skills. Through selective breeding, either intentional or unintentional, humans have developed many different types of dogs for specific tasks. Shepherds have bred two main types of working dogs.

The first group consists of dogs that assist in herding and controlling sheep flocks. These dogs are known as herding dogs. The most popular breeds in this category include the Border Collie and the Rough Collie. In Poland, this type of dog is relatively uncommon. Only a few farmers use herding dogs, such as Rough Collies, Polish Lowland Sheepdogs, or mixed -breed dogs. These dogs work by using intimidation and barking to keep sheep together and move them from one pasture to another. They can also catch and restrain specific animals when necessary. Herding dogs respond to the shepherd's commands, whether verbal or gestures, and are typically not left alone with the flock. Their work is primarily driven by their natural hunting instincts, and they have a strong need for interaction with their handler, which is further reinforced through training.

The second group consists of livestock guardian dogs, which have been used for centuries in mountainous regions of Asia and Europe. These dogs protect sheep and goats from large predators, mainly wolves and bears, as well as from thieves. Livestock guardian dogs are characterized by their large size, independence, and courage. They also have a highly developed instinct for defending their flock and territory. Their constant presence within a flock, along with their ability to confront intruders, usually deters predators from attacking. Direct confrontations between livestock guardian dogs and wild predators are rare, as wild animals, despite being hungry, instinctively avoid danger. There are dozens of livestock guardian dog breeds. Some notable examples include the Polish Tatra Shepherd Dog, Slovak Cuvac, Hungarian Kuvasz, Italian Maremma Sheepdog, Bulgarian Karakachan Dog, Turkish Akbash Dog, French-Spanish Great Pyrenees, and the Caucasian Shepherd Dog.

These two types of working dogs — herding dogs and guardian dogs have distinct temperaments and skill sets. As a result, they are best suited for the specific tasks they were bred for: herding dogs for managing livestock movement and guardian dogs for protecting the flock from intruders. Polish Highlanders, in addition to employing livestock guardian dogs, sometimes also use small, noisy mixed-breed dogs. These do not function as herding dogs but serve rather as early warning alarms against potential threats.



A livestock guardian dog watching over the safety of the sheep.

### 3. Tatra Shepherd Dog

The Tatra Shepherd Dog (Pol. Owczarek Podhalański), like other breeds of livestock guardian dogs, belongs to the group that most likely originated from the Tibetan Mastiff. Dogs of this type are believed to have arrived in Europe about a thousand years ago as a result of human migrations at that time. The ancestors of the modern Tatra Shepherd Dog likely first came to the Polish Carpathian Mountains with Wallachian shepherds during the 15th and 16th centuries. The Tatra Shepherd Dog is closely related to the Slovak Cuvac and the Hungarian Kuvasz. Until recently, these breeds were considered part of the same shepherd dog lineage. Their primary role was to protect sheep and homesteads from large predators and thieves. Polish canine experts first became interested in the large white dogs from the Podhale and Tatra regions at the beginning of the 20th century. The first breed standard for the Tatra Shepherd Dog was published in 1937 by a group of Working Dog Enthusiasts. The current version of the breed standard was established in 1985 and is registered with the Fédération Cynologique Internationale (FCI) under file number 252b. A detailed description of the breed standard and its history can be found in the book Owczarek Podhalański by A. and M. Redlicki, published in 2003. Here, I will provide only a general overview of the breed.

