



HOW TO MAKE DANGLE STICKS AND DRAGS FOR LIVESTOCK GUARDIAN DOGS

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Figure 1. Livestock guardian dog (LGD) wearing a wooden dangle stick. *Photo courtesy of maremmano-morango.blogspot.com*

Chasing young livestock and biting the legs of livestock is a common problem in young livestock guardian dogs (LGDs). Sheep and goats can be crippled, and possibly die due to injuries associated with bites from young LGDs.

It is imperative that these behaviors are dealt with immediately when noticed in young LGDs to also minimize damage to livestock wool and mohair. The use of dangle sticks and drags on LGDs can be very effective to help control unwanted chasing and biting of livestock.

These training tools come in handy during the long adolescent phase in some dogs, which usually lasts from about 10 to 18 months of age.

DANGLE STICKS

Dangle sticks are comprised of a piece of wood, short pipe, or weighted piece of PVC pipe that is attached to a chain, which is placed on the dog's collar (Fig. 1).

As the dog runs to chase livestock, the dangle stick hits them in the mid-leg area, making it uncomfortable to continue—or it gets tangled in their legs as they try to run, which causes them to stumble.

The dangle stick should be heavy enough that it causes slight pain as the dog tries to chase the livestock, but not so heavy that it causes them to walk with their head down and dragging the “stick.” It is important to place a swivel at each end of the device so that it does not become wrapped up on itself.

The length of the chain depends on the dog's height, as the chain should hit the dog in the middle of its legs as it runs. The dangle stick should be approximately 16 to 18 inches long. The stick should extend about 2 inches on each side of the width of the dog's front legs.

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Figure 2. A dangle stick. Note: Lock nut on eye-bolt to keep the board secure on the chain.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021

It is also important to use an eye-bolt and not an eye-screw (especially in wood) to attach the swivel and chain (Fig. 2). An eye-screw will eventually unwind itself out of the piece of wood. Make sure to use a lock nut on the end of the eye-bolt so that it does not come undone.

A double-sided snap is helpful for attaching the dangle stick to the collar. The double-sided snap also allows someone to easily adjust the length of the chain over time as the dog grows. Dangle sticks are a better option if a rancher has a lot of brush or old equipment in the field, as they do not get tangled up in things as easily as drags.

Dangle Stick Materials:

- ▶ Piece of wood or pipe, 16 to 18 inches long (1)
- ▶ Metal swivels (2)
- ▶ Quick links (3)
- ▶ Double-ended snap (1)
- ▶ 18-inch length of chain (1)
- ▶ Standard nut (1)
- ▶ Locking Nut (1)
- ▶ Eye bolt (1)
- ▶ Flat washers (2)

Tools Needed:

- ▶ Electric drill
- ▶ Adjustable wrench
- ▶ Pliers
- ▶ Saw
- ▶ Ruler

Directions:

Cut wood or pipe to appropriate length based on how wide the dog's stance is at its front legs. Generally, 16 to 18 inches long is sufficient. Make sure that the material is not too heavy for the dog. It should not pull their head down.

1. Using the ruler, find the center of the material, mark it, and drill a hole slightly larger than the diameter of the eye-bolt (Fig. 3).
2. Thread the standard nut to the top of the threads, place a flat washer under it and put it through the hole in the material. Then, place a flat washer onto the eye-bolt and the locking nut (Fig. 4).



Figure 3. The location to drill a hole for the eye-bolt, which is slightly larger than the diameter of it.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021



Figure 4. Example of a standard threaded eye-bolt with flat washers on both sides.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021



Figure 5. An attached quick link and swivel tightened to the eye-bolt loop.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021



Figure 6. After attaching the chain to the last quick link, leave the quick link loose until the correct height for the dangle on the LGD is determined.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021

3. Attach a quick link and a swivel to the eye-bolt loop and tighten the quick link (Fig. 5).
4. Attach another quick link and the 18-inch length of chain to the opposite end of the swivel and tighten the quick link.
5. Attach the last quick link to the opposite end of the chain, along with the double-ended snap. Leave the quick link loose until the correct height for the dangle on the LGD is determined (Fig. 6).
6. Tighten the last quick link at the correct height for the dog and re-attach the dangle stick on the LGD.



Figure 7. Different types of drags for LGDs.
Photos courtesy of Costanzo, Texas A&M AgriLife, 2021; and producer submitted photos, 2019

DRAGS

Drags work by making it harder for the dog to run, thus allowing young livestock to run away from them more easily. There are different designs for drags that range from chains with car tires, to metal bars shaped as triangles, to just lengths of chain attached together.

