



An Introduction to Livestock Guardian Dogs

This handout is designed for new farmers, small farm operators, and others interested in incorporating livestock guardian animals into their farms. It provides an overview of livestock guardian dogs (LGDs) and other guardian animals for producers considering non-lethal predator management.



What is a Livestock Guardian Dog (LGD)?

- A livestock guardian dog (LGD) is bred and raised specifically to protect livestock from predators.
- LGDs are **not** regular guard dogs, herding dogs, or companion animals.
- LGDs are specific breeds which integrate with and protect a herd or flock.
- Breeds like border collies or shepherds are **not** technically LGDs. True LGD breeds include Great Pyrenees, Maremma, Komondor, Akbash and others.

How do they work?

Livestock guardian dogs protect animals through a combination of bonding, territorial behavior, and constant presence. From a young age, LGDs are raised alongside livestock so they learn to identify the herd or flock as their social group. This bond motivates them to stay close, patrol the perimeter, and respond to anything unusual.

Their primary tools of deterrence are their presence, barking, and patrolling, signals that warn predators to stay away before conflict occurs. When properly socialized and trained during their first year, LGDs develop the confidence, judgment, and calm behavior needed to work independently and make sound decisions in the field. Their effectiveness depends on this early foundation, consistent guidance, and an environment that supports their natural instincts.

Studies show livestock guardian dogs can decrease livestock loss by 87–100% and their presence can drive away predators before they even try to attack.

Why should I consider an LGD?

- LGDs are an adaptive and proactive solution to predation.
- They are very effective over wide areas where predator-proof fencing is not possible.
- Livestock guardians benefit wildlife as they are **non-lethal** deterrents

Is an LGD right for my family and farm?

Benefits	Challenges
Can protect multiple forms of livestock and poultry; become part of the herd/flock	Can bark often; require fencing or large range otherwise they may wander
Predators do not become 'desensitized' to LGDs	Could become aggressive to livestock or people if not selected or trained properly
They are adaptable	Need time and guidance to mature properly
Protects family and farm, even at night or on broader pastures	Food and veterinary expenses; require proper care
Predator-friendly (non-lethal deterrence)	May not tolerate other dogs and not dual-purpose pets; they are working animals.

Full table: Dohner Jan 'Livestock Guardians' pg. 40

Other Livestock Guardians

Dogs aren't the only livestock guardians! You might consider the following:

- **Guardian donkeys:** Mammoth Jack or other large variety is best
- **Guardian llamas:** Best for sheep, goats, cattle or poultry
- **Guardian geese/turkeys:** Excellent poultry guardians against smaller predators

Selecting an LGD

- Once you decide on the breed that is best for your operation, it's time to seek out reputable breeders.
- Many breeders can arrange for transport of puppies, but there are many reputable breeders in the state and region.
- LGD's do best if selected as a puppy (12-16 weeks or less) and raised to integrate with your flock or herd; if you choose to get a second LGD, they can learn a lot by spending time with an older trained LGD.
- LGD's should not be treated as household pets or companions for humans; they need to associate primarily with your livestock to bond and become actively invested in protecting them.
- You should select a puppy based on their temperament. The best LGD is alert, calm, confident, and gentle. Males tend to range and patrol more while females stay with the herd and can be more docile.

Common Livestock Guardian Breeds

Great Pyrenees



Photo 1: Great Pyrenees Mountain Dog, © 2012 HeartSpoon (Wikimedia Commons)

Maremma Sheepdog



Photo 2: Maremma Dog (Wikimedia Commons)

Anatolian Shepherd



Photo 3: Anatolian Shepherd Dog, © 2020 Zeynel Cebeci (Wikimedia Commons)

Komondor



Photo 4: Komondor Dog, © 2007 whartonds (Wikimedia Commons)

Akbash



Photo 5: Akbash Dog (Wikimedia Commons)

Kuvasz



Photo 6: Kuvasz Dog © 2010 Erelyi kopo (Wikimedia Commons)

Training your LGD

- ✓ Puppies should be trained to assimilate into the herd by starting them in a dry, safe bonding pen with 1-2 calm animals.
- ✓ Rather than obedience training, LGD puppies should be trained and observed closely early on to discourage behaviors like playing with or chasing stock.
- ✓ Puppies should be raised to work independently; full training or integration can take 1-2 years before dogs become fully effective livestock guardians.
- ✓ More resources on this topic can be viewed at the Noble Research Institute, Jan Dohner's books and videos, and the 'More Resources' section of this document.

LGD Checklist: Have I?

- ✓ Researched different LGD breeds and selected one that best fits my needs?
- ✓ Installed adequate fencing or ensured my LGD has place to roam?
- ✓ Affirmed my livestock type and ages are a match for an LGD?
- ✓ Prepared for and considered how to address behavioral issues that may impact neighbors such as barking or roaming?
- ✓ Planned for time and resources for proper training?

Where Can I Learn More?

VIDEO “Livestock Guardian Animal Overview - Llamas, Donkeys and Dogs (Pt 1 of 3)”

<https://www.youtube.com/watch?v=2H6viXRUpk>

VIDEO “A Deeper Dive into Livestock Guardian Dogs (Pt 2 of 3)”

https://www.youtube.com/watch?v=9u1_o9o2nCU&t

VIDEO “Troubleshooting Livestock Guardian Dog Behaviors (Pt 3 of 3)”

<https://www.youtube.com/watch?v=MGBuYiXB0Hg>

BOOK Dohner JV. Livestock Guardians: Using Dogs, Donkeys, and Llamas to Protect Your Herd. Storey Publishing; 2007 Dec 12.

BOOK Dawydiak O & Sims D. Livestock Protection Dogs: Selection, Care and Training

INTERNET ARTICLE Noble Research Institute. “How to Select and Train Good Guardian Dogs for your Ranch.” Visit Noble.org

PAPER Young, Julie K., and Wesley Sarmiento. "Can an old dog learn a new trick? Efficacy of livestock guardian dogs at keeping an apex predator away from people." *Biological conservation* 292 (2024): 110554.

PAPER Van Bommel, Linda, et al. "Livestock guardian dogs establish a landscape of fear for wild predators: Implications for the role of guardian dogs in reducing human-wildlife conflict and supporting biodiversity conservation." *Ecological Solutions and Evidence* 5.1 (2024): e12299.

The [Agriculture and Wildlife Protection Program](#) is here to answer additional questions about non-lethal wildlife deterrence. Email awpp@bentoncountyor.gov or visit pw.bentoncountyor.gov/awpp.

This document was created in partnership with the Oregon State University Small Farms Program <https://smallfarms.oregonstate.edu/>