



CONSERVATION ENHANCEMENT ACTIVITY

E382A

CONSERVATION STEWARDSHIP PROGRAM

Incorporating “wildlife friendly” fencing for connectivity of wildlife food resources

Conservation Practice 382: Fence

APPLICABLE LAND USE: Pasture; Range; Forest, Associated Ag Land

RESOURCE CONCERN: Animals

ENHANCEMENT LIFE SPAN: 20 Years

Enhancement Description

Retrofitting or constructing fences that provide a means to control movement of animals, people, and vehicles, but minimizes wildlife movement impacts.

Criteria

- The type and design of fence retrofitting or construction will meet the management objectives and site challenges.
- The fence jobsheet will specify:
 - Animal species of concern, both wildlife and domestic,
 - Wildlife movement specific modifications to be made to existing fences to meet these management objectives, or
 - Wildlife movement specific specifications that will be incorporated into newly constructed fences, and

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- Location of the "wildlife friendly" fence(s) and location of the habitat types affected by the fence.
- Examples:
 - Pronghorn antelope need to be afforded a smooth wire at the bottom of the fence with a 14" height above ground.
 - Deer need a maximum height of 42" with a minimum of 12" between the top two wires.
 - Fawns and turkeys need a stranded fence to negotiate (not woven wire).
 - Fences should be retrofitted to let down and put back up for migrating herds.
 - All open top pipes should be capped for songbirds.
 - If bats or sage grouse/lesser prairie chicken are selected as species of concern, then fences should be marked for visibility.
 - For bats, height requirements above water sources will be honored.
- Height, size, spacing and type of materials used will provide the desired control, life expectancy, and management of people and animals of concern. New fences will be designed, located, and installed to meet appropriate local wildlife and land management needs and requirements.
- Avoid clearing of right-of-way vegetation during the nesting season for migratory birds.
- Plans and specifications are to be prepared for all fence types, installations and specific sites.

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Documentation and Implementation Requirements

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Participant will:

- Prior to implementation, obtain an NRCS jobsheet that clearly identifies the species of concern. This document should clearly identify construction techniques for wildlife friendly modifications on existing fences, or specifications for newly constructed fences.
- Prior to implementation, develop a map with assistance from NRCS as needed, which identifies the location of the wildlife friendly fences to be modified or constructed.
- During implementation, consult with NRCS if there are any changes to modification or construction techniques.
- After implementation, provide a map of the actual location of constructed or modified fences for review to verify the enhancement was implemented.
- After implementation, provide pictures of newly constructed or modified fences depicting the specified construction techniques to benefit wildlife for review to verify the enhancement was implemented.

NRCS will:

- Prior to implementation, as requested, assist the participant in the development of a map identifying the location of wildlife friendly fences to be constructed or modified.
- Prior to implementation, develop a jobsheet (or specification as required in the state) for the participant that details wildlife friendly construction techniques.
- During implementation, assist the participant with modification of construction techniques to allow fences to function for both wildlife and domestic species.
- After implementation, review actual fence location map and photo documentation of constructed or modified wildlife friendly fences.

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NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

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Participant Name _____ Contract Number _____

Total Amount Applied _____ Fiscal Year Completed _____

NRCS Technical Adequacy Signature

Date



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SOUTH DAKOTA (SD) SUPPLEMENT TO CONSERVATION ENHANCEMENT ACTIVITY

CONSERVATION STEWARDSHIP PROGRAM

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Incorporating “wildlife friendly” fencing for connectivity of wildlife food resources

Additional Criteria for SD:

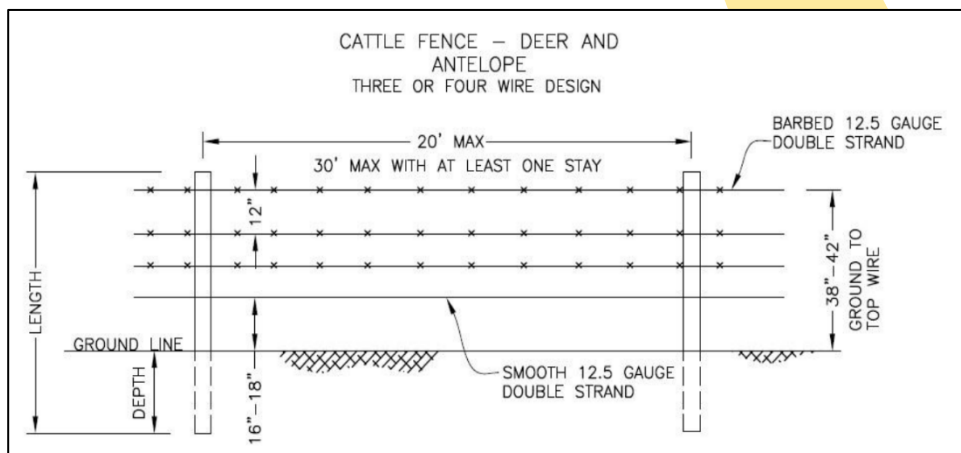
In addition to the criteria specified in the national job sheet E382A, the following additional criteria apply in SD:

This enhancement may be applied on Cropland. If applied on cropland, can only be planned and applied on existing fences (no new fences may be constructed on cropland using this enhancement).

Choose at least one of the following parameters depending on applicant’s needs and species of concern:

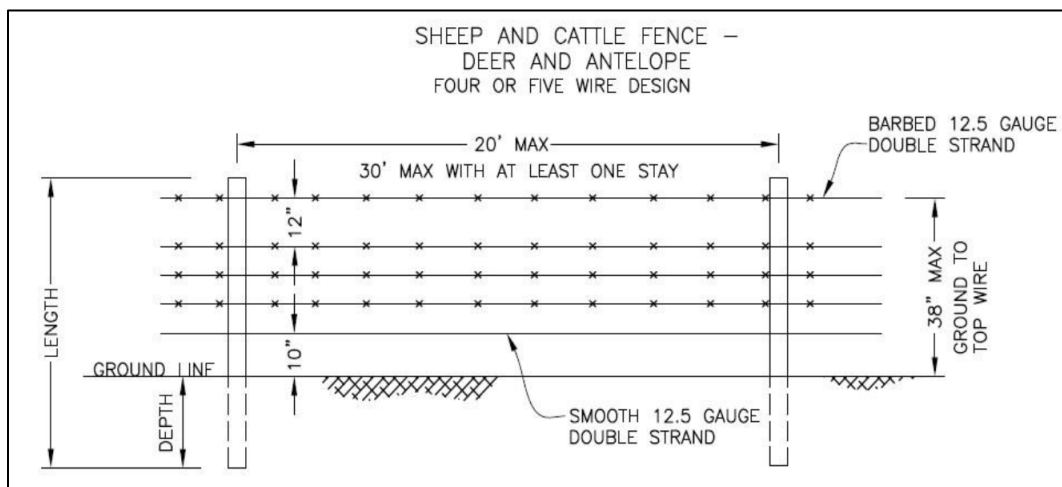
- Deer and Antelope Cattle Fences:
 - The top wire height above flat ground shall be no more than 38 inches to 42 inches (40 inches is the optimum height).
 - The distance between top 2 strands of wire will be 12 inches.
 - The bottom wire must be smooth 12.5-gauge double strand wire placed 16-18 inches above the ground.

Fences with 3 or 4 wires are acceptable.



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- Deer and Antelope Sheep and Cattle Fences:
 - The top wire height above flat ground will be no more than 38 inches.
 - The distance between top 2 strands of wire will be 12 inches.
 - The bottom wire must be smooth and no less than 10 inches above the ground.
 - Fences with 4 or 5 wires are acceptable.



- For elk range, the following conditions apply:
 - A 3/8-inch steel cable will be used as a replacement for the top wire and placed no more than 38 inches high in select fence sections where elk movements are known to occur. An alternative to using a steel cable is to attach a wooden rail in lieu of the top wire.
 - The distance between the top cable or rail and the second wire will be 12 inches.
 - The bottom wire will be 12.5-gauge double strand smooth wire and be placed no less than 16 inches above the ground.
 - A 4-wire fence is required.
 - If elk crossings are seasonal, “Let-down” fences may be constructed as an alternative to elk fence in areas of high elk traffic.
- All wooden post and rail fencing are wildlife friendly fence. If the fence is electric then the bottom wire should provide at least 10 inches from the ground to the wire (e.g., 22-32- 42 spacing) and the top wire should be no more than 38 inches (elk) to 42 inches (deer and antelope) high.