The main external features of the Tatra Shepherd Dog are a welldeveloped, proportionally built body with a generally rectangular outline. Adult dogs typically stand between 60 and 70 cm at the shoulder and weigh between 40 and 60 kg, with males being larger than females. Tatra Shepherd Dogs always have white coats. They have relatively long, straight, or slightly wavy hair on the neck, torso, and the back of the forelegs and hind legs. The fur on the head, muzzle, and lower parts of the limbs is short. Their tail is low-set, bushy, and fluffy. When relaxed, it hangs freely and reaches approximately hock level. According to the official breed standard, when excited, the dog raises its tail above its back, forming an almost perfect wheel shape, but it should not curl into a spiral. During winter, the Tatra Shepherd Dog's coat is double-layered, with a dense undercoat. The head is proportionally built, with a distinct stop. Males have more massive heads than females. The muzzle is broad at the base and tapers slightly toward the nose. The nose is medium-sized, black, and positioned high. It is worth noting that Tatra Shepherd Dog noses often lighten during winter (a phenomenon known as "snow nose"). Puppies aged six to eight weeks typically already have darkly pigmented noses. Similarly, black or dark pigmentation is present on the lips, eye rims, and occasionally the paw pads. Weaker pigmentation does not disqualify a dog from breeding. The ears of the Tatra Shepherd Dog are triangular, hanging, of medium size, set at the level of the rear corner of the eye, with their inner edges close to the head, and mobile. The eyes are medium-sized, slightly slanted, and dark amber in color. The torso is long and massive, with clearly defined, broad withers and a broad, straight back. The chest should be deep, while the abdomen is slightly tucked up. The forequarters are strong and straight when viewed from the front, with large, round paws. The hind legs are sturdy and straight when viewed from behind, with moderate angulation. The hind paws are slightly smaller than the front paws. The toes are tightly spaced, with tufts of fur between them. Some Tatra Shepherd Dogs have extra dewclaws (spurs) on their hind legs. Tatra sheep herders consider this a distinctive feature of the breed. However, according to the official breed standard, it is considered a disqualifying trait.



The Tatra Shepherd Dog is a native Polish breed of livestock guardian dog.

# 4. Temperament and Character of a Good Livestock Guardian Dog

The ideal livestock guardian dog is one that considers itself a member of the herd it is meant to protect. It integrates with the flock without causing harm, remains alert, and instinctively drives away approaching intruders. In other words, a livestock guardian dog perceives farm animals as members of its pack and instinctively defends them. While livestock guardian dogs are primarily used to protect sheep and goats, they can also be used to safeguard cattle and other farm animals. Additionally, they defend against attacks from wandering dogs.



A good livestock guardian dog stays with its flock and drives away intruding predators.

The behavior of an adult livestock guardian dog is influenced by both hereditary traits (such as temperament, intelligence, and instincts) and learned behaviors shaped by individual experiences. One notable characteristic of these dogs is that they reach mental maturity relatively late, around the age of two. Another defining trait is their independence and ability to assess and respond to threats without their owner's direct input. This is particularly evident in their strong instinct to defend their herd and territory from intruders. These qualities were deliberately selected, as these dogs often spend long periods, particularly at night, alone with the herd without a shepherd's presence. Another characteristic of these dogs is their ability to learn and retain habits relatively easily. This makes it possible to develop desired habits, such as following the herd or remaining at the grazing area overnight. However, once undesirable behaviors—such as chasing cars or cyclists or jumping over fences—develop, they can be difficult to correct, especially in adult dogs. Thus, while livestock guardian dogs possess excellent natural abilities to serve as protectors of farm animals, raising them—especially for first-time owners—requires patience, persistence, and consistency.

Raising a good livestock guardian dog requires: (1) choosing the right puppy, (2) creating a strong emotional bond between the dog and the farm animals, (3) developing the desired habits in the dog. Those considering the use of livestock guardian dogs must be prepared to invest significant time in selecting the right puppy, raising it properly, and, most importantly, ensuring proper socialization with farm animals. A well-trained dog can become an invaluable guardian of livestock and a protector of property. However, despite all efforts, the desired training goals may not be fully achieved.



Ten-month-old Polish Tatra Shepherd Dog displaying attachment and submissive behavior toward an adult sheep.

