This anecdotal article will focus on a relatively new and as-yet not very common form of electric fencing, namely low-tensile aluminum wire fences. In our operation, having used and installed both high-tensile steel wire and the low-tensile aluminum wire, we prefer aluminum for ease of installation and maintenance, and effectiveness in holding our goats in.

Just as there is no one perfect type of goat for all operations, because each person's situation, financial realities and therefore breeding objectives vary, there is no one perfect fence that everyone could or would like to use for their herd(s). We regretfully loaded a big, beautiful, black, fine-fibered buck with excellent confirmation onto the meat truck when it became obvious that his lovely hindquarters easily propelled him cleanly over 52” rigid panel fences from a walk.

One doe selected herself out of the breeding herd when her fetish for the guardian dog’s kibbles led her into the wrong pasture time and again...with both her lovely twin daughters hard on her heels! Without Mom to lead them astray, the twins stayed with the other 200-plus goats who believe that the two-wire electric fence is the edge of the universe, and that nothing worth having in life exists beyond it.

Electric fence is a mental barrier, not a physical one. Although not recommended with the highly-intelligent caprine, having the fences off occasionally does not immediately lead to jail breaks...provided that the fence normally works well, with 4,000 - 5,000 volts available on all wires. A very hungry goat, a goat in love, or a terrified animal will find its way through chain link fencing given enough time and inclination. Goats that are kept in decent body condition, rotated to fresh pastures when needed, given wide enough alleys and moved calmly through them, will respect electric fences and abide by the perimeters of the pastures as so defined.

Just as I like to visit other peoples’ operations to see what nifty tricks, tools, or procedures they use, in order to possibly adapt some to work for us, let me share with you what we have found to be fastest, easiest, and most effective in electric fencing. Maybe it will save you some time or aggravation, or just give you new sources or alternative applications for fencing supplies.

My first goat property had a professionally installed, “Gallagher” eight steel wire high-tensile fence. The tension on the wires did in fact hold up a tree that fell on the fence in a windstorm, but also popped pin-lock insulators, pulled out or pulled off-center 5” wood posts, and didn’t keep the bucks away from the does. (We’ve now progressed to half a mile separation, and are still not entirely at ease!)

The next farm had a combination of barbed wire and “field fence”, or woven wire. We enhanced the established fencing with electric as needed to keep goats and guardian dogs from going through or getting stuck in the fences. Enhancing a barbed wire fence was done by adding a hotwire below the bottom barb, and also one between the bottom two barbed wires. As goats will attempt to push under a fence first, one good jolt in the nose tends to discourage them quite effectively. Therefore, an electric fence with a weak charge is a very bad way to introduce goats to a new area or new fence. If they learn that it tingles but that’s all, you may as well not have strung the hotwire. An “offset” approximately 8-10” up from the ground and 6-8” in from the fenceline has been very effective for us in keeping goats both from going through the barbed-wire fence beyond it as well as from sticking their heads through woven wire fencing and getting stuck.

Our current (and hopefully final!) property was a blank slate. A perimeter fence of four-strand barbed wire existed, but no internal fences. A patchwork of different fields made up the rectangular property, and a number of those fields were and are still in a Crop Reserve Program (CRP), which means that domestic grazing animals are strictly forbidden to go into them. The prohibited fields have curving boundaries, there is an undulating irrigation ditch crossing the property, and a new driveway and house which the goats only got to visit one time (not planned!).

Budget considerations did not allow for woven wire fencing to be installed over the miles of fence that we needed to erect. Having brought all the “Combo” panels (1/4” rod panels 52” tall and 16’ long) and steel posts from the last place, we re-established the “night pen” and sheds, water troughs and salt/mineral blocks in a centralized, easy to check on location. Then, one pasture at a time, we began to enclose areas that the goats were allowed to graze, with 16’ alleys where needed.

Fences between allowed and prohibited areas are three strands, aluminum 14 gauge, all hot, with wires at approximately 10”, 20”, and 34”. Divisions inside pastures are two wire, approximately 12” and 22”. Posts are approximately

How to Hotwire a Goat
(How to Fence Your Goat)
By Yvonne Zweede-Tucker
Smoke Ridge Cashmere
Choteau, Montana
45’ apart (15 long paces), with one steel t-post followed by one to four 4’ rebars, and then another steel t-post, depending on how straight a line the fence is following (sharp curves need more steel posts, straight lines and gentle curves can use more rebar posts). Lean the posts out slightly against the curve - tightening the wire will bring them back in, and put the wire on the outside of the post going around a curve.

Gates are 8’ to 16’ wide, and currently predominately handles and wires between steel posts. We do want to have a few wooden posts pounded for both sides of high-traffic gates for solidity.

Our night pen is made of “combo” panels, 384’ long by 64’ wide, with 8 evenly-spaced sheds of 16’ wide by 8’ deep by +/- 4’ tall (plywood sides, tin roofs). Rubbermaid 50-gallon low-wall water troughs are portable and easy to clean, and by cutting small sections of the bottom of the panels out, the trough can service two pens at once. We can divide the 200 goats into 8 different breeding groups of 25, or more realistically, 3 groups of 50 with two buffer groups of 25 doelings (no buck) between each. Bucks in love, sharing fencelines, have proven detrimental to the lifespan of panel fences. During summer, when the herd nearly triples, there is adequate shed space for all to take cover from hail or windstorms.

Our objective is to continue to subdivide the pastures until we have between 28 and 30 paddocks between which we can rotate the goats. This summer the goats mined the property for thistles, brush, and wild roses, prompting some astonished local ranchers to ask us exactly what we had sprayed with...

These are all fences that have worked for us, based on what was in place already, using all-aluminum 14 gauge wire, t-posts and rebars, and flat-back plastic “tunnel” insulators (stapled onto wood posts, wired onto steel posts and rebars).

The following list of fencing supplies, prices and vendors is not meant to be exhaustive, cumulative, guaranteed, or an endorsement. It simply tells you where we bought our goods, and gives you an idea of relative prices.

Wire: Pure aluminum, 14 gauge, $114 per mile, 12.5 gauge, $165 per mile, from Twin Mountain Supply (800-527-0990) or in Belgrade Montana, Gallatin Farmers (406) 388-4808.

Insulators: “Flat-back”, $0.0375 each (that's less than 4 cents each), “Double-U” insulators serve as anchors, 60 cents each, both from Kencove (800) KEN-COVE (800-536-2683).

Handles: variety available, from $1.19 to $5.00 each (ours $1.85 each)

Steel t-posts: Pacific, $2.05 for 6’ posts

Rebars: Pacific, approximately 50 cents for 4’ lengths, 28 cents for 2’

Charger: Talk to Kencove, or any other reputable supplier that is familiar with aluminum wire, to determine the size and power of the charger that your operation will need (how many miles of wire, how much impedance, how much pain-potential do the animals need for respect).

Note: This article was written in 1997 - so costs quoted would need to be adjusted.
1) For: existing 4 or 5-strand barbed wire
   Add: an offset, 10" up, 8" out

2) For: existing 3-strand barbed wire
   Add: two strands hotwire

3) For: existing woven wire ("field fencing")
   Add: 1 or 2 hotwires

4) For: no current fencing on perimeter
   Add: hotwires at 10", 20", 34" height

This fence works very well with aluminum low-tensile wire, but probably wouldn't with high-tensile, unless it was in a very straight line!