

Who's Guarding Ewe? **Jillian Craig**

If you are suffering from predation losses and do not already have a livestock guardian animal, you may want to seriously investigate the options available. Although a livestock guardian animal will not eliminate predation losses entirely, they will help in the battle against predators. The various livestock guardian animals include dogs, donkeys and llamas. Many people with experience with guardian animals maintain that donkeys and llamas may not be quite as effective as guardian dogs. In some cases, horses may also be used.

Livestock Guardian Dogs

Livestock guardian dogs (LGD's) are by far the most popular choice for predator protection. The major benefit to having livestock guardian dogs is that a producer can have multiple dogs to watch the flock, which, helps keep losses in check. Dogs can help to protect the flock against coyotes, black bears, wolves and other dogs at large. A good livestock guardian dog will stay with the flock, will not harm the sheep, and is aggressive toward predators.

There are different breeds of livestock guardian dogs, the most popular breeds include; Great Pyrenees, Akbash, Maremma, and Anatolian Shepherd, as well as crosses between these breeds. Other breeds exist but are not as common in Ontario. Great Pyrenees are in general, the most popular choice. When choosing a livestock guardian dog make sure to research the breed before buying a dog. Both male and female dogs are effective for protecting the flock. Different breeds or individual dogs can be more aggressive than others. Consequently, it is important to monitor your LGD for signs of aggression towards livestock, this behaviour may need to be corrected or the dog may need to be removed from the flock.

If you are thinking about buying a LGD puppy, assess the parents for temperament and usefulness as a livestock guardian animal. A weaned puppy should be housed in a small pen with lambs so it can bond with them. The puppy should be kept in the pen for at least 8 weeks. Human contact should be kept to a minimum (few minutes a day) so that the puppy does not become too friendly and ignores the lambs. The young dog can then go into a larger pen with sheep or out with the main flock. The puppy should be trained on basic commands such as 'come'. Generally, it is a good idea to have an older LGD with the flock and then introduce a puppy so that the newcomer can learn from the experienced dog. A livestock guardian dog can take 2 years or more before they are fully mature and effective at protecting the sheep.

LGD's should be wormed regularly. Sheep are the intermediate host to a canine tapeworm, *T. ovis*. So it is important to make sure your dog is wormed. The dog should also be routinely vaccinated.

When a producer uses livestock guardian dogs, they may effectively reduce losses. A well trained dog should alert owners of predators or trespassers, the dogs will protect the property and stock, in this way, LGD's can allow producers to utilize pastures more efficiently.

Livestock guardian dogs can become sick, may become injured or die early. They can also roam from the flock onto neighbouring properties and may get hit on the road. These factors should be taken into consideration when thinking about purchasing a LGD.

Typically if you have under 200 sheep you could have 1 to 2 LGD's on up to 200 acres. However, if coyotes are a problem in your area, you may need more dogs since coyotes are very smart and will lure the dogs away while the remaining coyotes kill the sheep or lambs from behind. The coyotes may also go after the dogs, so it may be a good idea to have more dogs to

better protect the flock. Having other management practices in place will also help to keep your dogs and flock safe such as good fences. If you own a small flock, you could lock your flock in the barn or yards for the night. Coyotes are very adaptable and may be able to outsmart these management practices.

For more information on Livestock Guardian Dogs visit:

http://www.aphis.usda.gov/lpa/pubs/fsheet_faq_notice/fs_wsgdog.html

<http://www.nal.usda.gov/awic/pubs/1218.pdf>

Donkeys

Donkeys may be something to keep in mind when looking for a livestock guardian animal. They can protect the flock against coyotes, wolves and other dogs at large. They are low maintenance, have a similar diet to sheep, generally inexpensive to buy and can live for a long time. Primarily, donkeys use sight and sound to identify predators. Once a predator is located; donkeys will bray and try to chase intruders out of the field. If coyotes do not run away, a donkey will defend its flock by trying to strike out at the coyote with its front hooves, if the donkey is successful, it could discourage, hurt or even kill the coyote. Donkeys with a strong herding instinct are usually desired since they will want to stay with the flock and guard them. If you are thinking about purchasing a donkey, it should have exposure to sheep as soon as possible in order to develop a bond with the sheep. Generally, a donkey is best used for small flocks (less than 100 ewes); the ewes should all be pastured in the same field with the donkey. The sheep should be grazed on flat land with no trees. If there are hills or cover for coyotes to hide, a donkey may not be as effective since they cannot see all of the sheep, giving coyotes the opportunity to sneak into the paddock and kill.

When using a donkey, a producer should either use a jenny or a gelding. A jenny and her foal are optimal since the jenny will be very protective. When the foal is weaned it should either remain with the flock and the jenny be removed or the jenny stay with the flock and sell the foal. Jacks or intact males may be aggressive towards sheep and humans, and are not used in most situations. Only one mature donkey should be kept with sheep, otherwise the donkey may bond to other donkeys or cows and leave the sheep. If there are horses in a neighbouring pasture, a donkey may not be a good option for your farm since the donkey will want to be with the horses. If you have donkeys in different fields watching different groups of sheep, the pastures should be far enough away that the two donkeys will not bond or see each other since, they will be less effective.

