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Low-Cost Slant Fence Excludes Deer from Plantings

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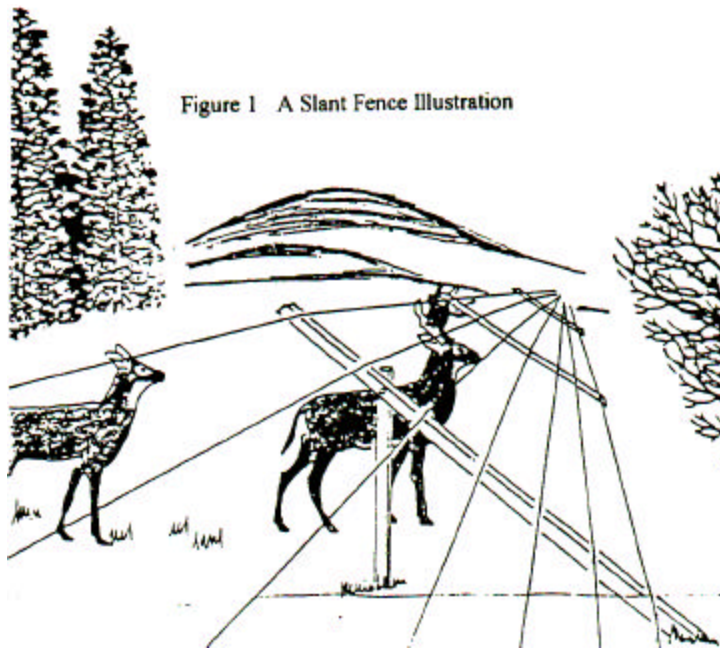


Figure 1 A Slant Fence Illustration

Over the past several years, deer have become the #1 pest of horticultural crops in Virginia as well as home gardens and landscaped grounds in both suburban and rural communities. Countless types of repellents have been tried with varying degrees of short-term success, but excluding deer by fencing them out of plantings they are devouring has been grower-proven to be the only successful method providing long-term deer control. However, construction costs for 8 foot or taller, conventional, woven-wire fences are prohibitively high for most folks and for fencing larger agricultural fields and home grounds.

A Low-cost Virginia Deer Control Success Story:

In 1995, strawberry grower Hugh French in Cumberland County, Virginia, after repeatedly losing three acres or more of berry plants to deer feeding each winter for several years, constructed a seven-strand, 5-foot-high, high tensile, electrically charged, slanted deer fence. Gallagher Corporation, a New Zealand fence manufacturing company (with dealers worldwide) that first published this design back in 1984, developed fence design. For the past three years, he has had 100 percent deer control with this slant fence that surrounds 12 acres of strawberries.

Apparently, the three dimensional effect of the slanting tier of wires confuses depth of field vision of deer so they will not jump by night or by day over the relatively short, 5-foot fence height. Normally, a 5-foot fence height would offer absolutely no impediment to deer intent on devouring horticultural plants! Part of the slant fence's success also may be credited to the electrical fence charger designed by the Gallagher Corporation especially for deer conditioning/control without harming them. When deer approach the inwardly slanting fence and touch an outer top wire, the electrical jolt lets them know the fence is not deer-friendly, nor is it friendly to dogs or to children. Good neighbors will certainly post signs warning others not to touch or try to climb through the electrified slant fence. Otherwise, eager perpetrators of litigation may rush to "trip" or "fall" over your fence in their haste to serve you papers!

Small animal exclusion, such as for groundhogs, also can be attained by placing the lowest of the seven electrified wire strands just a few inches off the ground. Normally, the seven wire strands are placed about one foot apart for the six strands up to the vertical line posts, with the seventh or top wire placed on the end of the slant posts, protruding some 1 ½ feet outward beyond each vertical post (see Figure 1).

After deer severely damaged our summer 1997 research planting of Eastern strawberries at the Kentland Research Farm near Blacksburg, we also constructed a slant fence. Unknown varmints, possibly groundhogs (or deer), also devoured several varieties of snap beans adjacent to our strawberry plots. When my prize experimental selections of half-runner bean plants were eaten nearly to the ground, that was my final wake-up call to action!

We have joined others with slant fences, looking forward to providing no more edible landscape for wildlife of our horticulture crops! We used 8-foot lengths of treated landscape timbers for our line posts, placed 2 1/2 feet in the ground with a 5-foot height remaining above ground (some cut the posts back to a 4-foot height), spaced every 30 feet along the perimeter of our plots. We bolted an 8-foot landscape timber to each line post at a slanting angle, allowing the top end of each slant post to protrude outward from each line post so that top ends of slant posts were 5 feet above ground. The bottom end of each slant post rests on the ground (is not placed in the ground). For field equipment and personnel access to plots inside the fence, we used non-conducting, plastic, electric, fence handles and tensioners to provide an 8-foot-long access near one corner. We can take down each wire strand and move the strands to one side upon entering or exiting the plots.

For under a dollar per running foot of fenced land perimeter for purchased supplies (not counting our labor), we believe this is the most-economical longterm solution to our horticultural deer damage control problem in Virginia.

This wildlife control fence design uses flexible, spring-loaded, 14-gauge, high-tensile wire. The fence is designed to withstand the impact of deer, falling trees, thermal expansion and contraction, and snow/ice loading with minimal maintenance or repair.

Minimal weed control is necessary with high-power electrical energizers specifically designed for the slant fence. Do not use soil-persistent vegetation control herbicides near valuable shade trees or landscape plants. Heed and follow all instructions on product labels.

For more information on slant fences. Please contact a Gallagher dealer in your area. Special thanks to Mr. John Carden, Gallagher representative in Central Virginia, for his assistance to growers and to us in the construction of deer control slant fences; to Mr. Hugh French for first demonstrating this fence design and for his insight on the multiyear effectiveness of the slant fence in a very high-pressure deer damage area; to our student Extension summer intern, Robyn Otto, for assistance in maintenance, even partial replanting of damaged summer strawberry plots; and to Mr. Jon Wooge, Mr. Buddy Poff, and the Horticulture farm technician crew for their rapid construction of our slant fence.

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Credit for the illustration. Figure I above, is given to the Gallagher Corporation.