



# FIELD NOTES FROM TRM RANCH

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Since the late 1970s, Montana Department of Fish, Wildlife and Parks has surveyed mule deer on the Rocky Mountain Front to better coordinate harvest with desired herd conditions. Post-hunting season surveys determine the size and composition of these herds. This information has been valuable in adjusting hunting seasons for meeting management goals. For the past seven years, cooperation between the Boone and Crockett Club and Montana Department of Fish, Wildlife and Parks coupled with the accessibility of the ranch has made TRM Ranch a significant sample point for these surveys. Each year, hundreds of mule deer are observed from vantage points on the Ranch, such as "Deerhill" and "Hightower."

Early January is the best time for these surveys as most deer have migrated from high country summer-fall habitats to concentrate on the low-elevation winter ranges. Determining herd composition is relatively easy at this time since bucks can be classified according to antler characteristics.

Unlike many mule deer surveys which are conducted in areas of dense cover, open habitats on TRM Ranch make observations much easier. This year I joined Gary Olson, a wildlife biologist for Montana Department of Fish, Wildlife and Parks, in classifying deer on the Ranch. It took us less than a day to locate more than 500 mule deer on or in the vicinity of the Ranch. A few days prior to this Gary counted, via helicopter, more than 700 mule deer on the TRM Ranch.

The helicopter survey this year was conducted under excellent viewing conditions; it was a sunny day on the Front with 15 inches of snow on the ground and minus 22 degrees.

Under these conditions mule deer and elk tend to concentrate in large, easily located groups of up to several hundred animals. Mule deer show a preference for snow-free, east-facing limber pine slopes in the southeastern portion of the Ranch. Elk are most abundant on open windswept, rough fescue grasslands of the northwestern portion. Dupuyer Creek forms the common border. The "big alfalfa field" in the central portion of the Ranch is utilized by mule deer, elk and cattle.

By the time I arrived at the Ranch a few days later, the weather had changed dramatically. A Chinook had warmed the entire Front in a matter of hours, melting snow and raising temperatures to a balmy 55 degrees. Both mule deer and elk had responded accordingly and were now intermixed in all habitats on the Ranch, from the grasslands and riparian areas in the bottoms to the limber pine and Douglas fir forests on slopes and plateaus.

This year's herd composition is better than it has been in the previous two winters but not as good as it has been historically. Overall, about 2,300 mule deer are wintering on TRM Ranch

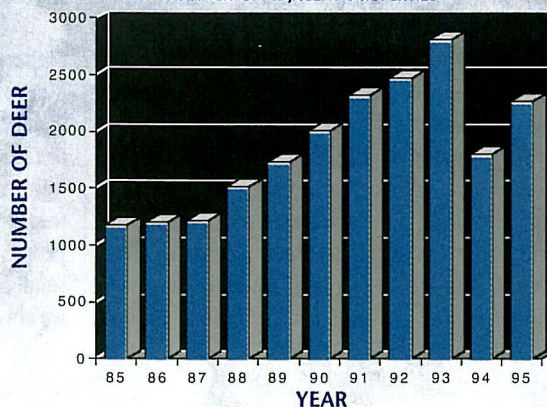
and adjacent areas this year. Based on counts taken in previous surveys it looks as if mule deer numbers fluctuate between 1,500 to 2,500. Gary and I were glad to see more mature, large antlered bucks (25-27 inch antler spread) and a good representation of younger three and four point bucks this year.

Overall, our counts averaged 18 bucks, including yearlings, and 78 fawns per 100 does. Accurate ratios for yearling bucks are harder to obtain since these animals are more difficult to identify, especially at a distance. The average ratio of 11 yearling bucks per 100 does is therefore only an estimated minimum. It is interesting to note that there appears to be a difference in the distribution of mature bucks (more than 2.5 years of age) on the Ranch. The "Hightower" area, for example, had the highest ratio of any area, 19 mature bucks per 100 does, possibly as the result of lower hunting pressure and higher quality of summer habitats.

Last year's hunting season was average in terms of weather conditions for harvesting mule deer. Deer migrated early out of the high country and dispersed widely across private and public lands due to mild weather in foothill habitats. Conservative harvest quotas on TRM Ranch continued to restrict the harvest of mature bucks.

Maintaining these quotas will assist the herd recover from 1992, when the majority of mature bucks in the herd were taken. Maintaining harvest quotas and conducting post-season surveys to monitor their effectiveness will help to better coordinate management strategies with desired conditions of mule deer on the Rocky Mountain Front.

**MULE DEER HERD**  
TRM RANCH & ADJACENT PROPERTIES



DATA SOURCE: MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS