

**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.

Position fences to facilitate management requirements. Plan ingress/egress features such as gates and cattle guards.

Plan and install fence to provide the desired control and management of animals and people of concern by using the appropriate fence height, size, wire spacing and type of materials. Use Fence Selection Criteria in Table 1 of the VA Materials and Construction Specifications to determine and design the appropriate type of fence to meet project needs.

Design and install fences to meet the life expectancy of the practice and to comply with all federal, state and local laws and regulations.

CONSIDERATIONS

Design and location of fences should consider: topography, soil properties, the kind and

behavior of livestock, location of livestock management, handling and feeding facilities 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.

Use natural barriers instead of fencing when appropriate.

Design and locate fences and establish clear rights-of way to facilitate fence construction and maintenance. Avoid clearing of vegetation during the nesting season for migratory birds (April 15th – August 15th).

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.

High tensile smooth wire is recommended along stream corridors prone to flooding. Refer to the Fence Selection Criteria in Table 1 and plan the appropriate number of wires to control the specific animal type.

Consider installation of maintenance gates on stream fences.

Plan permanent fencing for grazing livestock to allow flexibility to facilitate implementation of a grazing plan and permit land management activities such as nutrient application, pest control, forage harvest and other appropriate practices.

Properly dispose of scrap materials when fence construction requires the removal of existing unusable fence, to prevent harm to animals, people and equipment.

PLANS AND SPECIFICATIONS

Prepare plans and specifications for all fence types, installations and specific sites.

Individual fence type specifications are found in the VA Materials and Construction Specifications and the individual Fence Job Sheets. Complete the applicable VA Fence Job Sheets in accordance with fence criteria and include it in the design package.

Requirements for applying the practice to achieve all of its intended purposes shall be described.

CHECK DATA

As a minimum, record and maintain the following check data:

- Map fence with types and locations identified.
- Completed specifications sheet, located within the appropriate job sheet, for each fence type installed.
- Additional information as needed to describe the requirements for applying the practice to achieve all of its intended purposes (i.e. conservation notes, narrative, conservation plan, job sheets, or other means).
- As built changes documented with red pen and ink notes.

OPERATION AND MAINTENANCE

Inspect fences regularly, especially in flood prone areas after storm events, as part of an ongoing maintenance program to insure the continued proper function of a fence. Check voltage on electric fences regularly. If voltage is not sufficient, determine the cause and correct.

Maintain and repair fences in a timely manner as needed, including vegetation/tree/limb removal and water gap replacement.

Maintain and clear electric fences and flood gates of debris. Switch flood gates off during extended periods of flooding.

Remove and properly discard all broken fencing material and hardware. Take all necessary precautions 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.
- Holechek, J.L., R.D. Pieper, and C.H. Herbel. 2001. Range management: principles and practices. Prentice Hall.
- McKenzie, D.W., and W.F. Currier. "Low-Cost Diagonal Fence Strainer." Paper presented at the American Society of Agricultural Engineers Winter Meetings, New Orleans, LA, December 11-14, 1984.
- 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.

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