

PRAIRIE DOG CONSERVATION TEAM

Representing the states of Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico,
North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming

Bill E. Van Pelt
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086



WAFWA Grassland Coordinator
(623) 236-7573 - office
(623) 236-7926 - fax
bvanpelt@azgfd.gov

22 March 2011

Michael Thabault
Assistant Regional Director
U.S. Fish and Wildlife Service
Denver Federal Center
Post Office Box 25486 - MS 60140
Denver CO. 80225

Dear Michael,

I am writing the U.S. Fish and Wildlife Service (Service) to provide an update on the prairie dog conservation efforts associated with the Western Association of Fish and Wildlife Agencies (WAFWA) Memorandum of Understanding for the *Conservation and Management of Species of Conservation Concern Associated with Prairie Ecosystems* (MOU), which was implemented by WAFWA in January 2006, and was unanimously voted at the January 2011 mid-winter WAFWA to continue for another five years. The participating agencies agree that cooperation is necessary to collect and analyze data on these species and their habitats, and to plan and implement actions necessary to establish and/or maintain viable populations of each species that are sufficient to preclude present or future endangerment, within the constraints of approved budgets and authorities. This letter summarizes prairie dog conservation activities for calendar year 2010.

PRAIRIE DOGS IN GENERAL

POPULATION MONITORING UPDATE

Since 1999, many States have developed State-specific management plans and strategies towards achieving prairie dog related conservation goals such as population monitoring. Prior to these efforts, prairie dogs had not received much attention with regard to population inventory and monitoring and no systematic or consistent methods for managers were in use. Consequently, several methods have been developed for monitoring the prairie dog species found in each State, especially for black-tailed prairie dogs (BTPD). In 2007, all States within Gunnison's prairie dog (GUPD) range agreed to use occupancy surveys and modeling and several states began using this approach for white-tailed prairie dogs (WTPD) as well. In addition to occupancy surveys and modeling, other current survey methodology ranges from aerial transects and ground surveys to use of satellite imagery. Not all methods provide repeatable, statistically accurate and precise estimates of the parameters of interest or are results comparable among States.

At the November 2008 PDCT it was decided to convene an evaluation board to review prairie dog survey methodologies, which is consistent with existing conservation strategies. On January

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 2 of 14

25-28, 2010 a survey methodology workshop was held in Fort Collins, Colorado. The meeting was facilitated by Dr. Lee Lamb of *Negotiation Guidance Associates*. Dr. Michael Hutchins, Executive Director of *The Wildlife Society*, provided opening remarks. This workshop took an interactive approach where WAFWA partners and interested parties presented their survey methodology to an evaluation board. The evaluation board consisted of 6 members. They were Dr. Warren Ballard, Texas Tech University, Dr. John Koprowski, University of Arizona, Dr. Dave Otis, Iowa Cooperative Fish and Wildlife Research Unit at Iowa State University, Dr. Lyman McDonald, Western EcoSystems Technology, Inc., Dr. Thomas Stanley, U.S. Geological Survey, and Dr. Dean Biggins, U.S. Geological Survey. The intent was to have participants follow an agreed upon presentation and homework format, which was sent to the board prior to the workshop for review. After the presentation, a dialog occurred between the presenter and the evaluation board to answer any questions about the methodology. While all the states were able to send the informational homework, only 9 out of 12 states were able to directly participate in the workshop and present information on their survey methodologies.

The evaluation board has produced a draft report recommending a range wide survey method addressing all the parameters identified in the February 2003, addendum to the 1998 BTPD Conservation Assessment and Strategy (CAS; Van Pelt 1999), entitled, "A Multi-state Conservation Plan for the Black-tailed Prairie Dog, *Cynomys ludovicianus*, in the United States" (MSCP; Luce 2003). This WAFWA approved document lists the following minimum 10-year target objectives:

- 1) Maintain at least the currently occupied acreage of BTPD in the U.S.
- 2) Increase to at least 1,693,695 acres of occupied BTPD acreage in the U.S by 2011.
- 3) Maintain at least the current BTPD occupied acreage in the two complexes greater than 5,000 acres that now occur on and adjacent to Conata Basin-Buffalo Gap National Grassland, South Dakota and Thunder Basin National Grassland, Wyoming.
- 4) Develop and maintain a minimum of nine additional complexes greater than 5,000 acres (with each state managing or contributing to at least one complex greater than 5,000 acres) by 2011.
- 5) Maintain at least 10% of total occupied acreage in colonies or complexes greater than 1,000 acres by 2011.
- 6) Maintain distribution over at least 75% of the counties in the historic range or at least 75% of the historic geographic distribution.

