



## UNDERSTANDING MULE DEER AND FENCING

### Fact Sheet #13

#### OVERVIEW

Fences have become a predominant feature on the landscape throughout the West. While fences that limit or direct movement of big game are necessary to protect crops, manage livestock, delineate property boundaries, or create safe zones along roadways, these same fences can impede or completely block mule deer seasonal migration or daily movements to food, cover, and water needed for survival. Many fence designs are especially dangerous to mule deer because they entrap or entangle their legs and lead to a slow, grisly death. Other fence designs have been developed to minimize impacts to mule deer and other wildlife.



Photo: Ron Dudley



#### CONSIDERATIONS

Before building a fence, ask yourself “Is a fence necessary?” If a fence must be built in mule deer habitat or migration corridors, then several factors need to be considered: purpose of the fence, mule deer abundance, occurrence of daily or seasonal movements, and presence of fawns. Spacing between top wires, on fences using strands of wire, is very important because of the manner in which mule deer draw their rear legs under their bodies as they leap over a fence. If one or both hind legs fail to clear the top wire, the legs may catch between the top two wires, entangling the lower portion

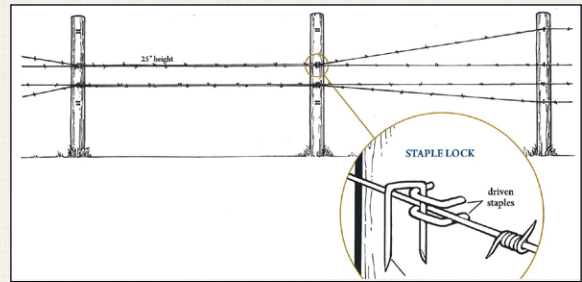
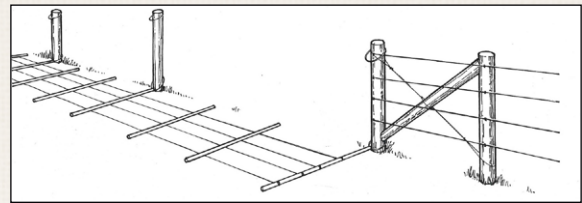
of the leg or legs, resulting in serious injury and often death. Fences built on slopes are especially problematic; a fence of any height is more difficult to jump when approached from downhill because effective fence height is increased. For example, approaching a fence from the downhill side on a 30% slope effectively increases the height by 20 inches. Obviously, on very steep slopes fences become impossible for mule deer to jump without injury or death. Also, where water availability to mule deer is limited, a small area of perimeter fencing around artificial water sources and springs can preclude mule deer use.





## FENCES TO ALLOW MULE DEER MOVEMENT

Any fence is going to create some impediment and risk to mule deer and other wildlife. However, some fence configurations reduce negative impacts. Height of a barbed- or smooth-wire fence on mule deer range should not exceed 42 inches. Space between the top 2 strands should be at least 12 inches. The bottom strand should be smooth (not barbed) wire and should be at least 18-20" above the ground to allow fawns to pass underneath. Woven wire fences should be avoided because they completely block mule deer fawn movement. If a "sheep-tight" fence is required, a 4-strand wire fence should not exceed 32". The bottom smooth wire should be at least 10" above the ground. There are a variety of other fence configurations that minimize impacts to mule deer. In areas where mule deer migrate, it is especially useful to build fences with seasonal "drop down" or adjustable-height sections or to simply leave extra gates open.



## FENCES TO EXCLUDE MULE DEER

Fences may be needed to completely exclude mule deer from hay stacks, gardens, canals, orchards,



and highway rights-of-way. Effective fencing is needed along highways to direct migrating mule deer to under- or over-passes to facilitate safe road crossing. These fences are typically made of woven wire and are 8 feet in height. Other configurations using electric fence have proven effective, and are usually less expensive than a new 8-foot woven wire fence. In cases where fencing is used to guide mule deer to passage structures on roadways, "jump-outs" must be included in the design to allow deer trapped in the right-of-way an opportunity to escape.

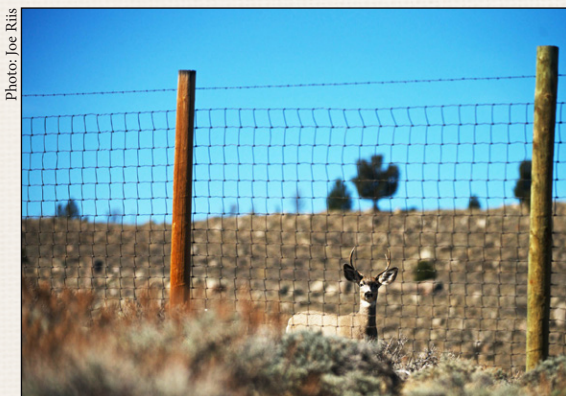


Photo: Joe Rits

## CONCLUSIONS

All fences, regardless of configuration, impede mule deer movement across their ranges. Inventory and evaluation of existing fences on the landscape is needed to identify and modify or remove unacceptable fences. Fences should be removed where they are no longer needed or unnecessarily impede wildlife movement. When new construction is considered, evaluation whether a fence is necessary is critical. Fences to exclude migrating mule deer from highways and funnel them to road crossings has proven highly successful in decreasing mule deer-vehicle collisions and increasing mule deer survival. Where non-exclusionary fences are necessary,

well designed fence configurations reduce risk of impeding mule deer movement to important habitats while similarly reducing mule deer mortality.

**More information on mule deer can be found at [www.muledeerworkinggroup.com](http://www.muledeerworkinggroup.com)**