## 5. Choosing a Dog

#### 5.1 Which Breed?

As mentioned in the introduction, there are many breeds of livestock guardian dogs. Virtually every mountainous country in Europe and Asia has its own local breed. Studies conducted in the United States have shown that livestock guardian dogs, regardless of breed, have nearly the same effectiveness in protecting livestock. The Tatra Shepherd Dog, described above, is Poland's native breed of livestock guardian dog. This breed is still actively used for livestock protection today. Unfortunately, purebred Highlander's sheepdogs are becoming increasingly rare, and instead, hybrids mixed with St. Bernards, as well as Caucasian Shepherd Dogs or Central Asia Shepherd Dogs, are more commonly found performing livestock guarding duties. The rising popularity of St. Bernards has made it increasingly difficult to find a purebred Tatra Shepherd Dog in the Podhale region—especially one with working parents. However, while they may be harder to find, purebred Tatra Shepherd Dogs are still available. I recommend Tatra Shepherd Dogs for livestock protection for two main reasons. First, as a native breed, they are exceptionally well adapted to local environmental conditions. Second, they are an important part of our cultural heritage, which we should strive to preserve. It is worth mentioning that Tatra Shepherd Dogs are bred not only in Poland but also in many European countries and in America by enthusiasts of the breed.

#### 5.2 Adult Dog or Puppy?

There is virtually no availability of well-trained adult dogs, as they are very rarely available for sale. In addition, there is no guarantee that an adult dog will fulfill its task correctly in another herd or that it will be accepted by your sheep or goats, especially if they have never been in contact with a livestock guardian dog before. Therefore, in practice, the only option is to raise a dog from a puppy.

#### 5.3 Male or Female?

Both male and female dogs are effective herd guardians. If you do not intend to breed your dog, its gender is not of significant importance. To prevent issues related to sexual activity, a dog can be neutered (i.e., surgically deprived of the ovaries or testes) at an appropriate age. However, I personally do not recommend this, as your dog may turn out to be particularly valuable, making it worth considering breeding. Sterilization (cutting the fallopian tubes or vas deferens) does not prevent problems associated with sexual activity; it only makes reproduction impossible.

#### 5.4 How Many Dogs?

For several reasons, I recommend raising only one dog at the beginning. First, a single dog bonds very easily with the sheep, which is the most important aspect of the entire training process. Training one dog is also significantly easier than training two at the same time. Additionally, dogs raised in a group tend to develop and reinforce their hunting instincts while playing with the sheep. Starting with just one dog allows the breeder to gain personal experience in training and handling. This will prevent the repetition of at least some errors while introducing the next puppy to the herd. It is best to introduce a second dog once the first one is fully trained. For farms with up to 50 sheep or goats grazing near buildings, one dog may be sufficient. However, if the herd is at higher risk of attacks from large predators or is significantly larger, you will likely need two or three dogs for adequate protection. On vast pastures with several hundred sheep, even more dogs may be required—large herds are often guarded by five or six dogs. Dogs working as a team are more effective at defending livestock



Introducing a second livestock guardian dog is most effective after the initial dog has completed its training and established a bond with the flock.

than a single dog working alone. Additionally, young dogs learn their role from older, more experienced guardians. It is important to remember that large dogs typically have shorter lifespans. By the time a dog reaches five years old, it should already be passing on its "knowledge" to a younger successor.

#### 5.5 How to choose a puppy?

First and foremost, choose a reputable breeder. You can obtain contact information for breeders of Tatra Shepherd Dogs or dogs of this type (dogs without entry to the pedigree book) through local veterinarians or branches



*These puppies will soon be placed with their new "packs" — flocks of sheep or goats.* 

of the Polish Kennel Club. It is best to purchase a puppy from a breeder who uses dogs to guard their own livestock. Avoid buying a puppy of unknown origin. Before making a decision, visit the breeder to observe the puppies while they are still with their mother. A puppy separated from its mother should be 7-8 weeks old. When choosing a puppy from the litter, you should pay attention to its physical condition, posture, and teeth. Do not buy a puppy that moves incorrectly, is emaciated, listless, has a defect in posture or bite. It is very important to choose a puppy with the right temperament and mental disposition. If the right puppy is chosen, then the chance of raising it to be a good defender of livestock is much greater. At 7-8 weeks old, a puppy has a small set of acquired behaviors, and its reactions reflect almost exclusively inherited tendencies. When choosing a puppy, you should observe how it behaves in relation to its siblings and a new person (you). The puppy should be brave, outgoing, and have a balanced temperament. To assess the potential of individual puppies, move them one at a time to a quiet, secluded spot in the garden or meadow. Observe how each one reacts to the new environment and to your attempts to encourage them to follow you. The puppy should not be scared after moving to a new place and should try to explore it and be sociable. It should also be encouraged to follow us. You should also check whether the dog shows submissiveness to you. To do this, turn the puppy onto its back and hold it with your hand. A very dominant dog will pull away and bite, while a very submissive dog will lick your hand or even urinate. You should not choose a puppy that is very submissive or very dominant. The dog you buy must be dewormed and vaccinated against infectious diseases.