This recommendation was derived by evaluating the strengths and weaknesses of the different methods, looking at efficiencies, statistical validity, survey results and to a much lesser extent, costs. Workshop participants have provided comments on the draft response as well as two

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 3 of 14

independent reviewers. The evaluation board is in the process of responding to these comments. Currently, the USGS is taking the draft report through its peer review process and it is anticipated the report will be submitted to WAFWA for their consideration in April 2011.

BLACK-TAILED PRAIRIE DOGS

I am pleased to report the states have met, or exceeded the first three objectives of the Multi-State Conservation Plan for the Black-tailed Prairie Dog, *Cynomys ludovicianus*, in the United States" (MSCP; Luce 2003) and are currently working on the three distributional goals identified in the plan. The current acreage estimate for black-tailed prairie dogs stands at 1,984,585 acres (Table 1). Notable additions include up to date information for Texas and New Mexico. For Texas, they noted a 9% decrease in their priority areas from 2005 to 2010. For New Mexico, they estimate 41 acres using 2005 imagery. In addition to survey efforts, Montana is conducting additional survey efforts evaluating the use of NAIP Imagery. Results are pending for this evaluation. In 2011, Oklahoma is planning on conducting a NAIP imagery based survey using the information from the 2010 workshop.

It should be noted that even though the survey methods used by the state wildlife agencies between 1999 and 2010 were not uniform across the species range, this is the best available estimate of occupied acreage. While PDCT recognizes that the difference in occupied acreage between 1961 and 2010 does not represent a true measurement of trend, but reflects better and more intense survey methods, the more recent trend (2002-2010) for the species appears to be stable to upward across the BTPD range. While decreases were observed in some states, other states recorded increases. For example, results from Colorado's survey effort empirically documented a 29% increase since 2002 and SD has seen an increase from 412,122 acres in 2003, to 625,410 acres in 2006, to 630,849 acres in 2008.

Other notable activities include Arizona continuing their reintroduction efforts for black-tailed prairie dogs. On October 8, 2010 the Arizona Game and Department (AGFD) and BLM, with funding from the National Fish and Wildlife Foundation, released 118 black-tailed prairie dogs within the Las Cienegas National Conservation Area. This third site received 64 prairie dogs and the rest were distributed between the 2 other existing sites. The first year of data collection for grassland vegetation monitoring was also completed. The data collected will be used as a baseline for future vegetation monitoring. The other exciting news is the newest resident at the 2008 colony, a burrowing owl. One was observed in 2009 for about 3 weeks but did not stay. Oklahoma assisted with a translocation of animals on Corps of Engineer lands.

In addition to reintroducing BTPDs, AGFD has also collaborated with the state of Sonora with monitoring their prairie dogs (see attached). On July 15, 2010 Arizona Game and Fish

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 4 of 14

Department and CEDES biologists sampled active and total burrow densities on the Las Palmitas black-tailed prairie dog (*Cynomys ludovicianus*) colony approximately 30 km north of Cananea, Sonora, Mexico. The size of the Las Palmitas colony (59.1 ha) has doubled twice since 1994 when it was measured at 14 ha and in 2004 when it was measured at 28 ha. Active burrow densities on the 13 transects ranged from 30-182 active burrows/ha, with a mean density of 102 active burrows/ha. Among all of the 13 sampled transects, 66% of the burrows were determined to be active.

As a result of this trend information and proactive conservation actions, it is the view of the PDCT this factor still has not rose to the level of a threat. As before, the PDCT will continue range wide monitoring that will provide an indication of trend over time. Please see Table 1 and Figure 1 for the best available occupied acreage estimates as of December 2010.

GUNNISON'S PRAIRIE DOGS

In January 2007, the PDCT agreed that the GPD states would implement an Occupancy Model methodology (Appendix B in the GPD conservation plan) developed and tested by Colorado Division of Wildlife. All the states implemented this monitoring strategy in 2007. In Arizona, the occupancy rates for the three Department 3 regions with GPD were 0.118, 0.109, and 0.361, respectively. However, the 2010 data has not been analyzed at this time. However, in association with their black-footed ferret reintroduction effort, Arizona has mapped the Aubrey Valley GPD Complex (AVC) using a density mapping method. In 2010, it was estimated to be 49,584, which is a slight increase over past estimates. However for the Espee Ranch the estimate had fallen to 3,736.

