NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

FENCE

(Ft.)

CODE 382

DEFINITION

Enclosing or dividing an area of land with a suitable permanent structure that acts as a barrier to livestock, big game or people (does not include temporary fences).

PURPOSE

- Exclude livestock or big game from areas that should be protected from grazing.
- Confine livestock or big game on an area.
- control domestic livestock while permitting wildlife movement.
- Subdivide grazing land to permit use of grazing systems.
- Protect new seedings and plantings from grazing.
- Regulate access to areas by people or prevent trespassing.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any area where livestock and/or wildlife control is needed, or where access to people is to be regulated. Fencing is not needed where natural barriers will serve the purpose.

CRITERIA

Permanent fence

Barbed wire fence. Boundary fences and interior cross fences will require a minimum of 4 strands of wire. All barbed wire will be double strand type. The first strand of a four strand boundary fence will be placed 12 inches above the soil surface with the remaining three strands placed at 12 inch intervals to comprise a total height of 48 inches. The first strand of a five strand boundary fence will be placed 10 inches above the soil surface with the remaining four strands placed at 10 inch intervals to comprise a total height of 50 inches. Line posts should be 6 to 7 feet in length and should be buried a minimum of 1 1/2 feet below the soil surface. Spacing may range from 10 feet with no stays, 20 feet with one stay or 30 feet with 2 stays. Corner, gate and vertical brace posts should be 8 to 9 feet in length and should be buried a minimum of 3 1/2 feet below the soil surface. Horizontal brace posts should be 8 to 10 feet in length. Corner, gate and vertical brace posts must be anchored securely. Install a deadman where needed. Locate braced line-post units at 660 feet intervals or at points of change in slope and curves.

Woven wire fence. Woven wire will be 32 inches or wider and will require one or more additional strands of barbed wire to be placed above. Boundary fences will require one strand of barbed wire to be placed at two inches above the soil surface with the woven wire being located 4 inches above the soil surface. An additional strand of barbed wire will be located at 44 inches above the soil surface if using 32 inch woven wire. If using wider woven wire the additional strand of barbed wire will be located four inches above the top of the woven wire. The woven wire for interior cross fences will be placed at 2 inches above the soil surface with an additional strand of barbed wire to be located 4 inches above the top of the woven wire to comprise a minimum height of 38 inches. Spacing of stay wires must not exceed 12 inches. Specifications for corner, gate and line posts are the same as for barbed wire fences.

Wire and hardware. Permanent fence wire and hardware will be new galvanized material. Crimped, commercial designed splice sleeves or "Western Union" splice will be used where splicing is necessary. All barbed and smooth wire must meet one of the following criteria:

i. Domestically manufactured 12 1/2 gauge

NRCS, Mississippi
June 2002

or heavier malleable steel wire.

ii. Domestic or foreign manufactured high tensile 13 1/2 gauge or 15 1/2 gauge barbed wire.

iii. Foreign manufactured 12 1/2 gauge or heavier malleable steel barbed wire with tensile strength tests equal to requirements of Federal Specification No. RR-F-221.

iv. Woven wire must be 32 inches or wider, with a minimum of 11 gauge top and bottom strands, and 14 1/2 gauge intermediate and stay wires. Additional barbed wires placed above or below the woven wire must be 12 1/2 gauge domestic or 15 1/2 gauge high tensile.

v. Staples will be 9 gauge. For soft wood posts (treated pine) staples will be 1½" long galvanized. For hardwood posts (Bois d'arc or Black Locust) staples will be 1-inch galvanized. Drive staples diagonally into the fence post. Do not drive staples so tight that it crimps the wire.

Posts

i. Line Post. Bois d'arc posts will have 2 inches of heartwood at the small end and other untreated posts will have 3 inches of heartwood at the small end. Treated round posts will be 3 inches or more in diameter at the small end. Steel posts may also be used.

ii. Corner, Gate and Brace Posts. Corner, gate and vertical brace posts should be at least 5 inches in diameter at the small end regardless of the material used. Horizontal brace posts should be at least 4 inches in diameter at the small end regardless of the material used.

Power fence

Power fence construction should follow the selected manufacturer's directions for wire, energizer, posts and other accessories. Power fences can be used for outside (boundary) lines and also used to subdivide to facilitate different grazing systems. Boundary lines should be comprised of at least two strands of wire.

High tension power fences (200-300 lbs. tension per wire) should be constructed of a minimum of 12 1/2 gauge, 160,000 psi break strength, type III galvanized steel wire.

CONSIDERATIONS

- Kind and habits of livestock and wildlife.
- Location and adequacy of water facilities.
- Topographic features.
- Soil-site characteristics.
- Locating fences in relation to livestock handling facilities.
- Equalization of forage-producing ability among grazing units as feasible and practical.
- Proposed or potential grazing system.
- Federal, state, or local fencing codes .
- Landscape resources.

OPERATION AND MAINTENANCE

- Repair or replace brace units when signs of weakness is evident.
- Replace line post as needed.
- Refasten loose wires to post and splice broken wires.
- Keep the fence properly stretched.
- Keep the fence line clear of weeds and brush.