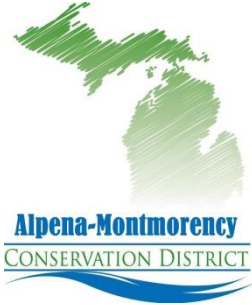


## FENCING ANIMALS OUT

### FOREST STEWARDSHIP MANAGEMENT NOTE #3



#### INTRODUCTION

Fencing out livestock or wildlife can be essential to the success of projects where grazing, browsing, or trampling could damage plantings or structures, such as erosion control devices.

Michigan's Stewardship Incentive Program recognizes the critical nature of these problems by providing cost-sharing for fencing in projects that involve: reforestation (SIP-2), windbreaks (SIP-4), soil and water protection (SIP-5), riparian and wetland protection (SIP-6), fisheries habitat enhancement (SIP-7), and wildlife habitat enhancement (SIP-8). In each of these areas, cost-sharing is available for three types of fencing: 1) 3-strand barbed wire, 2) woven wire, and 3) high tensile (electric) wire. Barbed wire is primarily for livestock. The other types may be used for livestock or large wildlife, such as deer.

#### LIVESTOCK FENCE

The SIP Standards and Specifications Manual (#1) gives detailed specifications for wire, posts, construction methods, etc. Fences may be of conventional or suspension-type construction. All wire must be new and meet the following general specifications.

1. **BARBED WIRE FENCE** - A barbed wire fence shall have a minimum of 3 strands. The strands shall be spaced approximately an equal distance apart with the top strand between 40 and 48 inches above ground level at each post. The bottom strand shall be approximately 14 to 18 inches above ground level at each post. The barbed wire shall be two 12 1/2 gauge or heavier wires twisted with 14 gauge or heavier 2-point, or more, barbs on approximately 4 inch centers. Wire and barbs shall be Class II zinc coated.
2. **WOVEN WIRE FENCE** - Fence with woven wire less than 32 inches high shall have at least 2 smooth or barbed wires above the woven wire. Fences with woven wire 32 inches or higher must have at least 1 smooth or barbed wire above the woven wire. All wires shall have a Class II zinc coating.
3. **ELECTRIC FENCES** - Fences will be constructed of at least four wires, with the total height of the fence to the top wire of not less than 40 inches. Wire will be smooth, have a tensile strength of at least 110,000 PSI, have Type III or better galvanizing, and be of 12 1/2 gauge or heavier.

#### DEER FENCE

1. **WOVEN WIRE FENCES** - Woven wire fences must be at least 8, preferably 10, feet tall and as a result cost at least \$4-6/foot in materials alone. Because of this expense, these fences are not the most practical alternative for orchards and tree plantations. Woven wire fences are, however, the best way to exclude deer from high risk areas, such as airports, where it is essential to exclude all deer. In these situations, woven wire fences should be 10 feet high, or 8 feet with an additional 2 feet of 3 single strands of wire 8 inches apart. Poultry wire is not effective since it is weak and does not last long.
2. **SLANTED FENCES** - Deer tend to jump fences from a standing position close to the base of the fence rather than by a running jump. Thus, fences that slant outward from the area to be protected present an overhead barrier to deer and are more effective than vertical fences of the same height. Several designs for such fences are available (#2,3), but to be most effective, even slanted fences should be electrified (see next item).
3. **ELECTRIC FENCES** - Electric fences will effectively exclude most deer and efficiently control deer damage if built and maintained according to specifications (#1). In most places in Michigan, the vertical 7-wire fence will provide the most efficient protection. In areas of high deer density, the slant 7-wire fence should be used. In uneven terrain, however, the slant 7-wire configuration is more expensive to build, and the wide herbicide strip required under the slant is subject to erosion. In northern Michigan, the slanted fence must be charged in winter or else the snow may pull it down. Material costs for these fences are approximately \$1-2/foot. When installed by commercial builders, costs range from \$1.50-3.00/foot. Costs vary with length of fence and terrain.

## **OTHER METHODS OF DETERRING ANIMALS**

Other methods for discouraging animals from browsing, include tree shelters and related devices (FSMN #13) and chemical repellents (FSMN #42,43).

## **REFERENCES**

FSMN #'s refer to other Forest Stewardship Management Notes in this series.

- #1 Michigan DNR Forest Management Division. 1992. SIP Practice Standards and Specifications Manual.
- #2 Michigan DNR Forest Management Division. Undated. Deer exclosures.
- #3 Palmer, W.L., et al. 1985. A practical fence to reduce deer damage. *Wildlife Society Bulletin* 13(3):240-245.
- #4 Payne, Neil F. and F. Copes. 1988. *Wildlife and fisheries habitat improvement handbook*. USDA Forest Service, Wildlife and Fisheries Administrative Report (unnumbered).
- #5 Wenger, K.F. (ed.). 1984. Range fences. Pages 762-768 in *Forestry handbook*. John Wiley and Sons.

## **RESOURCES (Fence Companies):**

Premier Fence Systems, Box 89, Washington, IA 52353. 319/653-6631. Portable electric fence.  
Reed City Power Line Supply Co., 420 Roth St., Reed City, MI 49677-0205. 616/832-2297.  
Techfence, Advanced Farm Systems, Inc., RD 1, Box 364, Bradford, MA 04410.  
The Wright Place, 5051 Fowler Rd., Reading, MI 49274. 517/283-2645.  
Waterford Corp., P.O. Box 1513, Fort Collins, CO 80522. 303/482-0911. Portable electric fence.  
West Virginia Fence Corp., US Route 219, Lindside, WV 24951. 304/753-4387. Portable electric fence.

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