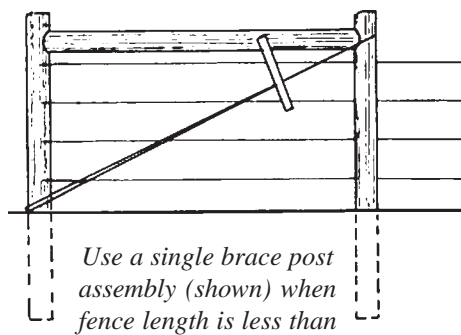


Wire Fences for Livestock

Tom Dorn
Extension Educator

The basics of building a wire fence for livestock are:

- 1) Clear away brush and trees that would interfere with building the fence.
- 2) Establish corner post/brace assemblies at the corners of the property and where gates are wanted.



Use a single brace post assembly (shown) when fence length is less than 200 feet. Use a double span brace post assembly for fences more than 200 feet.

Surveyors use a measure of distance called a rod. A rod is 16.5 feet. Barbed wire comes in 80 rod (quarter mile) spools. One should not attempt to stretch more than 80 rods of wire in one pull. On longer runs, a puller assembly should be installed so each half of the fence can be stretched separately.

- 3) Stretch a wire between the corners to use as a guide for installing line posts. Line posts can be wooden (usually treated to resist insects and rot) or they can be made of steel. Corner posts should be made of wood or heavy



walled pipe to withstand the tension placed on them by the tightly stretched wires. Line posts can be either wooden or steel or a combination of wood and steel posts is sometimes used. A common combination is to alternate wood, steel, wood, steel. Wooden line posts can be as small as four inches in diameter. Line posts are commonly spaced a rod (16.5 feet) apart. This is about the right spacing to support a wire fence and it also makes estimating the number of posts required easy since 80 rods equal a quarter mile.

3) The final step is to stretch and fasten the wire to the posts. The number of wires needed depends on the type and size of animals to be fenced in. Three to five, most commonly four, barbed wires are used for large animals. For hogs and sheep, a woven wire topped by one or two barbed wires, respectively, is needed. If building a combination fence to hold any type of livestock, woven wire topped by up to three barbed wires is sometimes used. When fastening the wires to the fence posts, it is easier if one works from the top down, stretching and fastening one wire at a time. Staples are used to hold wire to wooden posts. Always use at least 1.5 inch staples and leave the staple a little bit loose so you don't pinch the wire. Galvanized wire fasteners are made for each specific type of steel post. These save considerable time in the field compared to using a spool of heavy gauge wire that one must cut and bend to fit.

For more information on constructing wire fences go to lancaster.unl.edu/ag/livestok/fencing.htm

well-kept lawn will reduce the number of insects. Decrease habitat further by creating a vegetation free zone of about 18" adjacent to the foundation.

2. Because lights attract night flying insects that serve as food for spiders, choose carefully what type of exterior lighting you install. Use yellow or sodium vapor lights near the home.

3. Spend as much time as needed to seal all your home's entry place to reduce cracks and crevices for overwintering pests, like spiders, multicolored Asian ladybeetles, face and cluster flies. Don't forget about attic vents — flies and ladybeetles can enter attics and upper stories. Sealing will also help reduce crickets and millipedes in the home.

4. Make sure there aren't rock piles or junk on the property that will provide harborage for rabbits, mice, snakes. Wood piles left for many seasons is food for termites and habitat for carpenter ants.

5. Outbuildings will shelter overwintering rodents that may nest in cluttered areas or stored vehicles. Starting in late summer, use rodenticides in outbuildings to prevent rodent populations from increasing. Animal feed should be placed in rodent-proof containers and the area kept free of food.

6. Plant trees and shrubs that deer and other herbivores don't like to eat. Assume that what you plant will be eaten by something and fence small

Fencing for Appearance

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Fences serve many purposes in the landscape. They may be built to contain or exclude animals, to mark property boundaries, to provide privacy or to add beauty to the property. When the primary purpose is appearance, board or rail fences often are chosen. For small enclosures such as yards, picket fences or vertical board fences provide privacy and wind protection. For larger enclosures such as pastures

or entire properties, horizontal board or rail fences are more practical and economical.

The common horizontal wooden fence uses three or four boards (1" x 6" lumber) nailed or screwed to wooden posts every 8 to 10 feet. This fence adds striking contrast and definition, especially when painted white. The boards may be parallel horizontal or arranged in decorative "crossbuck" patterns.