*It is very important to choose a puppy with the right temperament and mental disposition.* 

# 6. Raising and Training a Dog

#### 6.1 Key Principles of Raising a Livestock Guardian Dog

When raising and training a dog, it's essential to remember that it is a living being with a complex psychology, not an automaton that can simply be programmed to fulfill specific tasks or meet its owner's expectations. The proper upbringing of a livestock guardian dog requires favorable conditions for socialization with the flock of sheep or other livestock, which allow the dog's natural instincts and predispositions to develop while reinforcing desired behaviors. Guarding and protecting the herd from intruders is an instinctive behavior that often emerges as early as the fourth month of life, though in some cases, it may take longer. The most crucial aspect of a dog's development is experience, which it gains during the first few months of life. A young dog will inevitably exhibit some undesirable behaviors at times, which must be corrected appropriately. However, it is unrealistic to expect a young dog to behave like a fully trained adult guardian. Mistakes will happen, so it is important to respond appropriately, considering the dog's age and developmental stage. There is no need to teach unnecessary tricks (e.g., shaking paws), as these do not contribute to the dog's role as a livestock guardian. Instead, focus on behaviors that will help the dog perform its duties effectively.



Socializing a puppy with sheep is easiest during winter, when the sheep remain in the barn.

When raising a livestock guardian dog, you should closely observe the behavior of the sheep, as their reactions to the dog are key indicators of the socialization process. Ensure that the sheep accept the dog—this is a crucial part of the training process. Pay close attention to the dog's developmental stages, as missed opportunities for socialization cannot be regained. If the critical socialization phase (up to 12 weeks of age) is missed, future attempts at socialization are unlikely to succeed. Additionally, it is important to note that sheep have their own way of reacting to new arrivals-they may not immediately accept the dog's presence. From the very first day, the puppy should be treated as a working dog, not as a companion or playmate. This distinction is essential for proper training and socialization, ensuring that the dog remains focused on its role as a guardian. During the period of socialization with sheep, your dog should not interact with other dogs that serve different roles on the farm. Later, take care to prevent your young livestock guardian dog from imitating the behavioral patterns of herding dogs or other farm dogs.

#### 6.2. Socializing a Puppy with Farm Animals

The first goal in raising a puppy is to develop a strong emotional bond with the sheep. In a dog's development, there is a stage between 14 and approximately 84 days of age (2-12 weeks) known as the socialization phase. During this time, the puppy learns what it means to live in a pack. The puppy has a natural need to establish contact with all animals and people it encounters. The best age to start socializing a puppy with sheep is approximately 7 to 8 weeks old. The puppy should not be separated from its mother earlier, as it still needs her milk and the social interactions with her and its siblings, as these interactions play a key role in shaping its social behavior. The intensive socialization period ends around 12 weeks of age. If by this time the puppy has not developed an emotional bond with sheep, it is unlikely that it will choose to stay with them in the pasture as an adult. During this period, minimize human contact and ensure the puppy is never left alone without the sheep. The young dog should not experience any significant negative experiences from either the sheep or the owner. If it is exposed to excessive fear or pain during this stage, it may become overly fearful and anxious, and it could be extremely difficult-if not impossible -to reverse this behavior later on.

