

DIVIDING PASTURES BY USING ELECTRIC FENCES

Dale Lanham, Herschel George

Electric fences were installed on the Bressner Pastures in the spring of 1990 to separate pastures and have not been changed much over the past 15 years.

On the east side of the creek, Insultimber (ironwood) posts were used which require no insulators. These 5 foot posts cost \$3.25 and were driven approximately 30 feet apart. A three wire fence was used, with the top and bottom wires being hot and the middle wire a ground wire with porcelain insulators on the corners. These pastures are burned every year and the posts have held up very well. However if a steer runs straight into a post, it will snap! But the high tensile wire has never broken.

On the west side, 5 ½ foot fiberglass rod posts were used. These posts are very easy to install and cost \$1.87 each. These were also driven approximately 30 feet apart. Over the past 15 years, there have been problems with the posts pulling up in the draws, and needing to be reset at least a couple of times a year in these areas. On the flat land, the posts have settled several inches lower than they were originally driven. The three clips that hold the high tensile wire do have a tendency to give, and we have had more problems with the wires wrapping together when deer hit the fence. Sunlight and weather appear to have made the fiberglass posts deteriorate. Leather gloves are required when working with posts that have been here for several years. Black polyethylene insulators were used on this side; however, there are very few of them left as they have split and are being replaced with the porcelain insulators.

The corrals were rebuilt in 2002, and placement of the electric fence around them was improved at that time. The new system encloses the electric wire in 3/4 inch plastic pipe along the pipe fences. The electric wire is run up and over the gates rather than being buried. The old corrals had the electric wire elevated above the corral pipes a few inches and several times, as workers were rushing to get out of the way of a contrary steer, they would end up touching the electric wire for a shocking experience. Not good for worker retention!

Lightning arresters helped protect the fence chargers, and have been changed several times. Most problems with an electric fence can be solved with a good grounding system. Both sides of the creek still run separate fence chargers, so that if one goes down, a wire can be run a few feet and connect the two sides together. The deep cycle marine batteries which power the fence chargers are kept charged by solar panels. Batteries have lasted 3 to 5 years.

Many livestock producers worry about the effectiveness of electric fences, and most of the cattle owners question if a three wire fence would keep their cattle separated. As individual calves are weighed, 2 to 3 are turned out together and problems are few. However, if only one calf is turned out at a time and they see another calf in the next pasture running away, the single calf would

sometimes not slow down and would go through the fence. A 5 wire barb wire fence is used on the west pastures between the corral and the pond, and calves go through it almost as much as through the electric fence. When driving parallel to these fences, several holes in the ground can be seen (about 2 feet long, 2 feet wide and about 8 inches deep). These were dug by some late cut steers that stood across the electric fence and pawed and bellowed at each other all summer, but never did cross the fence to fight.

Electric Fences can work very well with very little maintenance.

A few suggestions to consider:

1. Use high tensile wire
2. Use porcelain insulators to hold tension in the corners in pastures that will be burned.
3. Consider using larger diameter posts in the bottom of draws where the posts tend to pull out of the ground.
4. An adequate grounding system is essential for dry weather operation and lightning protection.
5. Inline lightning arresters help protect the system from lightning burning out the charger.
6. Use deep cycle "marine" batteries rather than automobile batteries.
7. Consider how you will introduce the cattle to the electric fence.
8. Protect the electric wire from accidental personal contact.