

WYOMING GAME AND FISH DEPARTMENT

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"Conserving Wildlife - Serving People"

STATUS OF BLACK-FOOTED FERRET RECOVERY IN WYOMING

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Recent program successes in the Shirley Basin/Medicine Bow Black-footed Ferret Management Area (Shirley Basin), combined with recent statewide prairie dog mapping efforts, will enable the Department to explore and expand ferret recovery efforts in Wyoming within the coming years.

Approximately 20% (25,000 ac) of the Shirley Basin complex was remapped during the summer of 2004. The area surveyed encompassed most of the Primary Management Zone 1, the northern part of Primary Management Zone 2, and some other areas not within either PMZ. Within the survey boundary, in 1991, there were 30 colonies present comprising approximately 25,000 ac. Following a decline in densities during the early and mid 1990s due to sylvatic plague, the area now encompasses 60 colonies and approximately 37,000 ac. This is nearly a 50% increase in occupied area over the last 13 years (since 1991). Although no quantitative data is available for prairie dog densities, ocular surveys indicate that densities have also increased following the plague epizootic. It is unclear if the entire complex has had similar increases. Ferrets were located in many of these new colonies during the 2004 surveys.

Spotlight survey results in Shirley Basin in 2003 indicated that the ferret population is continuing to increase and has likely been underrepresented in previous years. Changes in survey timing, personnel training and survey planning have enable surveyors to be more effective at locating ferrets within recent years. A minimum of 52 ferrets were located in 2003 during 7 nights of spotlighting spread over two weeks. Survey results for 2004 yielded yet another increase, as a minimum of 88 ferrets and 21 litters were located during 7 nights of spotlighting. A combined total of 644.75 hrs were spent spotlighting. Approximately 57% (364.5 hrs) of the spotlighting survey effort was conducted from vehicle, the remaining 43% (280.25 hrs) was conducted by backpacking. An average of 72.9 hrs were spent spotlighting by vehicle in order to locate a unique litter of ferrets, by comparison, only 17.5 hrs were required by backpack. Additionally, an average of 18.2 hrs were required to locate a unique ferret by vehicle, where as only 4.1 hrs were required by backpack.

As no surveys were conducted in 1998, 1999 and 2002, the increase in the minimum ferret alive estimate marked the 5th year of increases in Shirley Basin. Only one of 8 ferrets captured in April 2004 was recaptured in August and only 2 of 19 animals marked prior to

August 2004 were recaptured. Furthermore there are prairie dog colonies surveyed in 2001 and 2003 where ferrets and litters were detected that were not surveyed in 2004. These results indicate that the minimum number of ferrets detected in 2004 may only represent a small fraction of the total number of ferrets currently occupying Shirley Basin.

The Department is in the process of completing a statewide inventory of black-tailed prairie dogs (BTPD) using color infrared photos. We estimate that there are approximately 230,000 acres of BTPD in Wyoming. Moreover, we have identified 8 BTPD complexes that are >5,000 acres and 7 that are between 1,000 and 5,000 acres. The largest complex identified is approximately 100,000 acres and encompasses the Thunder Basin National Grasslands.

The Department and the US Fish and Wildlife Service (Service) have successfully block cleared the entire BTPD range and the majority of the White-tailed prairie dog (WTPD) range in Wyoming. This has been a significant step that will undoubtedly benefit future recovery efforts in Wyoming. The Department and the Service are currently discussing the feasibility of designating the entire BTPD and the portions of the WTPD range that have been block cleared as 10J non essential/experimental ferret recovery area.

The Department and Prairie Wildlife Research are currently developing a proposal to initiate an additional ferret recovery site in Wyoming. We are considering locating the second site within the 10J designation for Shirley Basin approximately 25 to 35 miles away from the existing population. This will ensure that the integrity of the existing population and site will be maintained, until additional information may be collected.

Table 1. Spotlight survey effort summary for Shirley Basin, 2004.

	Truck	BP	Total	Litters	Discreet Ferrets	Non-discreet Ferrets
Week 1	98.25	58	156.25	7	27	14
Week 2	147.5	79.25	226.75	11	42	33
Week 3	118.75	143	261.75	3	19	39
Total	364.5	280.25	644.75	21	88	86

Current Complexes

