

Project Title: Coyote control targeted on mule deer fawning areas at Cedar Mountain
Brief Description of Project: Program of targeted predator control on key fawning ranges when it is most effective for the benefit of mule deer in the Uinta mule deer herd unit. Work targeted using data from the radio collar study
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The project area is located within Uinta and Sweetwater Counties in deer hunt area 132. This is within the Uinta mule deer herd unit and is commonly referred to as the Cedar Mountain area. The project commenced May 1, 2012 and will run through July 2014.

The Uinta/Cedar Mountain deer herd has not been able to fully recover from a severe population crash that occurred in the early 1990's. Manipulations of hunting season strategies alone have not improved overall herd numbers. Fawn recruitment continues to suffer and post season fawn ratios are not adequate to grow this herd to our objectives.

Several studies have found that the vast majority of coyote caused mortalities on mule deer occur in the first two months of their lives. This predation is usually by a select number of coyotes occupying specific fawning ranges. It is often intensified during times of low availability of alternate prey, depressed deer populations and where fawns are vulnerable due to habitat limitations. This may be the case at the present time since rabbit populations are at a low, mule deer numbers are depressed and deer in the area are experiencing low fawn recruitment. It has been found that coyote control done to benefit mule deer is far more effective if done in high intensity on specific fawning ranges immediately before, during and right after the fawning and done to specifically target coyotes active in those areas.

From our recent mule deer study funded in part by ADMB we have gained valuable information on the mule deer population in the area. We found that 98% of captured does were pregnant in the winter. This high pregnancy rate is typical for mule deer. We followed those radio collared does in June and found that at least 80% of pregnant does had a minimum of one fawn at side. During the following December we flew extensive classification surveys in those areas and found a fawn:doe ratio of only 46:100. That means on average only 46% of does still had a single fawn surviving to 6 months of age. This is a very low figure indicating a very dire situation for the mule deer herd. Doe survival was very high from the previous winter at 96% and doe condition appeared to be at or above normal. Mule deer fawning habitats are very limited in this area and the amount of quality habitat is most likely restricting the ability to grow fawns to 6 months old. Coyote predation on fawns is exacerbated by the small areas available for mule deer fawning habitat. A coyote can be very effective at hunting fawns when there are small patches of quality fawning habitat to hunt. The identified fawning habitats have not received predator control treatment in the past. A three year intensive coyote removal effort was advised. The Muley Fanatic Foundation of Wyoming (MFF) funded year one of this work in 2012. ADMB and the MFF jointly funded year two of the project in 2013. ADMB and the MFF will again jointly fund year three of the project in 2014. After treatments we can look at post treatment faw:doe ratios to determine the effectiveness of our efforts.

The Uinta County Predator Board provides personnel, support, ground work and local expertise in the coyote removal efforts. They contract with a competent vendor to complete the aerial gunning operations. The funding allows for approximately 12-15 hours per year of helicopter coyote removal. This is time specific on identified mule deer fawning ranges. Maps of key identified fawning ranges are provided to the Uinta County Predator Board. Those maps have been updated yearly as new data is analyzed. Coyote removal is conducted immediately prior to, during or immediately after mule deer fawning. This typically occurs in the first week of June in this area. This maximizes the benefit to mule deer. After year one of control efforts a small increase in Fawn:doe ratios was found. After the project is complete and all data is collected by the end of 2014 we will be able to analyze changes in Fawn:doe ratios in Hunt Area 132

ADMB budget expenditures

helicopter coyote removal	\$ 5,000.00
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