Rail fences consist of heavy horizontal rails that generally have their ends chiseled down and inserted into holes in the posts. The rails may be

round or rectangular in section, with smooth or rough split surfaces.

Livestock pressure and cribbing (biting) of the wood can be reduced by placing one or more electric wires on the inside of the board or rail fences.

Wood fences can be painted, stained or left to weather to a natural wood color. Woods with natural decay resistance such as cedar, redwood and hedge (Osage orange) may be used without treatment. Other woods must be painted or treated with preservatives. Posts must be naturally decay resistant or pressure treated with preservatives and rated for permanent ground contact (preservative retention of 0.4 to 0.6 pounds per cubic foot of wood).

An alternative to painted wood is vinyl fencing. Rails and posts of polyvinyl chloride (PVC) plastic require no painting, but may require occasional washing to remove mildew and dirt. They are highly resistant to decay, but don't have the strength or stiffness of



wood. Flexible vinyl fencing uses high-tensile wires encased in a flexible PVC jacket that looks like a thin board. The resulting fence looks like a board fence at a lower cost.

White board fences look great when they are new and straight, but show the slightest imperfections. Be prepared to straighten leaning posts or replace warped rails. Painted fences will require frequent touch-up.

Wood and plastic fences may cost \$4 to \$10 per running foot. Wire fences can be built for less than \$1 per foot. For some situations, a compromise may be a wire fence with a single rail at the top or flexible vinyl fence at \$3 to \$5 per foot.

Preventing Rabbit Damage in Your Yard

Eastern cottontail rabbits are common in Lancaster County. These rabbits can cause damage any time of year.

For the gardener, the most permanent solution is to build a rabbit-proof fence around your garden. A one-inch mesh fence of poultry netting (chicken wire) is suitable. You might also try a two-foot high fence made of poultry netting and 3/8-inch fence rods spaced at three feet apart. For about \$50 (2003 prices), you can protect a 25 x 50 foot garden space.

For the owner of a perennial flower bed, the best approach may be to use motion-activated water sprays or a vigilant dog during the day to distract rabbits. You might also use a low, aesthetic plastic-mesh fence around flowers to protect the emerging blossoms. Keeping the soil wet may also repel rabbits from gardens or flower beds.

If you have young trees and shrubs in a backyard, consider low fences around clusters of plants, individual tree wraps or tree wraps incorporated with chemical repellents. Be sure to plan ahead in the event we have a winter with deep snow cover — you may have to extend the height of your fences.

Or, consider keeping rabbits out of your entire backyard. A wood privacy fence or chain link fence will not keep rabbits out of your yard. However, one-inch hardware cloth or hail screen added to the bottom two feet of your existing fencing creates an effective perimeter fence for your entire yard.

—By Soni Cochran, Extension Associate



A rabbit fence added to an existing fence.

PESTS

continued from preceding page

Another reason for why pests are more of a problem on acreages is many pests thrive in rural settings. Those pests may be associated with livestock and wild animals (flies and ticks) or specific conditions found abundantly in rural areas. Grasshoppers, millipedes, crickets, ladybeetles, chiggers, mice, rabbits and deer have specific requirements often found in greater abundance in rural areas. Rural homeowners may also have a pond or water feature which increase habitat for some pests.

A third reason is that some pests, like face and cluster flies, multicolored Asian ladybird beetles and mice seek overwintering shelter and a home with hiding places allows them to survive through our cold winters. Because of the relative abundance of these pests in rural areas and relatively few hiding places, rural homes are often inundated by these pests in the fall.

And finally, many acreage owners are unprepared for predatory animals, like coyotes, owls and hawks that are attracted to acreages where they kill livestock.

Minimizing Pests

1. Decrease habitat by creating more uniformity surrounding the home. Establishing and maintaining a

trees/shrubs/flower bulbs/garden areas to prevent damage. Some small mobile herbivores, like grasshoppers, will be difficult to deal with.

7. If you have animals, regularly clean up waste/feed that attract flies, rodents and birds.

8. Remember that mosquitoes breed in water, including barrels, water troughs, a pond or lagoon. Ponds

provide water for deer and attract Canada geese. Small garden ponds attract snakes.

9. If you have confined pets or livestock, be aware that they may be easy pickings for predators, including coyotes, hawks and owls, racoons, opossums and others. Livestock will also attract rats, which may be very difficult to eliminate once established.