

Temporary Fencing

By Jennifer Cook, Small Acreage Management Coordinator, CSU Extension/NRCS



Temporary fencing can be used to establish a rotational grazing system in which one pasture is subdivided in to two or more areas or paddocks. With the use of temporary fencing, animals can be moved around according to forage availability. This article will discuss temporary fencing materials and installation.

Wire

There are two basic types of temporary fencing wires: polywire (electroplastic twine) and polytape (electroplastic ribbon). Both are made of fine metal filaments, which carry the shock, braided with strands of plastic for strength and durability.

The advantage of polywire is that it's about half as expensive as polytape. Manufacturers use stainless steel or aluminum filaments. Although aluminum is a better electrical conductor, stainless steel will be more durable and last longer if you are moving the fence around frequently.

The advantage of polytape is that it is more visible than polywire. Polytape costs more per foot and is slightly more difficult to pick up and move. Polytape usually consists of five to 15 strands of metal (usually stainless steel) filament woven with strands of plastic to form a flat ribbon.

Polywire and polytape won't last forever, especially if you are moving them a lot. Five to seven years is a common life expectancy. Polytape is heavily affected by snow and ice weight, polywire is as well, but not as much.

Reels

If you plan to move the fence for any reason, invest in a reel. Rolling the wire back onto your arm or a spool will just cause a mess, and will kink the wires and break the fine metal filaments. Buy a reel specifically made to hold temporary fence wire.

Posts

There are four basic kinds of posts generally used for temporary fencing. Most common are plastic and metal posts.

Plastic posts have built in treads to step the posts in to the ground. They can be difficult to drive into dry hard ground. Plastic posts are slightly more expensive than other temporary posts and have a life span of three to five years.

Metal posts are stronger and last longer than any other temporary posts, but they cost more and require more labor to install and remove. Metal t-posts with plastic covers are commonly used.

Fiberglass rods are less expensive than plastic posts but are less convenient to move around. Fence suppliers sell a cap to put on the end of the post to keep it from splintering as it drives in to the ground. Spent shotgun shells also work well.

Some people use 4-foot long 3/8" metal rebar posts. They are cheaper and last longer than plastic and fiberglass posts, but they are not as flexible and will bend if the fence is hit. Plastic insulators slide onto the top to hold the wire in place.

Electric Fence Chargers

It takes a minimum of 700 volts to produce a shock sufficient enough to control short-haired breeds of cattle, pigs, and horses; and a minimum of 2000 volts for long-haired cattle, sheep, and goats. A common fence charge will deliver 4500 to 7000 volts. The voltage determines whether or not a shock will be delivered, and is not a measure of how much shock is felt. The energy output in a shock is measured in joules. Remember double the joules equals double the shock.

Low-impedance (as compared to high-impedance) chargers are commonly used in temporary fencing because they eliminate heat build-up in the wires. If your field is near a 120-volt power source, you can use an AC-powered charger. If not, use a battery-operated DC charger. Some DC chargers have a battery and recharging system (photovoltaic panel) built into the unit. Others operate on a separate system in which you can either recharge the batteries with a battery charger or you can buy a solar pack to keep the batteries charged.

Installation

Generally, one to three strand of wire are needed for cattle and horses. Sheep may need two or three strands. Be careful not to overstretch the wire as the metal filaments may break. Posts can be used every 100 feet, depending on terrain. Good grounding is important. The shock felt by a poorly grounded system may not be enough to keep an animal from walking through the fence. Check the manufacturer's recommendations for grounding your system properly. Grounding techniques will vary depending on soil (rocky, moist, sandy, dry).

Lightning Protection

Electric fence chargers are easily damaged by lightning. If possible, disconnect the charger from the power source and the fence during a lightning storm. Another option is to plug your charger into a surge protector.

Fence Suppliers (I am not endorsing any particular business)

Max-Flex

http://www.maxflex.com/Tape_Strand.HTM

Premier 1

<http://www.premier1supplies.com/>

Gallagher

<http://www.gallagherusa.com/>

Additional Resources

ATTRA publication, “Paddock Design, Fencing, and Water Systems for Controlled Grazing”

<http://attra.ncat.org/attra-pub/paddock.html#fencing>