One morning in the mid-1990s I drove my usual two miles to my flock, which grazed on rented land owned by the state of New Jersey. It was spring, and the lambs were already born. When I arrived, the ground was littered with dead lambs. Several sheep had bitemarks. When I examined the dead lambs, the bitemarks around the throat indicated that they had been suffocated. That clearly told me that they had been killed by a coyote. I contacted a local trapper, who quickly identified the weak spot in the fence where the coyote had come in. A day later he successfully trapped the coyote, a mangy and desperate individual. His sheep hunting days had now ended. However, I knew I had to do something to address the problem, expecting that this was going to happen again. The coyote population had indeed increased and sightings of individual animals had become more frequent, including in broad daylight. I knew about donkeys that guard. However, I also knew enough about donkeys since I had worked with them during my years as a shepherd in the transhumance system in Germany that I was certain I didn’t want one of these stubborn and unpredictable creatures. I heard of llamas that guard but also read that the empty threat they pose wears off when a coyote has figured it out. Someone who trained a herding dog with me mentioned that the U.S. government was in the midst of testing guardian dogs at several locations in the U.S. Somehow, I got hold of the contact info of Dr. Jeffrey Green at the Sheep Experiment Station in Dubois, Idaho. I called and had a lengthy conversation with Dr. Green. In hindsight, I am surprised he took as much time as he did. He determined that I am a dog person—which is true!—and should get a guardian dog and not some donkey or llama. He gave me some insight about the various breeds of guard dogs and what makes a guardian dog guard. He followed up by sending me some literature about rearing and working a guardian dog, together with contacts of breeders of these dogs. I interviewed several different breeders of different breeds. Since I was in populated New Jersey and had rented public land to graze my sheep, I opted for a dog from the breed that was the only one that hadn’t bitten a human out of the three hundred different dogs that were tested by the USDA: a Great Pyrenees. There was another reason why I picked the breed. Great Pyrenees, as well as Maremmas, tend to defend the flock and stay better with them while other breeds like Akbash and Anatolian Shepherds tend to also be territorial and defend the property in addition to the flock. I
had no need for that. Since I was inexperienced and since I needed immediate protection for my flock, I opted for a young adult. I found a breeder in Tennessee who had a young female that had been started on goats. I purchased the dog and soon she came by plane to Newark, New Jersey, where I picked her up. I named her Gertrude and put her in with a group of sheep in a pen, just like I had been advised. Just as soon as I had put her in, she escaped through the spaced bars in the gate, only to return without my knowledge shortly thereafter while I was looking for her for a long time in the adjacent woods and fields. What a start. It was so bad that it made me feel hopeful: It could only get better. What I am touching on is the steep learning curve that I had ahead of me. While it is correct that I am a dog person, rearing and working a guardian dog is so distinctively different than training a herding dog that I had to learn almost everything anew. So, what are guardian dogs and how are they different from other dog breeds? There are many old-world guardian dog breeds like Great Pyrenees from France, Maremmas from Italy, Akbash and Anatolian Shepherds from Turkey, to name a few. They have several traits in common. First, they are all large and mostly white or fawn-colored. Livestock, with its inherent fear of the wolf, feel less threatened by a lighter colored dog versus a dark or black dog. That means white dogs are more acceptable to a group of sheep to live amongst them. In literature I also found that the lighter color enabled farmers from past centuries to distinguish between wolf and dog at night when they came to support a dog in its fight against the wolf. Furthermore, guardian dogs lack prey drive, the drive that makes them chase and hunt animals. That keeps a guardian dog from chasing the animals it is supposed to protect or at the very least reduces the amount greatly. Last but not at all least, guardian dogs are by nature protective. Whoever they grow up with, they feel obligated to defend and protect from any intruder that means harm to them. This guarding behavior is instinctive. It is not taught, and it cannot be taught. The dog either has it or it doesn’t have it, in which case it will fail. Let me repeat this since it is so important: The guarding behavior is instinctive. It is not taught. I also feel the need to repeat this because I get the question often how I trained my guardian dog to guard. I didn’t. However, the guarding behavior being instinctive does not mean the sheep farmer has no role to play. It isn’t that you let a guard dog loose with the flock and that’s it. Rearing a pup properly is important. Good behavior, like alert barking, can be encouraged, and bad behavior, like chewing or chasing or leaving the flock, must be disciplined. In order for a guardian dog to work successfully, it must be reared with the flock as opposed to with humans. A group of older sheep that are calm or in the lambing barn are good places to start a pup at an age of eight weeks.

A common misconception is that a herding dog could also guard. Likewise, another misconception is to use the guard dog to herd the sheep. Herding and guarding are mutually exclusive. Herding derives from hunting. Herding is in essence a controlled hunt. A herding dog sees in the livestock something like prey. Uncontrolled herding results in injuries and losses of livestock. Guarding, on the other hand, means that the dog views the livestock as members of its own pack (hence the need to raise the dog with the livestock) just like your pet dog views you as a member of the pack.

Occasionally I get an e-mail or phone call asking me if they should get a guard dog. In all cases, I don't even attempt to make a recommendation. You know your situation best and should be able to weigh the advantages against the disadvantages to make that decision. All I can say is this: A guardian dog is a big responsibility and a lot work if you want this to work properly. If I would not need one, I would not have one.

What I can’t do in this article is outline how to raise the pup, how to correct undesired behavior, how to interpret certain behaviors, and so on. That would be an entire book. So, here is an actual book I own and read: *Livestock Protection Dogs: Selection, Care, and Training*. The authors are David E. Sims and Orysia Dawydiak. I highly recommend reading such a book if you attempt raising a guard dog.