From a practical standpoint, socializing a puppy with sheep is easiest during winter, when the sheep remain in the sheep barn. After selecting

a puppy, the new owner should place it in the sheep barn immediately after separating it from its mother and siblings. The puppy should be confined to a small enclosure made of wire mesh, approximately  $10 \text{ m}^2$  in size, located in direct proximity to the sheep. Inside the enclosure, place some young sheep—orphaned lambs are ideal for this purpose. The enclosure should include a bowl of fresh water, and the puppy should be fed at least four times a day. The enclosure should be secure, preventing the puppy from



A puppy and his companions waiting for the morning chores on the farm.

escaping. However, after some time, the puppy should be allowed to leave and return freely. During this period, adult sheep should not be allowed inside the enclosure, as some may be too aggressive. Placing a very young puppy directly among mature sheep is not recommended, as it may result in injury. If a puppy is attacked and mauled by adult sheep, it could develop a lasting fear that is difficult to correct. The puppy may associate sheep with negative experiences while becoming overly attached to humans, linking them with food, petting, and other positive interactions. It is crucial not to play with the puppy excessively or pet it too much. Be friendly but maintain a level of emotional detachment. A light pat on the neck is sufficient when greeting the puppy or bringing it food. When leaving the sheep barn, always calmly say the command "stay". If the puppy attempts to follow you, repeat the command "stay" and gently push its withers backward. Avoid saying goodbye to the puppy when leaving, as this reinforces its desire to follow you. For the first few days, the puppy should remain only in the enclosure with lambs or other gentle sheep. The rest of the flock should have visual and olfactory contact with the puppy through the mesh fence. Initially, adult sheep may react to the puppy with fear, retreating to the farthest part of the sheep barn. As their fear subsides, they will typically begin sniffing the puppy cautiously. If the puppy were free at this stage, some sheep might attack it. Once the adult sheep lose interest in the puppy, it can be released under supervision. From this point forward, the puppy should be let out daily, or ideally, multiple times a day, until the sheep no longer react fearfully or aggressively. When the sheep have fully accepted the puppy, it should be allowed to enter and leave the enclosure freely. The duration of time a puppy should remain in the enclosure depends on how quickly the adult sheep accept its presence. My observations suggest that sheep breeds such as Blackheaded Sheep and Suffolk Sheep tend to accept a puppy more quickly than Polish Mountain Sheep and its hybrids. During the lambing period, ewes giving birth and those with newborn lambs should be separated from the puppy and the rest of the herd to prevent disturbances and reduce the risk of the ewes attacking the puppy. Later, the puppy should be gradually introduced to newborn lambs. The puppy must be accepted by the entire herd. It is a big mistake to accustom only one or a few sheep to the dog. In such cases, the rest of the sheep will likely never fully accept the dog and will run away from it, which in turn may provoke the dog to chase them. Remember that the older and larger the dog, the more difficult it is for the sheep to accept it.

You can also introduce the puppy to the herd during summer grazing, setting up a similar box and pen for the dog and sheep in the pasture. During the day, the puppy should remain with several lambs or calm adult sheep, which should be replaced every few days. All sheep should spend their nights near the puppy. However, based on my observations, summer presents additional challenges. It is difficult to prevent unwanted visitors from approaching the pen and interacting with the puppy. Summer, which coincides with school holidays and peak farm work, often brings more visitors eager to see the dog. Unfortunately, such visits rarely end with just watching. Additionally, if the puppy is left alone—without sheep, which should never happen—such visits reinforce its bond with humans. The puppy associates people with pleasure and attention, which interfere with its ability to bond with the herd of sheep. Another potential issue is the puppy escaping from the pen and approaching the shepherd's house, which is highly undesirable. To prevent this, the pen must be built in a way that ensures the puppy cannot get out. Part of the enclosure should have a roof and be shielded from the wind, providing the dog with shelter from rain and heat.



A young Tatra Shepherd Dog, properly socialized with a herd of goats.

#### 6.3. Teaching Discipline and Responding to Commands

At approximately 12 weeks of age, the puppy enters its early adolescent phase. This is the time to start teaching discipline, including coming on command and responding to other basic cues. Starting from week 12, the puppy should be allowed to explore the area around the sheep barn or pen daily for periods ranging from a few minutes to an hour, either in one session or multiple shorter intervals. However, you should not take the puppy home or engage in intense play with it. When calling the dog, use commands such as 'come' or 'here'. When the dog obeys, reward it with a pat and an occasional treat. Then, lead the puppy back to the sheep barn or pen to rejoin the sheep. I recommend feeding the dog immediately after returning to the sheep so that it associates going back to the herd with a positive experience. Avoid the opposite approach—feeding first and then taking the dog out—as this can reduce the dog's motivation to return to the barn.

