

## Solutions to perennial problems: Animal Control Solutions with Peter Maxner

Peter Maxner: From Falmouth, just outside of Windsor NS. 35 years of experience with pasture management. Not just a topic on Gallagher products, its pasture management, predators. Not necessarily confined to livestock management, protection of gardens also.

Look at the field and see all kinds of grass. Oh we have to get the cattle in there. Need to have a fence to manage the particular forage. Good fences make good neighbours. Make the animal be the lawn mower. The more you can get the plants eaten into that 2-4 inch range the better.

2 essentials: ground and power source, with no shorts, have to have good insulators. Energizers: looking at types of energizers available. Have to know joules of energy: their ability to push the power the distance. Size the energizer for your field and expected expansions in the future.

Grounding: can't stress enough how important. Energizer put the power to place of least resistance.

Insulated fence: any chance of contact there is a ground, lose a lot of power.

Horses learn quickly. One jolt they won't go near the fence again.

The power has to go through you into the ground and races toward the grounding rods.

The shock is a psychological. 7-8000volts, min 5000

Deer fence: 7 ft. fence, a bracket off-set 16 inches off the fence at 2ft high.

Frost or snow prevents the current from going through your feet. In winter using the non live wire as a ground, completing the circuit relies on them touching both wires at the same time. Sandy soil will do the same thing. Grounded back at the energizer: Ground rod not eliminated, just connected right to it. Can't eliminate the ground rod altogether by alternating ground live wires.

With rocky soil the ground rods are difficult to get in. More moist soil farther down which mean more surface contact and the better ground you get. Can bury the ground rod horizontally, you want vertical, but could use old car or even bed spring.

Peter has actually fenced for wild mink, cats and racoons. Figure out how to electrify chain link fence. Chain link buried in ground all the way around. Has a ground already. Added a wire and works very well.

Energizer gives out a high powered voltage but only for a fraction of a second.

Grass brownoff with a high power energizer. A good energizer will burn off a strip of grass and it will die off. He never shuts off the energizer, most people only run it the spring.

What about in the winter? Snow won't act as a conductor so it doesn't short the circuit.

Cow is insulated by snow, but she remembers, what if a coyote jumps in and chases cow...coyote is problem not cow, same as deer.

Voltage over a km of fence line will drop from 6400 down to 600, outside perimeter fence should be solid smooth steel wire. Discourages use of barb wire, something will get caught up it is not very good at all. Something with a little more visibility: braided.

Good corners keep a good long distance fence. Get the posts in first no wires. Then tighten up just one wire. 45-50 ft. between posts depending on land contour. Start the line at one corner and end the line on the other side of the post. Corners are really important, slaters keep them tight.

Blueberry field, keep animals out, not in. Again, smooth steel, high tensile, galvanized wire.

Buy cheap insulators or good insulators. Let the insulator move; do not put them on so tight that it can't move. Single nail insulator has opportunity for power to leak. One nail insulators: is there a problem of it jumping through the plastic? Over time, yes.

Good to go with the long-term investment with insulators. Two staples let the insulator move better. The wire needs to be able to slide. Wire doesn't need to be singing tight, just make sure they don't touch between posts

How many times have you just gone out and wrapped a wire around another? Have to make a good connection.

Run out cable. Copper and galvanized after about a year will oxidize, loose good connection. Don't use electrical cable to feed power.

Gates: spring gates work pretty slick, one end of the gate needs to hook into power. Get the power to go under ground so there is power all the way around.

Ground rods; 1 ground rod for every 2 joules that energizer puts out. 6 joules of energy 3 ground rods. Put them 10' apart. Do not use a ground rod that's hooked to garage or grounding for house, never to well casing, or lightning rods. Culvert works great, unless someone goes into the culvert.

Lightning diverter, has to be wired in. Could be strong enough to blow them all to pieces, they are not too expensive and could save you an energizer.