Miniature donkeys should not be used to guard the flock. Medium and large standard donkeys work best to ward off potential predators. A donkey over 44" high at its shoulder is usually adequate to protect the flock. Donkeys are not fully mature until two years of age, before then, they may not be as effective at guarding.

Donkey behaviour should be monitored, especially since each individual animal can display different behaviours and at different times of the year. If the donkey becomes aggressive with the flock, it should be removed immediately. The donkey may also have to be removed at lambing time since it may disturb the ewe and lamb bond or could even trample lambs.

For the most part, donkeys can eat the same feed as your flock. If grain is fed, donkeys should not eat cattle or sheep feed containing feed additives such as, rumensin (active ingredient

is monensin), Bovatec (active ingredient is lasalocid) or Deccox since these are fatal to donkeys and other equines. If using these feed additives, the donkey should be fed separately.

Make sure to know the advantages and disadvantages of a donkey before purchasing one. If you are interested in a guard donkey, you should also read the “Caring for Guard Donkeys” article in this magazine.

For more information on the use of donkeys visit the OMAFRA site at:

<http://www.omafra.gov.on.ca/english/livestock/sheep/facts/donkey2.htm>

Llamas

Another option to consider when searching for a livestock guardian animal is a llama. Llama's can be successful guard animals since they naturally dislike canines. When the flock is in danger they become aggressive towards coyotes, wolves, dogs and foxes. When protecting the flock, llamas are alert and may alarm call and position themselves between the flock and the trespasser. They might also walk or run toward a predator, chase, kick or paw at the predator, and even herd the sheep away. Typically, gelded males are used since intact males can be aggressive towards the sheep and may try to breed ewes, causing injuries or death. Gelded males should be closely watched as they also may exhibit breeding behaviour. A female llama can also be used successfully. Generally, one llama should be used when guarding the flock since they will bond with another llama and may forget about the flock.

In order to reach their full guarding potential, llamas should be at least one to two years of age before they are fully effective. One llama can be used for up to 250 to 300 sheep pastured on 250 to 300 acres. The sheep need to all be in the same pasture for the llama to be successful and the terrain should be flat and clear of brush, otherwise coyotes are likely to hide without detection from the llama. If predators are an issue on your farm, you should also have other management strategies in place. If a pack of coyotes get into your pasture, they could overwhelm one llama and kill sheep and lambs.

Llamas eat the same feed as the flock, making them easy to care for. A llama should be wormed two to four times a year depending on the management system.

If the llama is overly aggressive towards the sheep then it should be removed from the flock. If the llama is protective of the sheep and will not let you work with the flock, then the llama should be separated from the sheep during routine procedures such as worming, vaccinating, shearing, etc.

For more information on llamas go to:

<http://www.extension.iastate.edu/publications/PM1527.pdf>

<http://www.nal.usda.gov/awic/pubs/1218.pdf>

Before choosing a livestock guardian animal it is important to note the advantages and disadvantages to each and select a protection method that is best suited to your farm. Livestock guardian animals will not solve all predation problems, but will help to reduce predation losses. Some producers use 2 different types of guardian animals, for example guardian dogs and one donkey or one llama and guardian dogs. Guardian animals combined with good fences and management strategies will help a producer in the constant struggle against predation.

For general information on predation visit www.ontariosheep.org or <http://www.omafra.gov.on.ca/english/livestock/sheep/predator.html>

Approximate Costs on Livestock Guardian Animals			
	Dogs	Donkeys	Llamas
Initial Investment	Puppy: \$300- \$1000 (or more) Mature Guardian: \$1,000- \$2000 (or more)	\$200 - \$750 (sometimes more)	\$500 - \$1500 (more for breeding stock)
Hoof Trimming	N/A	\$240 - \$300	N/A
Annual De-worming/ Vaccinations / Vet	\$100 for vaccinations and worming. Vet bills can be higher if dog gets sick, gets in a fight with predators, hit by a car, etc.	\$80 - \$100 for worming	\$20- \$30 for worming
Annual Feed	\$350 - \$600 (based on mature 75 – 100 pound dog eating 18 kg of dry food per month)	\$180 - \$300 (based on 1/3 bale of hay for 180 days at \$2.50- \$3.00/ bale, plus any additional grain)	\$180 - \$300 (based on 1/3 bale of hay for 180 days at \$2.50- \$3.00/ bale, plus any additional grain)
Total Annual Expenses	\$650 - \$900	\$450 - \$650	\$200 - \$320

Please note that these are approximate costs.

GLENN: Please add Dog, Donkey and Llama pictures to go with the paragraphs