The period between 12 and 16 weeks of age is known as the hierarchyestablishing phase, roughly equivalent to a 10-to-12-year-old child in human development. During this time, in addition to basic discipline, the dog should learn to respond to commands such as 'no' or 'not allowed' and 'stay' or 'stand'. You should also start leash training and gradually accustom



A four-month-old Tatra Shepherd Dog in a pasture with a flock of sheep.

the dog to being tethered periodically. It is also very useful to teach the dog to obey commands like "leave" or "go away". Remember, positive reinforcement — treats and praise — is the foundation of training. Punishment should be minimal and used only when the dog clearly understands what is expected but deliberately disobeys. Discipline training should be moderate, as excessive human interaction can strengthen the dog's attachment to people, which is not ideal for a livestock guardian dog. Keep training brief and incorporated into daily routines with the sheep.

Between 12 and 16 weeks of age, the dog becomes more confident and physically stronger. It may start playing more intensely with the sheep,

which requires close supervision. Although playing with sheep helps the dog bond with the flock, it can also result in injuries—or, in some cases, a young dog may accidentally kill a lamb during rough play. If you notice that the dog is playing too intensively with a lamb, you should give a firm, growling command such as "no" or "leave it," then grab the dog by the neck and shake it with control. As soon as the puppy stops attacking the sheep, immediately praise and reward it. If the puppy kills a lamb while playing and continues to interact with it, it should be corrected as described above, and the carcass should be removed. However, do not dispose of the lamb immediately. Instead, after a few hours, bring the dead lamb back and place it in front of the dog. If the dog attempts to tear at the lamb again, scold it firmly. Repeat this process until the dog understands that lambs must not be harmed. To satisfy the dog's natural urge to chew, offer it a large beef bone or a chew treat made from compressed tendons, which are available in pet stores.

#### 6.4. Training a Dog to Stay with a Herd in the Pasture

This period is particularly challenging, especially at the beginning. It is best if there is a well-fenced pasture where the dog and the sheep can be kept together. The fenced pasture should be located in a place that allows you to observe the dog and the herd from a distance. Inside the fenced pasture, there should be clean drinking water and a roofed area providing shelter from rain and sun. If these conditions are not met, the dog may eventually leave the pasture. The dog should be fed in the pasture, among the sheep. You can also install an automatic feeder with dry food available at all times, but sheep must not be allowed to eat the dog's food. If the pasture is far from human settlements, it is advisable to stay with the dog and the sheep for the first few weeks or even months to monitor the dog's behavior. Gradually, the time the dog spends alone with the sheep should be increased. When leading the sheep to an unfenced pasture, the dog should first be taught to walk at your heel-first on a leash, then off-leash. When leaving the dog with the sheep, you can give it a bone to gnaw on or scatter small pieces of treats around the pasture. This will keep the dog occupied and create a positive association with going to the pasture.

Between 4 and 8 months of age, the dog goes through a developmental stage called the escape phase. During this period, it may disobey and wander away from the herd to explore its surroundings. If the dog leaves the pasture, crosses the fence, or disturbs the sheep, do not get angry or

punish it harshly, as this can make the dog fearful of the shepherd. Instead, calmly take the dog back and give the command "back to sheep." With time, the dog will learn to return to the herd on its own when it hears the



When training a puppy to stay with a herd of grazing livestock, it is best to do so on a fenced pasture, such as one with electric fencing.

command. However, do not punish the dog for not following the command until it fully understands what is expected. If the dog repeatedly wanders off, you can tie it in the pasture for a few hours or temporarily separate it from the herd for a day or two by locking it in the sheep barn. Neighbors may encourage the dog to leave the pasture by calling it or offering treats. It is best to ask them in advance not to do this and request that they notify you immediately if the dog enters their property. For the first few months, you should visit the dog in the pasture several times a day. If you find it where it should be, praise and reward it. In some cases, using an "invisible fence" system may be justified. This system consists of a cable, transmitter, and electric collar, allowing you to create an invisible boundary of up to 10 hectares. The cable is laid along the fence (or buried 5 cm underground) and connected to a power source. When the dog approaches the boundary, it first hears a warning sound. If it continues to walk in that direction, it will receive a mild electric shock. A few such experiences are usually enough to discourage the dog from crossing the pasture fence.