In Utah, observed occupancy for the 124 plots was 14.5% in 2007. When plots were added within previously known GPD areas (stratum 2, n = 32), the total n for all strata equaled 142 plots, Utah observed 11.8% occupancy in potential habitat without historic records and 46.9% occupancy in habitat with historic records. Parametric values for occupancy were computed by Paul Lukacs of the Colorado Division of Wildlife. The estimate based on only the originally assigned 124 plots, 0.157; SE = 0.033 all considered in one strata, has the lowest standard error. There is a 95% probability the true value of occupancy lay between 9.2% and 22.2%. In 2010, estimated occupancy still stood at 14%. While Utah observed apparent disappearance of GPD's from some areas near Bluff, UT., they also observed colonization of some quite isolated areas. This implies GPD's in Utah can successfully disperse farther than has been previously recognized. Utah also estimates their state wide occupied acreage at 375,342 acres. However they caution this crude estimate does not have any confidence limits.

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 5 of 14

In Colorado, Gunnison's prairie dog occupancy increased from an estimated 11,938 500x500m plots occupied (95% confidence interval = 8,577 – 16,470) in 2005 to 13,635 plots occupied (95% CI = 10,156 – 17,115) in 2007. This presents a change in occupancy from 7.5% to 8.6% or a 15% increase in occupied plots (95% CI on change in occupancy = -21% – 51%). While the increase in occupancy is not statistically significant, it still provides evidence that the population is at least stable if not increasing. While 2010 range wide information is not available at this time, Colorado has their information done. Trends in occupancy for the GUPD statewide appear to be stable. From 2005-2007 the annual rate of change (λ) was equal to 1.055 (SD = 0.114), and for 2007-2010 $\lambda = 1.014$ (SD = 0.076).

For New Mexico, they report 13 of 121 occupancy model sites surveyed in 2010. However, data are being compiled and analyzed by CDOW. New Mexico is also reporting translocation efforts and grazing research underway at Sevilleta NWR, Socorro County. GPDs are routinely moved to pre determined translocation sites from Albuquerque, Santa Fe, Grants, NM but detailed information is usually not available because no permitting is required by the New Mexico Game and fish Department. Distributional and acreage surveys have been done on BLM land in Taos area and on Navajo Reservation. Vermejo Park Ranch is promoting growth of GPD colonies as possible ferret reintroduction sites.

Also, the Navajo and Hopi Nations completed a survey effort and reported an estimate of 102,615 ha (253,566 acres) active areas by GPD on their reservations (see attached report). The tribes used standard interpretive techniques to survey 1,654 digital orthophoto quarter quads (DOQQs) for ground disturbance caused by GPD. The surveyed area covered 7,944,363 ha (1,963,027 acres).

As a result of this trend information and proactive conservation actions, it is the view of the PDCT this factor still has not rose to the level of a threat. As before, the PDCT will continue range wide monitoring that will provide an indication of trend over time.

WHITE-TAILED PRAIRIE DOGS

In 2003, Colorado and Utah tested a survey methodology developed by the Colorado Division of Wildlife in conjunction with Colorado State University. This new technique tested for monitoring WTPDs is called "Occupancy Modeling" (Mackenzie et al. 2002). Unlike prior techniques that estimated acreages of occupied habitat, Occupancy Modeling yields measures of statistical precision and allows calculation of confidence intervals (CIs). This method will allow managers to detect population declines and identify triggers within the natural biological variation of the species to initiate management action.

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 6 of 14

Since the original pilot study in 2003, Colorado has completed 2 years of surveys for WTPDs (2004 and 2008). Results from the surveys found WTPDs occupying 24.1% (Standard Error [SE] = 12.8) in 2004, and 23.1% (SE = 2.1) in 2008, of 47,710 0.25-km² plots. The confidence intervals for estimates of number of plots occupied for 2004 (n = 11,492, SE = 6,091, CI = 3,564 – 26,476) and 2008 (n = 10,778, SE = 1035, CI = 9,293 – 13,181) overlapped, indicating occupancy rates did not change significantly from 2004 to 2008 signifying a stable statewide trend.

In Utah, only one year of occupancy surveys have been conducted with the results from the surveys finding WTPDs occupying 46% of sampled plots.