A drag is generally longer than a dangle stick but can achieve the same results if mounted on a short chain (Fig. 7). Drags can work by getting tangled in the dog's legs as they try to run, or with tire drags, which slows them down. It is important that a drag is only used for LGDs on pastures free of obstacles and brush.

Pastures with lots of brush, old equipment, or other obstacles will catch the drag as the dog moves and hold it there until it is released by the rancher. Dogs can get quickly dehydrated in the summer heat if their drag gets tangled in one of these items.

Ranchers using drags need to frequently check on their LGDs. Drags will affect how easily the dog maneuvers in the pasture and deals with threats from predators. Drags and dangles are meant to be used on younger dogs that are not working on their own to protect livestock from predators and are not meant to be long-term solutions to behavioral problems.

A small 13 to 14-inch passenger car tire works well for a tire drag for most LGDs. The tire should not be so large and heavy that the dog cannot pull it, but not light enough that the dog can run with the tire.

As with the dangle stick, a swivel should be used so it does not become wrapped up on itself (Fig. 8). Double-ended snaps are also handy to use on drags. Also, make sure to securely close all chain quick couplers so they do not come undone.

Old car tires can often be found for free at local tire shops. Make sure that it does not have any exposed steel wires that could injure a LGD or livestock. The chain should be about 15 feet in length so that the dog has enough length to freely move with the tire drag.



Figure 8. Tire drag with swivels at each end of the chain.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021



Figure 9. Swivel, quick link, and double-end snap.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021



Figure 10. A tire drag with quick link and swivel.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021

Materials for a Tire Drag:

- ▶ Old car tire, 13 or 14 inch size (1)
- ▶ Metal swivels (2)
- ▶ Quick links (3)
- ▶ Double-ended snap (1)
- ▶ 15-foot chain (1)

Tools Needed:

- ▶ Adjustable wrench
- ▶ Pliers
- ▶ Saw

Directions:

1. Cut a length of chain off the main piece that is long enough to go around the tire.
2. Using a quick link, connect the chain around the tire.
3. Before tightening the quick link, add a swivel to it. Next, tighten the quick link.
4. At the opposite end of the swivel, add another quick link and the rest of the length of chain. Then, tighten the quick link (Fig. 10).
5. At the opposite end of the chain, add the last quick link and swivel and tighten the quick link.
6. Attach the double-end snap to the opposite end of the swivel and then attach the drag to the dog (Fig. 11).



Figure 11. A chain with two quick links and swivel attached.
Photo courtesy of Costanzo, Texas A&M AgriLife, 2021



Figure 12. Lengths of chain for drag.
Photos courtesy Bill Costanzo.



Figure 13. Quick link and swivel attached to chains.

Materials for a Chain Drag:

- ▶ Double-end snap (1)
- ▶ Metal swivels (2)
- ▶ Quick links (3)
- ▶ 78-inch long chain (1)

Tools needed:

- ▶ Adjustable wrench
- ▶ Pliers
- ▶ Saw

Directions:

1. Using a metal saw, cut the chain into two 24-inch pieces and one 30-inch piece (Fig. 12).
2. Using a quick link with a swivel, attach the two 24-inch pieces together and tighten the quick link (Fig. 13).
3. Attach the 30-inch piece of chain and another quick link to the opposite end of the swivel and tighten the quick link (Fig. 14).
4. At the opposite end of the chain, add another quick link and swivel. Then, add the double-end snap to the opposite end of the swivel (Fig. 15).
5. Attach chain drag to the dog and adjust the length. Then, tighten the last quick link.

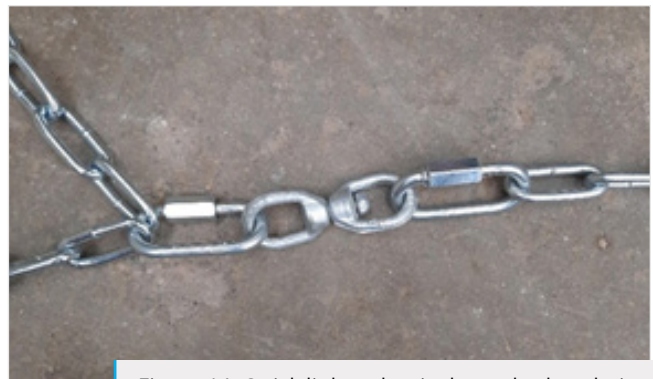


Figure 14. Quick link and swivel attached to chains.



Figure 15. A completed chain drag.