

## A LAY-DOWN FENCE FOR SNOW COUNTRY

GEORGE T. TURNER

*Forester, Rocky Mountain Forest and Range Experiment Station, Forest Service, U. S. Department of Agriculture.<sup>1</sup>*

Wire fences pose a problem in snow country. Wherever the snowpack reaches a depth of 4 feet or more, wires are loosened or broken and posts frequently need to be straightened or reset. Consequently, maintenance becomes a major chore and expense.

The type of fence described here (Figure 1) has reduced maintenance costs by two-thirds on Black Mesa in western Colorado. It was first observed on the Grand Mesa National Forest, but the originator is unknown. This fence is highly recommended for relatively uniform terrain where livestock need not be controlled during winter. Basically, it is a standard 4-wire fence that can be laid down as a unit. It remains under tension at all times. One man can let the fence down or put it up almost as fast as he can walk. Since the wires rest on or near the ground and thus escape the strain of the settling snowpack, they are seldom broken.

Construction of a lay-down fence is simple. Right-of-way should be relatively free of large stumps and rocks and wide enough to accommodate the fence when laid down. Posts and braces are used as in an ordinary fence and wires are stretched between braces. However, instead of being anchored directly to brace posts, the wires are fastened to a stub post set on the ground next to each brace (Figure 2). The top of the stub post is guyed to the bottom of the

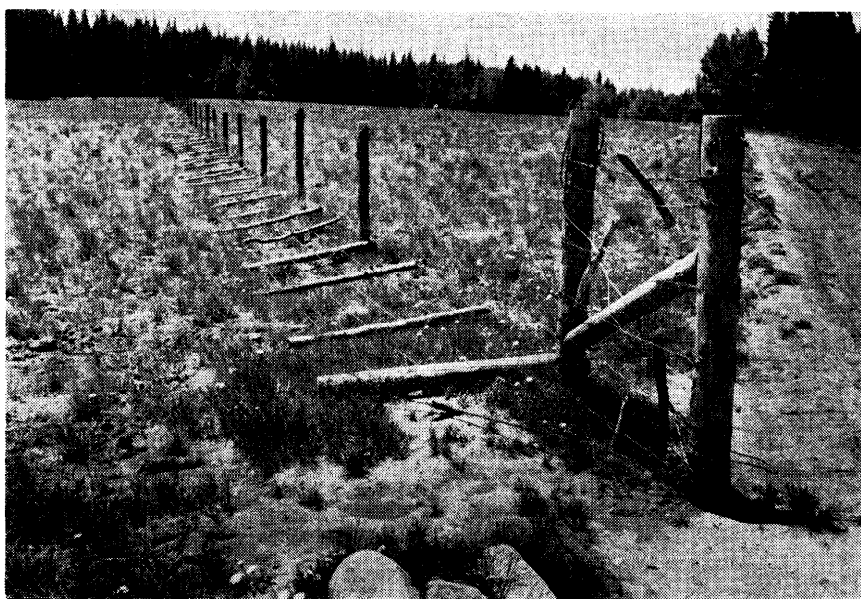


FIGURE 1. A lay-down fence practically eliminates damage from snow. When let down, fence remains under tension (note guy wires fastened to stub post).

second brace post on the side from which the fence will fall. The bottom of the stub may be guyed to the bottom of the second brace post or bolted loosely to the first brace post so as to swivel near the ground. A half-inch bolt is recommended for this purpose. Both methods have proved satisfactory. A wire loop near the top holds the stub post upright.

Fenceline wires are stapled to 3-inch stays slightly offset from

line posts. Stays are held upright by a wire loop stapled loosely to the opposite side of the post near the top. In addition, a bottom loop is recommended where livestock are on both sides of the fence. Offsetting the stays prevents binding in the lower loop when the fence is lowered. For best results stays should be the same height as the posts. One or two additional stays may be placed between posts if a tighter fence is desired.

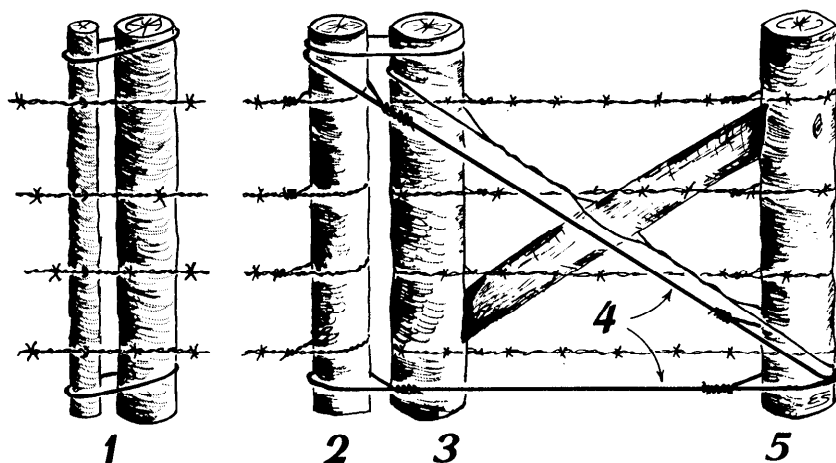


FIGURE 2. Detail of fence construction showing: (1) stay slightly offset from line post; (2) stub post; (3) first brace post; (4) guy wires; (5) second brace post.

<sup>1</sup>Maintained in cooperation with Colorado State University, Fort Collins, Colorado.

To let the fence down, a person usually needs a stretcher to gain some slack while he lifts the top loop from the stub post. Thereafter the going is easy. As the loops are lifted off the top of the stays, the fence falls gently—still under tension and all wires held in place.

The job of erecting the fence is nearly as fast and easy. First raise a few rods of fence near the brace to reduce side pressure. Use a stretcher to place the wire loop over the stub post then erect the remainder of the fence a rod at a time. Broken wires may be repaired as encountered.

Where the terrain is fairly uniform, sections of lay-down fence may be as long as a quarter mile. Shorter sections must be used where the topography is rough and broken or where the fence turns abruptly.

A lay-down fence does have the following limitations and disadvantages:

1. It provides no protection against stray livestock or trespass after it is lowered.
2. It requires attention both in spring and fall.
3. Wires rust more quickly where in contact with the ground for several months.
4. Initial cost of construction is somewhat higher than for a standard fence.

Chief argument in favor of a lay-down fence is the substantial saving in maintenance cost. Where damage from snow is severe, the cost of converting a standard fence to a lay-down fence may be recovered in 2 or 3 years. It is especially recommended for snow country where a fence is needed only during the summer and where the terrain is relatively uniform. It might be feasible for division fences and drift fences where the cost of building and maintaining other types of fence is prohibitive. It's worth considering.