The first estimate of prairie dog abundance in Wyoming and other states was completed in part due to a growing concern that prairie dogs were becoming rare due to the high success of poisoning campaigns (US Bureau of Sport Fisheries and Wildlife 1961). In 1961, only 15,410 acres (6,236 ha) of WTPD colonies were estimated to remain in Wyoming (US Bureau of Sport Fisheries and Wildlife 1961). A decade later, a second attempt was made to estimate abundance in Wyoming and 45,702 acres (18,494 ha) of WTPD colonies were recorded (Clark 1973). When strychnine was banned in 1972, federally subsidized poisoning campaigns were halted, and the WTPD escaped additional persecution. The WTPD occurs primarily on federal lands managed by the Bureau of Land Management. Consequently, these federal lands served as refuge for the WTPD during the next 15-20 years that followed the ban of strychnine. By the mid 1990s WGFD with the help of private consultants, University of Wyoming, had began to inventory and map what was perceived as the "best available" habitat for the black-footed ferret in Wyoming. During this effort 385,988 acres were mapped from the ground and air. In 2004-2006 several small portions of the Shirley Basin/Medicine Bow WTPD complex were mapped for ferret management purposes. Overall the complex has increased by >18K acres in portions Wyoming has been monitoring and mapping since 1991. However, no other efforts were made to estimate abundance statewide until 2007-08.

In 2007, Wyoming began selecting survey quadrants with the objective of implementing the same survey method as Colorado and Utah. However, the survey protocol was costly and not compatible with aerial survey methods. As part of Wyoming's evaluation process, data on presence and status of colony was collected for analysis. This pilot study enabled Wyoming to develop an alternative approach using aerial photos and surveys to develop a robust estimate of occupied area with confidence intervals. The technique follows statistical measures developed by Cochran (1977), Skalski (1994) and Bowden et al. (2003). In 2008, Wyoming flew 600 quadrants (500m X 500m), estimated area occupied within each quadrant, and evaluated the status of each colony present. .

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 7 of 14

In Wyoming, WTPD colonies were present on 272 (68 %) quadrants. There were 206 quadrants (76 %) that had colonies that extended beyond the quadrant. Of the 272 colonies overlapping quadrants, 228 (84 %) were classified as healthy. Additional WTPD colonies were recorded within 1,500 m of the 600 quadrants 64 % (256) of the time. The mean size of quadrants in the high stratum was 24.97 ha (61.71 ac) and the mean in the low was 24.86 ha (61.43 ac). Quadrants in the high stratum had a mean of 3.68 ha (9.1 ac) WTPD colony area while those in the low stratum had a mean WTPD colony area about half (mean = 1.68 ha [4.15 ac]). The habitat model used (Seglund et al. 2006), estimated potential habitat for the WTPD in Wyoming to be 27,822,847 ac (11,511,356 ha). For 2008, Wyoming estimated that there were 2,893,487 WTPD colony acres (95 % CI: 2,372,597 to 3,414,377 colony acres).

Montana is at the northern edge of WTPD distribution. Current known estimates of occupied acreage range from 118 acres (Knowles 2004) to 366 acres (Atkinson and Atkinson 2005) in 11 colonies. White-tailed prairie dog colonies in Montana have not been rigorously mapped since 2005 yet 8 of the 11 colonies remain active. One of the 8 colonies was re-established through translocation efforts.

To ensure occurrence within Montana, a proactive relocation effort for WTPD has been implemented between various cooperators including Montana Fish, Wildlife and Parks and the Bureau of Land Management. In 2006, cooperators completed an Environmental Assessment (EA), which proposed to translocate WTPD for the purpose of augmenting or re-establishing historically occupied colony sites on BLM lands in Carbon County, Montana. WTPD occurrence is within the following area: that portion of Carbon County where Highway 212 crosses the Wyoming state line, then north along it to the junction with Highway 72 at Rockvale, then south along Highway 72 to Edgar, then east along the Edgar to Pryor Road to the Crow Reservation boundary, then south and east along the Crow Reservation boundary to Bighorn Lake, then south along the west shore of Bighorn Lake to the Wyoming state line, then west along the Wyoming state line to its junction with Highway 212, to the point of beginning. Translocation efforts began in 2007 and continued into 2009.