A few years ago, in 2011, I wrote an article for *Small Farm Quarterly* about Livestock Guardian Dogs. The article can be found on my website www.whitecloversheepfarm.
one distinct difference between my viewpoint then and my opinion now, which I feel compelled to point out. In the original literature I received from Dr. Green it clearly stated that human interaction must be reduced to a minimum. My first two guard dogs, Gertrude and Berthold, indeed lacked that human interaction. I could entice them with food to jump into my truck or a trailer that I converted to a dog house. However, I could not touch them in the open field and I could not walk them on a leash. My third guardian dog, an Akbash named Ista, was a bit more socialized but still not leash trained. Now I have my fourth guard dog, a Great Pyrenees named Simon, and he is leash trained and interacted extensively with my family, particularly with our children, when he was young and was walked by my kids. Why did I change my mind? I changed it for two reasons. First, it became a hassle to get a hold of the dog when the dog needed to be vaccinated or dewormed or anything like that. Secondly, I have seen guardian dogs in the past decades with proper instincts that had human contact during rearing, were petted and leash trained, but as adults had little desire to follow the person around, let alone leave the flock. My Simon is now almost a year old and with every passing month he is less and less inclined to leave the sheep and follow me around. Sure, he comes and greets me (or any of my kids) when being fed, expecting his pat and praise. However, he makes no attempt to follow any of us when leaving and is perfectly content to stay with the flock. Still, we don’t interact with him the same way I interact with my herding dogs. So, in a sense the human contact is still limited but not nearly as limited as I used to handle it.

I have been told on several occasions that guard dogs work in pairs, that I should have two. I always had just one guard dog at a time. However, I can see the benefits of having two. With just one, the playfulness of a pup can be detrimental to the sheep, and the dog needs to be observed. Such behavior, like chewing or chasing, must be corrected. If a pup is together with an older dog, this playfulness can be directed at him. Also, the way guard dogs operate when defending in a pack is different. So I clearly see the point of having two or even more and don’t dispute the benefits. I just have thus far been satisfied with only one. Besides, I don’t entirely rely on my guardian dog alone. In addition to my guard dog, I also have excellent high-tensile woven wire perimeter fence and my interior fences are electric netting that are always well put up, never in disrepair, and always powerfully charged. Furthermore, I rotate my sheep once daily most of the year. That does not allow coyotes which like to check out what they wish to hunt before they do, to detect a pattern or weak spot in the fence, because it is different every day. Therefore, the coyote pressure on my flock just hasn’t been heavy enough to entertain the thought of a second guardian dog.

Where should you get a guard dog and what breed should you pick? You are well advised to seek a dog from working parents, meaning a pup from parents that both guard livestock. Whether the parents guard chickens or sheep or goats is rather irrelevant as long as they desire to guard. You want to stay away from pups in which for generations no ancestor has guarded and were show dogs and pets instead. Don’t use it and you lose it! There are already bloodlines of guard dog breeds that no longer guard. I also always recommend buying a pup from someone who works the parents and not from a puppy miller. You want someone to be able to tell you exactly how they view the dogs, and have intimate knowledge of them. That all trumps in my view

Simon’s first day with the flock. Thus far he has been with the rams and bucks behind the house for supervision.
the decision of what breed to choose. Having that said, in my view and in the view of some who I consulted, Great Pyrenees are more sensitive to the handler than for instance Akbash are. Also, Great Pyrenees and Maremmas are staying much closer to the flock while Akbash and Anatolian Shepherds are also territorial and explore the territory much more and will roam your property. So keep that in mind when choosing a breed. Some breeds might be more suitable to you or your situation than others.

Having a guard dog does not mean that your dog is often involved in fights with coyotes. The dog is more a deterrent; he will rarely get into an actual fight. While exceptions apply, coyotes are opportunists. They don’t hunt in organized packs like wolves do. A dog that marked the pasture and is active at night, barking at any possible intruder, is already doing more than 90 percent of the job. Most coyotes will not bother entering a pasture that has a barking guard dog, or two, in a defensive posture. It isn’t worth it. Barking is indeed a big part of the deterrence. So, if a barking dog annoys you, don’t get a guardian dog! The danger with pet dogs that are not properly observed or leashed by their irresponsible owners can be a lot more of a problem than a coyote. In addition, even if you have a guard dog in the flock, I still recommend erecting fences properly, and in case of electric fencing, electrifying them well. You will double your chances that coyotes will leave your sheep alone.

Almost any time of year I hear plenty of coyotes all around me. I have seen some during broad daylight, rather unafraid. Well-meaning hunters and trappers have offered to kill coyotes that are around me. I declined. Why did I do this? There is a school of thought that says to leave coyotes alone if they don’t prey on sheep. If they are killed, other coyotes will come in to occupy that territory over time. Those coyotes may have already developed a taste for sheep elsewhere. I have not had losses due to coyote kills since my arrival here in upstate New York. I will leave the coyotes alone for as long as they leave me alone.

Lastly, I want to put this article of mine in perspective. I have written it based on my experience. I have had guardian dogs now for about twenty years. I am currently owning my fourth guardian dog. I am by no means an expert. I am just sharing what I have experienced and observed.

Ulf owns and operates White Clover Sheep Farm and breeds and raises grass-fed White Dorper sheep and Kiko goats without any grain feeding and offers breeding stock suitable for grazing. He is a native of Germany and lives in the US since 1995. He farms in the Finger Lakes area in upstate New York. His website address is www.whitecloversheepfarm.com. He can be reached by e-mail at ulf@whitecloversheepfarm.com or by phone during “calling hour” indicated on the answering machine at 585-534-3313.