

DEER CONTROL USING 5 STRAND VERTICAL FENCE

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Many fences have been tried over the years with various amounts of deer control. The 5 strand vertical fence is working very well and is cost effective. Small areas, 5 acres or less are \$.60 ft. to \$.33 ft. on larger areas 100 acres or more for materials. Costs may vary from site to site.

Site preparation is essential, a path 10-12' wide should be cleared by mowing or bulldozing. If land is very rough, bulldozing really aids in construction and effectiveness of the fence.

Approach to the fence on the deer side should be a clear 6-10', as should the protected field side. This area should be kept maintained by mowing or herbicide. The fence works because deer think they can go through, and in the process get shocked and find better things to do.

If weeds and brush are allowed to grow up on the fence it becomes a physical barrier and deer will jump the fence.

Use 12 $\frac{1}{2}$ ga. high tensile steel wire Class III galvanized, breaking strain of 1800 lbs. Wire is pulled from 150 to 200 lbs. tension with a device called a strainer or winch. With wires this tight we can extend post spacing up to 120 feet apart with a post in the ground and a batten or spacer (floats on top of ground) every 40 ft., closer if ground is uneven. Wire spacing is crucial 10" or less off the ground, all other wires 12" apart. This spacing is working very well at this time.

Corners and ends must be braced extremely well to hold the pressures of the fence. Use treated or durable wood such as locust. This is a long-lasting fence if corners and ends are built accordingly.

In-line posts and battens can be wood or fiberglass. Fiberglass is easily installed, is strong, rot free and self insulated.

Springs can be used to hold tension on fence wire with a spring in every wire. Each spring will handle 1500' of wire. This is not essential but is a buffer for expansion and contraction and heavy snow loads. They add a good dimension to the fence.

To make this fence effective, you need a low impedance type energizer. These energizers have hi-voltage and high wattage and can carry many miles of wire with considerable weed loads and still stay effective.

The Bi-Polar energizer has really made a difference in deer fence effectiveness. The Bi-Polar puts out both

positive and negative electricity on alternating wires. Also the Bi-Polar that's on the market now has a faster pulse rate, 67-70 per minute. This is 10% faster than standard energizers, resulting in less dead time between pulses.

Example: On 5 strand deer fence, 1st, 3rd, and 5th wires are positive, 2nd and 4th wires are negative, all wires are hot.

When a deer touches either positive or negative, if conditions are such that earth return is working, the deer will be repelled. If ground is dry, frozen or snow covered when the deer touches positive and negative together it will receive a shock of better than double the voltage of each wire added together. Feet do not need to be grounded.

The same thing can be accomplished with a standard energizer by alternating a hot wire and a grounded wire. The only thing wrong with this is you have dead wires on the fence, dead wires encourage deer to try to go through the fence all the time.

With a standard energizer, a 6th wire should be added on the bottom of the fence tied back to energizer ground system and grounded every 1500' along fence line as a ground return. However, this is not necessary with the Bi-Polar and the ground return will not work with ice on the ground or extremely dry ground conditions.

Whenever a fence is installed, you will be changing deer movements so a training period is necessary. Sometimes it's immediate, sometimes 2-3 weeks are necessary.

These electric fences are not always 100%, but in every fence I've been associated with, damage has been taken from as much as 100% to a very low damage rate which the land owner can live with. This makes this system cost effective, with minimal maintenance.