It has been indicated numerous activities are impacting WTPD habitat. Those activities include oil and gas development, agricultural conversion, and off road vehicle use. While many of these activities can impact WTPD at a local level, monitoring across the entire range does not indicate a major threat to the long-term persistence of the species and their habitat. It should be noted, more site-specific information on WTPD populations are collected in association with black-footed ferret (BFF) reintroduction efforts to monitor natural variation on a year to year basis.

BFF habitat evaluation data have been collected nearly every year since 2000 (and sporadically before that) using a transecting approach called the "Biggins Method". Using this method, an area of prairie dog colonies is mapped/delineated, and within that area, some part of the colonies

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 8 of 14

is surveyed/sampled with transects, and prairie dog activity status and densities (using inactive/active burrow counts) are evaluated (Biggins et al. 1993). This evaluation method was designed to determine, based on BFF energetics, the number of BFFs an area could support. With this WTPD information, agencies can address management issues at a local level as they arise and this information serves as an indicator on the status of the WTPD across a sample area. However, studies have shown prairie dog populations are dynamic on a year-to-year basis and determining population trends with the current measured variation is impossible.

Although different methods are being used by the states for monitoring, all survey methods indicate a robust or stable range-wide WTPD population. White-tailed prairie dogs continue to persist across the entire historical range despite numerous localized impacts. In general, WTPD populations continue to be wide spread.

PLAGUE MONITORING

It is likely that plague is the most important factor that could adversely impact prairie dog species range wide. Plague continues to be documented in various areas across the west in all prairie dog species. However, impacts can occur over large landscapes as observed in Conata Basin, South Dakota and Espee Ranch in Arizona. It is also important to note, wildlife and land managers are monitoring for the presence of plague, and in the case of ferret reintroduction areas, try and mitigate for the impacts of plague. This mitigation includes dusting for fleas to reduce the impacts of plague outbreaks. For example, Arizona dusted 4,100 acres of GPD in association with the Espee Ranch, and Colorado dusted 268 acres of WTPD and 598 acres of GPD, and thousands of acres in South Dakota.

The PDCT recognizes the need for further research into the dynamics of plague in prairie dogs. One of the exciting venues for future plague research is thought to be examining the use of vaccines. Currently, most of this research is being conducted by USGS in a laboratory setting. However, Colorado has coordinated with the USGS, National Wildlife Health Center to evaluate experimental bait consumption by following biomarkers to measure the rate of consumption and distribution amounts. Both of these research/conservation projects will continue in 2011 and will be expanded to include other colonies within the range. Also, at the 2010 Black-footed Ferret Executive Committee meeting, a plague vaccine coordinator was identified and funded to track progress of registering this oral plague vaccine.

In addition to the vaccine, WAFWA is working with a private company to develop a rapid field test for plague detection.

The discovery of plague positive fleas and carcasses within the Wolf Creek Management Area in 2008 marked the beginning of a Colorado and BLM disease management project to limit the impact of the plague epizootic on the ferret population. This project included evaluation of the

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 9 of 14

effectiveness of flea control to manage plague outbreaks and research collaboration with the USGS National Wildlife Health Center to evaluate biomarker use to measure the consumption of experimental bait for future delivery of an oral plague vaccine.

In the fall of 2008, prairie dog burrows on 369 hectares of habitat were treated with delta dust and an additional 471 hectares were treated in the spring of 2009. To evaluate the effectiveness of the flea control, 348 white-tailed prairie dogs were captured in 2009 and all fleas were collected for laboratory testing. Plague positive fleas were collected from 16 of these live-trapped prairie dogs, all of which were captured on non-treated areas. As part of continuing research efforts, 268 hectares were treated with insecticide and 49 white-tailed prairie dogs were captured in 2010 with all 27 fleas testing negative for plague.

The flea control appears to have been effective for 4-8 months as the prairie dog population in the treated area appeared to remain at high to moderate density while populations on adjacent non-treated habitat declined dramatically. Additionally, all 10 plague positive carcasses collected in 2009 were found in the non-treated areas. The occurrence of plague positive fleas 1-2 years after treatment suggests that the insecticide provided only temporary protection against disease transmission and was unsuccessful at stopping the epizootic.

Also in 2008, the AGFD contracted with Northern Arizona University to examine whether or not genetic diversity in the Major Histocompatibility Complex (MHC), a set of genes important for mammalian immune systems, differed between Aubrey Valley populations of Gunnison's prairie dogs and other prairie dog populations in Arizona (see attached). Since many Arizona populations of Gunnison's prairie dogs have experienced declines related to plague, and no declines had been documented in Aubrey Valley, managers had hypothesized the Aubrey Valley population carried some genetic-based resistance to this disease and were genetically differentiated from other populations.