Pasture management: Sub divide, strip graze, pasture. Gain in production by only sub divided areas for a couple days feed in each.

Remember to get water to them. Dairy cows need that water something fierce. Underground irrigation systems for filling stock tanks work great.

A reel and portable post, hook some power on to it, and real simple to do.

You as the producer needs to determine the speed at which you rotate your livestock through the fields.

How to make an old fence still work for another couple years? Off set wire, to keep animal off old fence so they aren't leaning on it. Tumble wheels, really into intensive grazing, only one strand for tumble wheels.

Picture pasture sub divided into 3, all at different stages of grazing. He will help with pasture grazing management plan, design it so that one individual can get the animals to move in 15 minutes.

In New Zealand the strip up the hill. Another fellow intensive grazing, moving the fence two feet at time. But he only did this for two cows. Out west a combine/moving fence combination.

Questions to pasture management predator control:

Pigs are different, they'll run through fence. Pig's don't have a brain that goes into reverse, they don't see. Mesh fence can work well.

500 ft roll, 5 \_ feet tall for chicken, just a grounding post on other side of battery. This could work for apiary to keep out bears. Don't want a mesh up cause you move hives for pollination. Better off with a permanent yard. Need a good 6000 volts to keep out bears.

Question: rotational grazing, finds if mowed, set cows in to clean up, stubble must be hard on nose, they won't go into it. A problem is using too high quality forage

How high for sheep and against coyote, 3 \_ feet high, 5 feet. Bottom wire has to twice as tight cause coyote will try to dig under and will smell for when the power is down.

Another issue: spring power is up; summer, can't get the same hot fence. Two problems don't have a good ground. Main goal is to get zero for a reading from ground rod. How much growth: trees, bulrushes, wild roses growing up on your fence line.

Dry time: a bucket upside down over the grounding rod to keep ground moist around it. Watering ground rods in dry time is an asset, might be an inconvenience.

Ground rods last? Don't know: maybe 25 years, if hot galvanized. Lazy: put in with front end loader.

Fence to keep racoons out of sweet corn. Just have to run it out, not back into the energizer. 4-6 inches off the ground.

Bench wire? Works very slick, netting is so much easier. Grape growers use netting.

More convenient way to reroll the netting? Grab the post lay it down and roll it.

Interested: did not mention insaltimbre is great insulator wood, type of eucalyptuses, need diamond tip carbide skill saw, diamond drill, non conductive, permanent post.

Fibre glass post works well, also steel post with insulator on it. Recycle plastic posts available in Ontario, still available in Maritime? . What happened? Plant burnt. Very flexible, snow plow friendly, heavy to work with.

Pasture management, paddock layout, water systems, Peter can help design, just won't come out and lay out the fence.

How many acres per cattle for intensive grazing? Average 2.5 acres per head. 1-1 is pushing it. Depends on the pastures species, figures are based on conventional techniques. AV says 1 acre for 2 cows.

Management is more important than changing pasture species. Back in there 21 days or so, manure is gonna be a little runnier the hooves will spread it, the sun will bake it eliminates disease.

Parasite control; co-evolved together, 21-28 days for intestinal parasites. The only way to avoid it is grazed first, hayed second time, but not very feasible. Don't rely on it.

How many cows can adequately water off one nose pump with nursing cow in the summer? 25 cows 50 animals on one nose pump.

Solar waterer's? Not much experience, principle is great.

Solar Fencer's? Doesn't disrecommend. They are costly, they do the same job. The solar panel will just recharge that battery. Biased to plug in unit: not much for energy use monthly. Remote location necessitates. Danny says solar works great, his is not a Gallagher, but it works great.

Gallagher has replaceable components.

Emphasize water: controlling factor. Herd mentality making sure they are watered is key.

How far is reasonable to expect them to go for water? 800m is the farthest. Av says half that.

Sheep, live off the lush grass first, and then after a couple days they need to drink more. Cows can go twelve hours between drink, on lush wet grass they can drink half as much.

