Conservation Enhancement Activity
New Mexico Supplement

## E382A

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 job sheet 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
- Location of the "wildlife friendly" fence(s) and location of the habitat types affected by the fence.
- 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.
- $\quad$ Plans and specifications are to be prepared for all fence types, installations and specific sites.


## New Mexico State Requirements

Retrofitting of existing fences is to be done where wildlife are known to cross in seasonal migration routes and resident wildlife use areas. The crossings are often identified by game trails, where fence damage occurs, and at fence corners or intersections. Consider that travel corridors generally follow swales, gullies, ridges, and close to water.

The safe movement of all species present in the area that may be impacted by fence lines should be considered such as deer, elk, moose, pronghorn antelope, bighorn sheep, javelina, bears, and birds. For this enhancement, the fence adaption must benefit a minimum of one species and this must be documented on the fence jobsheet/implementation requirement sheet.

Net wire fences are strongly discouraged. If net wire fences are necessary to contain livestock, the new or retrofitted fence shall be no more than 36 inches high, preferably less. A preferred net wire fence has 24 inches of woven wire with two strands of barbed wire at 2 and 10 inches above the net wire.

New construction and modifications to existing fences are both considered a structural practice that requires landowner approval on leased land. If the fence is on or adjacent to public land, the agency fence specification that is most stringent will be followed.

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## Requirements for pronghorn antelope and other wildlife such as bighorn sheep and javelina that cross under the fence:

- The bottom wire must be at least 16 " above the ground. Less than 16 " can be accepted along short sections where there are slight variations in the ground level.
- Smooth bottom wire will be required when constructing a new fence. When retrofitting an existing fence, a smooth bottom wire is not required.
- If an existing fence is net wire, the net wire fence shall be a maximum of 36 inches high for a minimum of 100 continuous yards of retrofitted fence.

Recommended improvements for wildlife that typically cross under the fence:

- When retrofitting an existing fence consider using a smooth wire.
- Consider raising the bottom wire to 18 inches.
- Retrofit at least 60 continuous feet of fence.
- The section of fence that was retrofitted to 16 inches is recommended at every $1 / 2$ mile intervals in known use areas.
- Where sheep and goats are contained, replace a minimum of 100 yards of net wire fence with the standard 4 -wire fence with smooth top and bottom wires.
- On boundary fences, remove small sections of fence and install small cattle guards six feet wide and four feet in line length.
- Remove a minimum 10-foot section of mesh/net wire fence. Retrofit the braces and replace with strands of wire.

Requirements for deer, elk and other wildlife that typically jump over the fence. Placement will be along wildlife corridors/travel routes/known crossing areas.

- The distance between the top two wires must be at least $12^{\prime \prime}$ inches apart. Less than 12 ", but no less than 10 ", can be accepted when there are slight variations in the spacing.
- The top wire must be no higher than 42 ".

Recommended improvements for wildlife that cross over the fence:

- Consider replacing an existing barbed top wire with smooth wire.
- A top rail can replace the top wire at 38-42" above ground level with post spacing 10 to 14 feet apart. Use round rails/poles, rather than square or split-rail in areas where snow may build-up on the rail. Do not use boards or planks.
- A 1-inch diameter PVC sleeve may be placed on the top wire the entire length between two posts in places where animals frequently cross.


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- Using PVC to bunch the two top wires may be implemented if the top wire is lowered to no higher than 42 inches. Caution should be used if the top wire is lowered to where livestock can easily jump the fence.
- Let-down fences are appropriate in migratory paths during season of use and livestock are not present in the field. This may also include a design that allows drop-down of the wires when not in use.
- To facilitate movement of elk calves, use a top height of 38 " at key locations or remove the top wire during calving season when cattle are not in the field.


## Requirements for Lesser Prairie Chicken (LPC) habitat:

- Existing 4 or 5 -strand barbed wire fences in areas more than $1 / 4$ mile from an occupied or recently occupied lek may be marked using 3-inch vinyl siding undersill (trim strips) on the top wire and third wire from the top. The markers on the third wire are staggered from the markers on the top wire. Where fence post spacing is 30 feet, four (4) markers will be installed evenly spaced on the top wire and three (3) on the third wire from the top. Where fence post spacing is 20 feet, place (3) markers on the top wire (evenly spaced) and two (2) markers on the third wire from the top.
- In addition to marking the fence, all brace and line posts in the section of fence being retrofitted will be configured to discourage raptors from perching.
- All existing fences within $1 / 4$ mile of an occupied lek or a lek occupied in the last five years must be marked according to the above to comply with the Lesser Prairie Chicken biological opinion.

Recommended improvements for fences in LPC habitat:

- Move existing fences to more than $1 / 2$ mile away from occupied or recently occupied lek.


## Requirements for bats and birds over water:

Option 1- preferred alternative: Remove all horizontal fence wires over the water surface of a tank or trough.

- If livestock from both pastures do not need simultaneous access to the water trough, part of the fence might be replaced with removable fence panels or wires so the configuration can be changed to make the trough accessible from one pasture at a time, without obstructions.
- Where simultaneous access is required and resources permit, a second trough can be added.
- Make fence wire more visible by adding vinyl siding trim or small diameter PVC tubing to the top and middle wires.

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Option 2- when the above is not feasible:

- The fence should be placed off-center to maximize the amount of unobstructed surface area on one side of the fence,
- Fences shall be modified to include highly visible material (minimum 2" diameter),
- and will be a minimum of 18 " above the trough or high-water line (whichever is higher).

Option 3- least preferred when other two options are not feasible:

- All wire fence that extends over water will be a minimum of 36 " above the trough or highwater line (whichever is higher).
- Consider replacing barbed wire with smooth wire.


## Documentation and Implementation Requirements

## Participant will:

- Prior to implementation, obtain an NRCS job sheet 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

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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.


## 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.

Participant Name $\qquad$ Contract Number $\qquad$
Total Amount Applied $\qquad$ Fiscal Year Completed $\qquad$

NRCS Technical Adequacy Signature
Date

