

DOG HARNESSSES

By Oliver Cameron
with Ole Wik

I have never used conventional dog harnesses that pull from high off the back, because it's the hind legs that are doing all the work. The weight of the body holds the front end down, but the front legs don't do much of the pulling. That might be OK if you're going a long ways and you don't want each dog digging in and pulling for all it's worth.



Typical harness that pulls from high off the back.

Image source: <http://www.windchill.com.au/images/Buz%20howling%20in%20harness.jpg>

Instead, I make my own harnesses. I use a singletree-type spacer to keep the rear of the harness apart at the rear. It rides below the tail, so that the pull is quite low on the dog and is almost entirely on the chest, below the neck. That gives the dog the advantage that it can use all four feet.



A commercial that shows the dog really digging in. Note the spreader bar behind the tail.

Image: <http://www.nordkyn.com/models.htm>

How to make a dog harness:

It's been quite a long time since I've made dog harnesses. Maybe I should get some webbing or some rope and make a harness for somebody's dog, so that I can get a better picture of it. We don't want to write up something that won't work.¹



Oliver's dog, Pack, in harness. Note the straps that cross over the hips to hold the singletree up.

Images:

Construction:

- 1) Start by laying a long piece of webbing across the dog's neck. The two ends go down alongside the neck just ahead of the shoulders, between the front legs, and are long enough to continue on back to the singletree and beyond that a bit farther, where they will come together.
- 2) Fasten the two sides of the strap together with a short cross strip behind the front legs, just below the neck. It's very important that the opening for the dog's neck is not too small, but not too big either. You want to make it just a little bigger than the dog's head, so that it won't pull back too far on his shoulders.
- 3) Sew a short piece of webbing to the collar piece above the dog's neck. It comes back a ways behind the shoulder blades, and is usually adjustable.
- 4) Fold a piece of webbing in the middle, double it back over itself, and stitch it together partway along to form a Y-shaped arrangement. The base of the Y connects to that piece that comes back from the collar at the top of the neck. From there it goes back between the shoulder blades to a point that is about even with the shoulders, or even with the back of the front legs.
- 5) The two arms of the Y then fork and go down at an angle, one on either side, and fasten to the long piece of webbing that runs underneath the dog back to the singletree. The attachment point is between the front and hind legs.
- 6) Run another strip of webbing from each arm of the Y across the back of the dog and sew it to the long piece of webbing right in front of the spreader bar on the opposite side. Sew these two strips together where they cross on the back. This arrangement holds the bar up below the tail so that it won't drop too low and get the dog tangled up.



Oliver's harness, shown upside down.

Image: To be determined

7) Connect the two ends of the long strips of webbing behind the spreader bar. As you do that, sew in a loop or ring. The tug line from the sled will fasten into that.

Design considerations:

I usually attach the tug to the harness with a toggle. I don't want to fool with metal snaps—they're a damned nuisance, especially if the weather is too cold and the wind is blowing. All too often the dog's body warms them enough to melt some snow, with the result that the slider freezes. Then you have to take your gloves off to warm it, or beat on it with the back of your knife.



Swivel snap suitable for webbing. Snaps into matching D ring.

Image: <http://www.outfittersupply.com/Snap-Hooks/products/123/>

Instead, I usually make the attachment with a toggle. For hooking an individual dog, I splice one end of a short piece of tope into the main tow line, with the toggle on the other end. It goes through a little loop at the end of the dog's harness, behind the tail.



Toggle suitable for rope loop.

Image: <http://www.earthpathwaysdiary.co.uk/blog/>

Some freight harnesses rest on the area where the rear legs join the body, where the legs are not moving. If you go below that, you have to have a spreader that is quite wide. Otherwise the dog will be working back and forth against the webbing, and this soon wears on the hair.

That is a key point with the harness I make. The spreader is wide enough that it holds the harness away from the dog. When the dog is moving back and forth and working around, there is bound to be some contact, but it's not continuous.

Did you ever use rivets in making harnesses?²

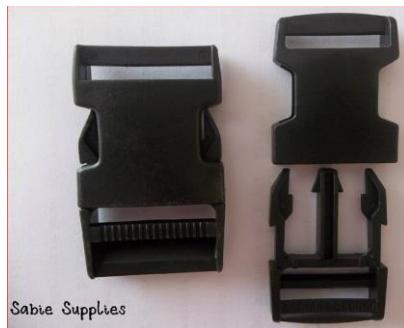
No. When I first started making dog harness, all we had was cotton webbing, not nylon. I used to buy webbing in huge rolls, maybe 100' in a roll, and I always had it on hand.

