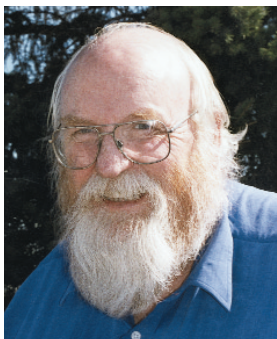


9 Winter electric fencing tips



Swath grazing, stockpile pastures, bale grazing and crop residue grazing ... they all call for some sort of winter containment of cattle. Electric fencing is the logical solution but zapping cattle on pastures in winter is more difficult than giving them a jolt on soft moist summer soils. Jim Stone, who

teaches fencing and other topics at Olds College in Alberta, has some tips to make your electric fences as effective in winter as they are in summertime.

1. GETTING GROUND

Winter soils in typically arid regions, especially after prolonged drought, can be very dry. This limits grounding ability. In winter, particularly when fields are a half mile or more from the energizer, Stone recommends stringing a ground wire from the energizer ground out to the field.

On a dual wire electric fence the top wire should be hot while the lower wire is the ground. The lower wire is connected to ground rods driven into the soil, ideally well before freeze-up. Manuals often call for 8' ground rods but those take a lot of pounding and Stone often plants a few more 4-footers to gain the same contact with the earth. Some producers he knows bury

a sheet of metal and hook to that to ground their fence. Sometimes it takes even more than that.

"We had a fight with this grounding issue at the Ag Canada Lacombe station during some swath grazing studies," Stone recalls. "We just couldn't get a decent ground so we pounded in ground rods every 50 meters or so of fence and that established a good ground out in the field."

If caught with a poor ground after freeze-up, a quick fix is to drill a hole in the frozen soil with a cordless drill and the longest 1/2" bit you can find. Pour some hot water down the hole and push in a ground rod as far as possible.

You will find that a small bit of soil moisture, even when frozen, can really improve the grounding.

2. GET ENOUGH JOLT TO THE FIELD

"Make sure you have enough reading (in the field) considering the grounding issue and the thick hair coat cattle carry in winter," Stone advises. To be safe wear normal boots or shoes, not rubber ones, when you test the fence. And don't test near the energizer. "Most of these new testers don't have a ground wire," he explains. "It's through you that they get grounded."

To be effective Stone says a fence should test between 4,000 and 6,000 volts. If it doesn't, check the energizer. "Some energizers have higher voltage if they have lower joules — which is the amperage or volume of electricity. Voltage is the impact of the electricity and you need high voltage in the field."

The critical time for a fence in any season is at turnout. Stone calls it the education phase. This is when the cattle will test the wire and an energizer that doesn't deliver a sufficient jolt that first time won't get much respect later on. If your energizer can't produce the needed volts, Stone's advice is borrow one that can for the first week. Once the cows have been educated you can replace the stronger fencer with your own unit.

3. MATCH WIRE GAUGE TO HAIR COAT

Always use 12 1/2 gauge high tensile electric wire especially during that education period. Remember, cattle are haired up in winter and hair acts as an insulator. Any well-insulated cow that gets only a tickle when she pushes against a fence can become a problem fence crawler.

The headaches of handling high tensile 12 1/2 gauge wire to cross fence a swath grazing field are fewer than the problems you will have if your cows lose respect for that fence. Once the cows are educated you can switch to poly twine, which is easier to roll up, but Stone would advise against using poly tape for cattle. "There's too much surface area and I've found the contact just isn't there for a good jolt," he adds. He also avoids lighter high tensile wire, under 12 1/2 gauge, as it tends to stretch and lose its shape.

4. CHAIN PROBLEM COWS

To train a problem cow try hanging a short length of chain around her neck so a few links dangle down by the dewlap. The chain tends to work under the hair, closer to the hide, supplying a

better contact between the fence and the cow. Some producers spray the necks of their cattle with water on turnout day to improve conductivity between the fence and the hide. It's all part of building fence respect early on.

5. PLAN FIELD LAYOUT

Stone has worked closely with Carstairs, Alta. cow-calf producer Lyle Brown who grew his herd from 350 to 700 cows at least in part by swath grazing with electric fencing. A favorite setup of theirs calls for swathing the crop on a quarter section all in one direction. Then they set up an electric-fence alleyway at one end, perpendicular to the swaths, and split the fields into 4 rectangular pastures using 12¹/₂ gauge wire on posts spaced 40' to 60' apart. The posts are pounded in after the field is swathed and pulled in spring before seeding. These semi-permanent fences run parallel to the swaths and perpendicular to the water alley. Then cross fences are used to control the pace at which the cattle move forward into the swaths.

"Having the fences line up this way prevents swath trampling and loss as the cows move to and from the watering area. In Lyle's case he gets virtually no loss whereas we've seen other setups where the cows cross over the swath and losses get as high as 50%," says Stone.

Here, again, he advises cross fencing with 12¹/₂ gauge wire for the first week or so to drive home the lesson that fences do bite.

6. USE WINTER-FRIENDLY POSTS

A cross fence can be hung on step-in posts but Stone would avoid the plastic ones for winter. They tend to shatter in extreme cold. He prefers the metal rod and clip step-in posts at this time of year.

Push the posts into the ground under the swaths. "Most of the time the ground under those swaths does not freeze as hard as the uncovered ground, at least up until mid-winter. If the ground is frozen I use that cordless drill and 1/2" bit to drill holes in the ground for the step-in posts and it works well," he adds.

Some producers build portable fence posts, setting the posts in concrete poured into an old tire. Stone says these work for cross fences as the posts are too heavy for the cows to push around but light enough that a front-end loader can shuffle them along fine.

7. USE 2 CROSS FENCES

Stone strongly recommends stringing 2 cross fences ahead of cattle grazing swaths or stockpiled pasture. That way, when you drop the nearest fence the cows can't run all the way to the end of the field. In essence, you leapfrog down the field by moving the back fence ahead each time to the next feeding station.

"On swath grazing setups, I think it's wise to move that cross fence daily. This prevents swath wastage and helps spread the manure more evenly," he says. "Make them clean it up completely.

"And, if a storm comes in, you can drop the one fence and give them more

feed. When the weather clears, go back to the original sequence."

8. STRONG PERIMETER NEEDED FOR BALE GRAZING

"If you're lining the bales up in a field they should be laid out 15' to 20', center to center instead of in a tight row," advises Stone. "If they're lined up too tightly together the cattle spend too much time in one spot and the manure builds up. In a perennial grass stand the grass under that manure mattress is killed off." In a feedyard bale spacing is not an issue.

Line the bales up on their sides with the open face (round end) facing the cows. Expose enough of them at a time that all the cows have uniform access to the feed. Do this for each row of bales you lay out across the field. Stone suspends the electric cross fence on 3/8" fiberglass posts pushed into the face of the bales.

"In these bale feeding setups it's important to have a strong perimeter fence to hook that bale-face cross fence to," he adds.

9. ASSIST SOLAR BATTERIES

Finally, Stone admits he's found few ways to overcome the challenges winter causes for solar fencing systems. First, there are fewer hours of sunlight available to recharge batteries and they have a harder time holding a charge in severe cold weather. "If you don't mind bringing the batteries in to charge them more often then it can work for you," he adds.

— Larry Thomas 