A common issue at 4-8 months of age is the dog chasing sheep. Adult sheep usually do not allow themselves to be provoked by a playful dog, but lambs sometimes panic and run away, which triggers the dog's instinct to chase. Sometimes, the lambs-especially young ones-approach the dog curiously and then suddenly run away, stimulating its natural chasing instinct. Some experts suggest attaching a chain with a peg to the dog's collar to limit its movement. I personally tried this method, but it was ineffective. Another approach, proposed by American experts, is to reduce the energy content of the dog's food while keeping the volume the same so that the dog does not feel hungry. This can be done by partially replacing high-energy food components (fats and carbohydrates) with a larger amount of vegetables and bran. However, it is important to ensure that the dog still receives enough protein for proper growth, so protein content should not be reduced. My observations show that adjusting the diet is only a supplementary measure. Based on my own experience, I propose solving this problem as described below. Supervise the dog while it is with the sheep for a period of time. If the dog starts chasing or shows signs of preparing to chase, firmly scold it with the command 'no,' which it should already recognize. If verbal correction is not enough, say 'no' while tossing a short metal chain (about one meter long) near the dog (not at it!). The noise will serve as a distraction. You can also use a whistle to distract the dog. If the dog stops chasing, immediately praise it by saying 'good dog'. Unfortunately, during this stage, many dogs are tethered because their owners lack the time or patience to train them properly. However, restraining the dog in this way prevents it from unlearning bad habits, and even promising individuals may be wasted. Training a dog to stop chasing sheep can take several weeks or even months, depending on the individual dog. If you successfully teach your dog to stay with the sheep in the pasture, it may be able to function as a guardian by the age of 8 months. However, in some cases, training will be required until the dog is 16 to 20 months old.

# 7. Organization of Grazing

The effectiveness of livestock guardian dogs depends primarily on whether they consistently stay with the grazing sheep. Wolves and other large predators hunt mainly at night, but unfortunately, attacks can also occur during the day. This is especially true for pastures located far from buildings and human settlements. Livestock guardian dogs can guard sheep on their own, provided they have undergone proper socialization and have developed the essential skills. To prevent the dog from leaving the pasture, you can use an electric fence-although some dogs eventually learn to overcome it. A good practice is to put bells on a few of the sheep. Dogs learn to distinguish the sound of bells on calmly grazing sheep from that on frightened, fleeing ones, allowing them to react accordingly. At night, sheep should be herded into a secure pen near the farm or a shepherd's hut unless they are closed inside a barn. This pen can be made of wooden boards, a two-meter-high wire mesh, a chain-link fence, or an electric fence. If the pen is large enough, the dogs can stay inside with the sheep, which is the best option. This method is currently being used successfully on several sheep farms in the Bieszczady region. A dog will stay in an area that meets



Integrating livestock guardian dogs with electric fencing effectively reduces the threat of predator attacks and minimizes the risk of the dogs wandering away from the livestock.

both its mental and physical needs. Therefore, if it is to remain in an enclosed space, it must always have access to clean water and a sheltered area that provides protection from prolonged rain or extreme heat. Otherwise, the dog may try to escape to seek more suitable conditions. If, for various reasons, the dog cannot be left alone with the sheep in the pasture, it can still be used to guard the herd at night and, together with a human shepherd, help protect sheep grazing in areas most at risk from predators. In this way, the dog will also help reduce losses caused by wolves and other predators. In winter, adult dogs may stay in the barn — which is the preferred option — or be housed in a nearby kennel.