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- Let-down Fences:
 - Both barbed and woven wire let down fences can be constructed.
 - Line posts may be wooden or steel, but wooden posts are more durable where there is heavy snow.
 - Line braces are necessary at least every 1/4 mile, but seldom less than every 100 feet.
 - Topography and the characteristics of big game migration routes dictate the length of let-down fence sections.
 - For both types of let-down fences, 2 stays are needed between fence posts spaced 16.5 feet apart.
 - For woven wire let-down fences, it is recommended that there be shorter sections between line brace posts and that a ratchet type tightener be installed for each section.
 - With both the barbed and woven wire let-down fences, wire loops at the top and bottom of the line posts support those stays positioned at the line posts.
 - To lay down the fence, the wire loops are lifted over the top of the stays, the stay is lifted out of the bottom loop, and the fence laid flat on the ground.
- Extra Gates
 - A simple alternative to a let-down fence is to design new fences or retrofit existing fences with extra gates. Installation of double gates in big game travel corridors, and at fence corners that are left open when livestock are not present, can be an effective means to facilitate wildlife passage.
- If let-down fences or extra gates are installed, they should be located where big game can become accustomed to them. Preferably, the fence should be let down or the gates opened prior to the arrival of big game into the area. Livestock management must be timed so that livestock are absent during the season when the fence is down. If fawns are numerous, the openings should be maintained from June 1 to September 1 to allow their passage. For spring, fall, or winter big game movements, local observations will best dictate when the fence is let-down or gates are opened.
- Greater Sage Grouse fence marking must meet the following criteria:
 - If the Sage Grouse Initiative fence collision tool is available for the fence being evaluated, segments of fences with a high risk for collision will be marked.



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- If the Sage Grouse Initiative fence collision tool is not available, fences within $\frac{1}{4}$ mile of a sage grouse lek or fences known to cause sage-grouse mortalities will be marked.
- **Fence markers should only be used in sage grouse initiative areas.**

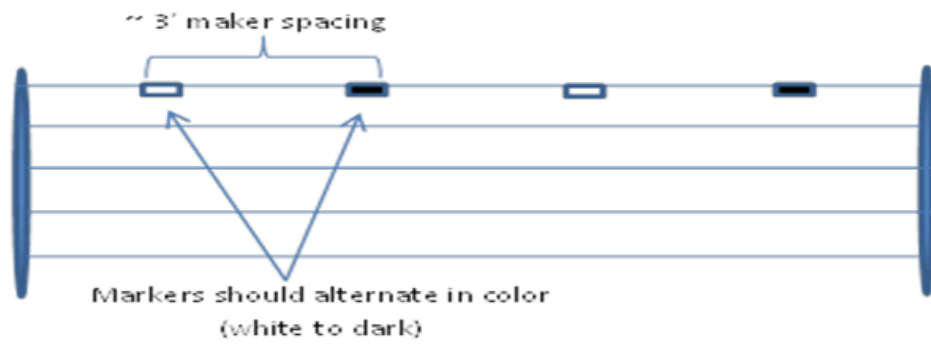
Additional Documentation Requirements for SD:

In addition to the documentation requirements specified in the national job sheet E382A, the following additional documentation requirements apply in SD:

- Complete the SD CPA-23, Fencing, or other document that details the design of a new fence.
- For Greater Sage-Grouse fence marking, complete the attached fence marking job sheet.



Client:		Date:	
Location:		County:	
Contract #:		Planner:	
Objective:	Increase wire fence visibility to reduce potential wildlife collisions and mortality.		



Field/Pasture	Length of fence (ft)	Estimated number of markers	Notes
Total =			

Maintenance and Monitoring: Marked fences that are damaged shall be repaired to ensure adequate wire visibility. If fences are replaced, new fences shall be marked. Monitor for evidence of sage-grouse collisions and contact the NRCS if strikes continue in marked fences.

Acknowledgement Statement:

The Client acknowledges that they have received a copy of the specification and understand the contents and requirements.

Accepted by: _____ Date: _____

Certification:



I have completed a review of the information provided by the client and certify this practice has been applied. Certification by: _____ Job title: _____
Date: _____