One time I tried making some leather harness, with light leather doubled over and sewed up, but I never had occasion to use rivets. I just sewed it together. That was the only time.

General considerations:

>Each collar must be individual to be most efficient. Usually I don't have that many dogs, so I know which harness goes with which dog. Some folks write the dogs' names on them.

>A harness doesn't want to be too big. You don't want it so loose that it pulls back on the shoulders. To make it adjustable, I usually put a plastic buckle in there, of the type where you run the strap through, over a cross piece, and back under.



Side-release plastic buckle. The top part is permanently

fixed to the webbing. The bottom part is adjustable.

Image: <http://www.etsy.com/listing/109267374/38mm-1-12-inch-flat-side-release-plastic?ref=market>

After making the harness, I put it on the dog, hook it to a load, and run alongside to see how that collar part fits. When the dog is pulling, he puts his head down. If the collar is too high, this will tend to choke him and thus interfere with his pulling. That's why the strap that fastens to the collar part at the top of the neck is adjustable. I can adjust that so that it raises or lowers the collar part, so to speak.

>I usually fasten the wheel dogs into the ring at the front of the sled, where the tug line fastens. Quite often that's a permanent setup. I will make an eye in the end of the tug and fasten it permanently.

>I like to use neck lines for the wheelers most of the time, fastened into the main tug. Sometimes I hitch them around and sew them there. The neck line has a loop that will go over the dog's head easily. I put the loop through the ring in the dog's collar and slip it over his head. Again there are no snaps, and it's easy to get the loop off the head.

>Sometimes I had five dogs, with a pair behind the leader, necked in. With four dogs, I may have one dog ahead of the wheelers, and then the leader alone. If I have a pair of leaders, usually one will depend on the initiative of the actual leader. They're quite sensitive to working together.

>When you have them hooked side by side, a certain amount of energy is wasted pulling to the side. The shorter the tug from the dog to the tow line, the worse it is.

For that reason, I don't hook them tandem like that when I'm only using a few dogs. Instead, I hook them single file, between two traces. I usually use the same harnesses that I described for a single dog pulling a sled.³

The wheel dog is hooked to the sled by a harness, with both ends of the singletree hooked to the yoke by separate traces. The dog's shoulder comes through a long opening in the side of the harness. I put a loop at each side of the neck that the traces can go through. They're loose enough that they can work up and down, giving the dog some freedom.

If a rigid line were fastened to the wheel dog right there and you had three or four dogs together, the tow line would pull him down when you go over a hump. You have to have some room, yet you have to hold it to the dog somewhat.

Then I go to the next dog. The ends of its singletree are fastened into the ropes on each side, and then through the loops on the collar, and then onto the singletree of the lead dog (if you have three dogs).

If a person is using that type of a system all the time, he could use a different type of harness adapted to that type of use, but I always used the harness I had. It could be used either way.

If dogs have too much freedom, they will tend to get one of the tugs between their legs. Just stop and fix it. When they get used to it, if they are well behaved, they soon learn to cooperate with that type of harness. I never had a team of dogs that on a short turn, when the two tugs start to pull sidewise on them, they'd want to jump over it.

>I once experimented with a horse collar design, using dog hair or caribou hair or whatever for stuffing. It had a rod in the front part, with the padded collar behind that. After quite a bit of use, I sewed a tug into the front. Where that pulled, even if I had the collar pretty tightly stuffed,

it soon wore thin there. I didn't think it was working as well as the other harnesses, in addition to being a darned nuisance to make. I eventually gave up on it.

- 1) This essay stems from a series of telephone conversations that Ole Wik had with Oliver between December 2007 and February 2008. By that time Oliver was living in Oregon and was pretty much bedridden.
- 2) Highlighted text indicates remarks made by Ole.
- 3) Blogger WILDERNESSDAVE posted this image of dogs pulling between dual traces:



He commented: "When traveling in the Northwest Territories, we learned about one more way to hook up a dog team. There, the Dene First Nations people would traditionally run dog teams on really narrow trails in the woods. They would hook up their dogs in single file to travel on these trails." (<http://www.wildernessclassroom.com/dogsledding-season-ends-minnesota-continues-greenland/>)