## 8. Financial Costs, Inconveniences, and Benefits

You can purchase a Tatra Shepherd Dog puppy or a similar breed, with the price depending on the breeder's reputation and whether or not the dog is registered with a cynological association. The annual expenses for nutrition and basic veterinary care, including vaccinations and deworming, can be significant and should be factored into the overall cost of keeping a livestock guardian dog. Additionally, the cost of materials for constructing a secure enclosure, such as a 6-foot-high mesh or chain-link fence, depends on the type and quality of materials chosen. Another option, such as an 'invisible' fencing system, also requires an initial investment. The remaining costs mainly involve the breeder's time spent on: finding a suitable puppy, creating conditions for proper socialization with sheep, shaping desired behaviors, and building enclosures and pens. While most dogs can be trained to become effective livestock guardians, there is always some degree of uncertainty at first. There is a risk that the financial investment and time spent may not yield the expected results. The dog may: wander away from the area, become aggressive toward people, attack sheep or other farm animals, fall ill, get poisoned, have an accident, die prematurely, or be killed by large predators.



The benefits of a well-trained livestock guardian dog can be invaluable.

However, the benefits of a well-trained livestock guardian dog are invaluable. Key benefits:

- Reducing or eliminating losses caused by predators
- Alerting the farmer to threats to the sheep and farm
- Increasing safety when using remote pastures
- Reducing the farmer's nighttime guarding duties

It also offers independence from administrative decisions regarding predator damage control. For some farmers, owning such a dog may also bring personal satisfaction from achieving a more harmonious coexistence with wildlife.

# 9. Recommended Literature

Andelt W.F. (2004) Use of Livestock Guarding Animals to Reduce Predation on Livestock Sheep & Goat Research Journal, Vol. 19: 72-75

Dawydiak, O. and Sims, D. (2004) Livestock protection dogs - selection, care, and training. Second Edition, Alpine Publications, Loveland, Colorado: 1-244.

Green, J.S., and Woodruff R.A. (1996) Livestock Guarding Dogs. Protecting Sheep from Predators. USDA, Agricultural Information Bulletin No 588: 1–32.

Lorenz, J. R. and Coppinger, L. (1986) Raising and training a livestockguarding dog. Oregon State University Extension Service, Extension Circular 1238: 1-8.

Redliccy A. and M. (2003) Owczarek podhalański. MAKO PRESS Sp. z o.o., Warszawa: 1-69 [In Polish]

Śmietana W. (2005) Use of Tatra Mountains Shepherd Dog in the Bieszczady Mountains. Carnivore Damage Prevention News, No 8: 10-12

# Contents

1. Introduction	5
2. Types of Pastoral Dogs	. 8
3. Tatra Shepherd Dog	. 10
4. Temperament and Character of a Good Livestock Guardian Dog	. 12
5. Choosing a Dog	. 14
5.1 Which Breed?	. 14
5.2 Adult Dog or Puppy?	14
5.3 Male or Female?	. 14
5.4 How Many Dogs?	. 15
5.5 How to choose a puppy?	16
6. Raising and Training a Dog	18
6.1 Key Principles of Raising a Livestock Guardian Dog	18
6.2. Socializing a Puppy with Farm Animals	. 19
6.3. Teaching Discipline and Responding to Commands	. 22
6.4. Training a Dog to Stay with a Herd in the Pasture	. 24
7. Organization of Grazing	. 27
8. Financial Costs, Inconveniences, and Benefits	29
9. Recommended Literature	31

The Nature and Science Foundation (Fundacja Przyroda i Nauka, Poland) was established in 2022 by Dr. Wojciech Śmietana, a biologist with over 35 years of experience in the research and conservation of Europe's large carnivores — wolves, lynxes, and bears. Between 1998 and 2005, Dr. Śmietana operated a small experimental goat farm — guarded by Tatra Shepherd Dogs — deep in the wild Carpathian forest. He also introduced dozens of livestock guardian dogs to sheep and goat herders in the Bieszczady Mountains, helping them protect their animals from predators. From 2017 to 2020, he coordinated nationwide wolf monitoring, conducted as part of the State Environmental Monitoring program.

#### What We Do

The Foundation carries out:

- Scientific research
- Wildlife monitoring
- Public education

Our current focus is on conserving large carnivores while promoting harmonious coexistence between humans and wildlife.

Get Involve To learn more or find out how you can support our mission, visit: www.fundacja-przyroda-i-nauka.org



NATURE AND SCIENCE FOUNDATION

ISBN 978-83-975636-0-5 (digital publication - PDF) ISBN 978-83-975636-1-2 (printed publication)