NAU investigated two immune system genes (*MHC-DRB* and *CCR5*) and thirteen microsatellites

markers to compare genetic variation between Aubrey Valley prairie dogs and a neighboring population at Seligman, which last experienced a documented plague outbreak in 1996. MHC allelic diversity was moderate, with a total of four alleles that display sequence distances of 3-20%. In contrast, *CCR5* was identical in individuals from both populations. Neutral loci demonstrated moderate genetic differentiation between these neighboring populations ($F_{ST} = 0.065$) and the MHC locus demonstrated greater genetic differentiation ($F_{ST} = 0.169$). These findings provide evidence for genetic distinction between these two populations despite small geographic separation (<6km), and suggest the possibility of allele-specific resistance to plague. These results demonstrate the selection pressure of disease on wild populations and pave the way for more in-depth genetic investigations of plague resistance in the Gunnison's prairie dog, as

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 10 of 14

this is important for long-term conservation goals. It has been hypothesized that higher diversity at MHC loci, both in the form of greater sequence diversity and a higher number of heterozygotes vs. homozygotes, may be associated with an increased ability to fight infectious diseases like plague.

PRIVATE LANDOWNER INCENTIVE EFFORTS

A significant portion of the occupied prairie dog acreage in the U.S. is on private land where the Endangered Species Act (ESA) has less ability to influence land and species management, and where voluntary private landowner agreement is necessary for successful conservation on a landscape scale. Many private landowners are reluctant to partner to conserve a species if they believe they are risking ESA restrictions in the future. However, increasing occupied acreage and the level of active conservation on private land are necessary to meet acreage goals identified by the states in their management plans. Private landowners must be part of the solution, and that depends on their successful interaction with state wildlife agencies. We believe increased trust by private landowners and the greatest conservation success will be met by keeping PDs off of the Candidate species list and management remaining under state wildlife agency authority.

As part of their state management plans, numerous states (AZ, CO, KS, OK, MT, SD, NM, WY, and TX) have, or are evaluating, incentive programs for prairie dogs or grassland species emphasis using federal funds through the Landowner Incentive Program (LIP). However, appropriations for the LIP once again are not in Senate/House or President's budget, which will hinder progress in this area. However, in 2010, states still report landowners enrolled in some form of incentive program involving prairie dog conservation. These efforts affect a minimum of 2,530 acres in South Dakota and 16,811 acres in Oklahoma of BTPD. The Colorado Division of Wildlife is attempting to secure a perpetual conservation easement on the 15,156 acre in Moffat County, Colorado encompassing a large WTPD complex for potential ferret reintroduction.

CONTROL INFORMATION

Once again, one of the more controversial elements faced by the states this past year revolved around lethal control of prairie dogs. The EPA approved the use chlorophacinone (Rozol) in many of the prairie dog states despite protest by state agencies. The perceived advantage being that, unlike zinc phosphide (traditionally used), these two poisons do not require prebaiting.

While WAFWA recognizes and supports lethal control as one of many management tools for prairie dogs, we have concerns with anticoagulants and the potential impacts of secondary poisoning on other grassland dependant species. Mortality from secondary poisoning due to Rozol application in prairie dog towns has been documented in a badger collected in Kansas in 2006 and a bald eagle collected in Nebraska in 2007. Finding these two mortalities were by chance. Findings and verifying impacts to non-target species, which can travel long distances between the time of ingestion of the poison and death, is remote. It is likely many more non-

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
March 22, 2011
Page 11 of 14

targets than these two individuals documented have likely been impacted from control efforts using these two poisons. This concern was recently discussed in association with the Swift Fox Conservation Team and a briefing paper was prepared for the participating states to brief their Directors.

As WAFWA stated before it is our belief when the 1993 USFWS Biological Opinion was conducted on 16 vertebrate control agents including Rozol, Kaput, and zinc phosphide, Rozol and Kaput were not registered for prairie dog control at the time, and therefore, not reviewed for potential secondary impacts.

While lethal control using poison impacts local populations, wide-spread campaigns to eliminate the species no longer exist. States use poisoning as a means for control, not elimination. For example, South Dakota reports poisoning 30-40,000 acres a year from 2004-2006. Despite poisoning roughly 10% of their population, their overall statewide population expanded over 50% from 412,122 acres in 2003 to 625,410 acres in 2006.

