

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

FENCE

(Ft.)

CODE 382

DEFINITION

A constructed barrier to animals or people.

PURPOSE

This practice facilitates the accomplishment of conservation objectives by providing a means to control movement of animals and people, including vehicles.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any area where management of animal or human movement is needed.

CRITERIA

General Criteria Applicable to All Purposes

Fencing materials, type and design of fence installed shall be of a high quality and durability. The type and design of fence installed will meet the management objectives and site challenges. Based on need, fences may be permanent, portable, or temporary.

Fences shall be positioned to facilitate management requirements. Ingress/egress features such as gates and cattle guards shall be planned. All fences shall consist of at least the minimum acceptable fencing specifications to control the animal(s) or people of concern. The fence design and installation should have the life expectancy appropriate for management objectives and shall follow all federal, state and local laws and regulations.

Height, size, spacing and type of materials used will provide the desired control, life expectancy, and management of animals and people of concern.

To determine the type of fence to construct to control livestock and requirements for each, see the Fence Selection Criteria in Table 1 of the

Materials and Constructions Specifications or the NC Fencing Job Sheet database.

CONSIDERATIONS

The fence design and location should consider: topography, soil properties, livestock management and safety, livestock trailing, wildlife class and movement, location and adequacy of water facilities, development of potential grazing systems, human access and safety, landscape aesthetics, erosion problems, moisture conditions, flooding potential, stream crossings, and durability of materials. When appropriate, natural barriers should be utilized instead of fencing.

Where applicable, cleared rights-of-way may be established which would facilitate fence construction and maintenance.

Fences across gullies, canyons or streams may require special bracing, designs or approaches.

Fence design and location should consider ease of access for construction, repair and maintenance.

Woven wire is not recommended along stream banks that flood frequently. High tensile smooth wire is less likely to catch as much flood debris as woven or barbed wire, and it is cheaper to repair when flooded. Use the minimum number of wires to control the specific animal type. In either case, set back should be such that bank sloughing and high water does not damage the fence.

Fence construction requiring the removal of existing unusable fence should provide for the proper disposal of scrap materials to prevent harm to animals, people and equipment.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for all fence types, installations and specific sites. Requirements for applying the practice to achieve all of its intended purposes shall be described. Utilize the current NC Fencing Job Sheet Database for fence design and documentation.

OPERATION AND MAINTENANCE

Regular inspection of fences should be part of an ongoing maintenance program. Inspection of fences after storms and other disturbance events is necessary to insure the continued proper function of the fence.

Check for the following:

- Structural integrity including post stability, rot, rust, broken or weak boards, wire tension, wire spacing, and wire breakage or cuts.
- Integrity of all fasteners such as staples and nails.
- Any electrical components for function such as proper voltage, insulator integrity, and proper grounding.
- Debris on or in the fence.
- Flood damage.
- Overhanging trees and limbs.
- Vegetation encroachment (weeds and brush).
- Worn or broken components (fasteners, posts, wire).

Remove and properly discard all broken fencing material and hardware. All necessary precautions should be taken to ensure the safety of construction and maintenance crews.

REFERENCES

- Bell, H.M. 1973. Rangeland management for livestock production. University of Oklahoma Press.
- Heady, H.F. and R.D. Child. 1994. Rangeland ecology and management. Western Press.
- Holecchek, J.L., R.D. Pieper, and C.H. Herbel. 2001. Range management: principles and practices. Prentice Hall.
- Stoddard, L.A., A.D. Smith, and T.W. Box. 1975. Range management. McGraw-Hill Book Company.
- United States Department of Interior, Bureau of Land Management and United States Department of Agriculture, Forest Service. 1988. Fences. Missoula Technology and Development Center.
- United States Department of Agriculture, Natural Resources Conservation Service. 2005. Electric fencing for serious graziers. Columbia, Mo.
- United States Department of Agriculture, Natural Resources Conservation Service. 2003. National range and pasture handbook, revision 1. Washington, DC.
- Vallentine, J.F. 1971. Range development and improvement. Brigham Young University Press.