STATE REGULATIONS

Many of the states have or have the ability to establish shooting dates or seasons for prairie dogs. However, in most cases, except Arizona, the closure only occurs on public lands or in association with black-footed ferret reintroduction sites. In most cases, shooting closures were put in place to allow pregnant females to whelp and raise their young to dispersal age. North Dakota did note an increase in nonresidential licenses in 2006 that allow for the shooting of prairie dogs and postulated the increase was possibly due to season closures in surrounding states.

In closing, the WAFWA grassland states remain committed to the multi-state conservation effort and sound management of prairie dogs and other grassland associated species, and their habitats. If you have any questions about information in this letter, please contact me or the appropriate states directly.

Sincerely,

Bill E. Van Pelt
WAFWA Grassland Coordinator

cc: WAFWA Prairie Ecosystem Directors
Pete Gober, USFWS
Dan Reinkensmeyer, USFWS

Mr. Michael Thabault
 Re: 2010 Prairie dog conservation efforts
 22 March 2011
 Page 12 of 14

**BLACK-TAILED PRAIRIE DOG STATUS
 31 DECEMBER 2010**

<u>State</u>	<u>Year of last survey</u>	<u>Minimum 10-year Objective Acres^c</u>	<u>Minimum 10-year Objective Acres^c</u>	<u>Acreage Objective in State Management Plan</u>	<u>Current Occupied Habitat</u>
AZ	2010	4,594	4,594	4,594 (Draft)	26
CO	2006-07	255,773	255,773	255,773	788,673
KS	2009	148,596	148,596	148,596	148,000
MT	2008	240,367	240,367	104,000 ^d	193,239
NE	2003	137,254	137,254	137,254 (Draft)	136,991
ND	2006	100,551	100,551	33,000 ^e	22,396
NM	2008	87,132 ^f	87,132 ^f	87,132 ^f	41,000 ^f
OK ^g	2002	68,657	68,657	68,657	42,000
SD	2008	199,472	199,472	166,958	339,114
TX	2010	293,129	293,129	293,129	43,539 ^h
WY	2009	158,170	158,170	158,170 (Draft)	229,607
Total		1,693,695	1,693,695	1,457,263	1,984,585

^a Refers to total potential habitat encompassed within the range (Hall 1981), not occupied habitat.

^b Gross habitat = (total acreage of primary range x 1%) + (total acres of peripheral range x .1%)

^c Suitable habitat = gross habitat minus habitat with >10% slope, or other unsuitability factors

Acres of suitable habitat = Minimum 10-year objective.

^d The acreage objective in the State of Montana's 2001 Management Plan is 90,000-104,000 acres for non-tribal lands. The state's acreage objective will be subject to modification in response to a financial incentives program for landowners if an incentives

Mr. Michael Thabault

Re: 2010 Prairie dog conservation efforts

March 22, 2011

Page 13 of 14

program is funded. Separate objectives will be set by individual Native American tribes. The current occupied range is based upon a partial survey effort of the southeastern portion of the state.

^e The current acreage objective listed in the North Dakota Management Plan is 33,000 acres, including non-tribal and tribal lands. The state of North Dakota and the Standing Rock Indian Reservation will determine the target acreage for each jurisdiction. The state is willing to consider an objective of 100,551 acres on non-tribal lands if a financial incentives program for private landowners is funded. Tribal lands will have separate acreage objectives.

^f The New Mexico acreage objective is based on a percent increase per year, which would take approximately 10 years to achieve the current acreage objective. If future statewide survey efforts indicate a different acreage than the estimated minimum current acreage listed, the rate for achievement of the 10-year objective may be adjusted accordingly.

^g Oklahoma estimate is based upon 2003 DOQQs.

^h Texas information is not a range wide survey but its 12 focal areas. In 2005 this area equaled 47,821 acres.

Note: Neither the current habitat estimate nor the state objectives include Native American lands in Montana and South Dakota.

Mr. Michael Thabault
Re: 2010 Prairie dog conservation efforts
22 March 2011
Page 14 of 14

Figure 1. Best available estimate of black-tailed prairie dog occupied acreage in the U.S. in 1961 (U.S. Fish and Wildlife Service), 2000 (U.S. Fish and Wildlife Service 2000), and 2004 (Prairie Dog Conservation Team).

