PRAIRIE DOG CONSERVATION TEAM

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

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June 20, 2008

Pete Gober
U.S. Fish and Wildlife Service
Ecological Services Field Office
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Dear Mr. Gober,

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. As mentioned last year, this MOU replaces the MOU for Black-tailed prairie dog (BTPD) conservation and is WAFWA's vehicle for beginning the transition toward an ecosystem management approach (i.e. prairie) in the Western Great Plains. This letter summarizes prairie dog conservation activities for calendar year 2007 and early 2008.

BLACK-TAILED PRAIRIE DOGS

POPULATION MONITORING UPDATE

In February 2003, the PDCT published an 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). The goal of the CAS, MSCP, and the associated state management plans is to remove enough threats to the BTPD that long-term conservation of the species will be assured through state management. 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.

I am pleased to report the states have met, or exceeded the first three objectives of the MSCP and are currently working on the distributional goals identified in the plan. The current acreage estimate for black-tailed prairie dogs stands at 1,935,257 acres. In 2005-06, the states of WY, ND, NM, TX, conducted or evaluated information from statewide surveys or DOQQs from past years. The states of CO and SD completed surveys in 2007. Nebraska, OK and MT intend to conduct surveys in 2008. Kansas surveyed approximately ¼ of the range in 2006, using several different techniques. Analysis of this effort and one new technique is ongoing and is intended to identify a suitable statewide monitoring technique. A complete survey of the range will follow completion of the analysis. Arizona completed its 12 step re-establishment process and is currently planning on reintroducing black-tailed prairie dogs in calendar year 2008.

In addition, BTPD exist in Canada and Mexico. Saskatchewan BTPD colony perimeters are mapped with GPS every 2 years. The area extent has stabilized over the last 6 years at 23 colonies totaling approximately 2470 acres. Mexico, despite having intense drought conditions over the last 10 years, still has one of the largest complexes of black-tailed prairie dog towns in North America. A total of 91 prairie dog towns ranging in size from 5 to 15,525 acres are found within the complex, covering a surface of 36,561 acres. In 2006, BTPDs in Mexico appeared to be stable and the species continues to be widespread across its range. On September 25, 2006 the announcement of the intention to create a Biosphere reserve in Janos was published in the Mexican Federal Registry and the two species of prairie dogs were selected to have a specific PACE (Conservation Species Action Plan) completed in 2008.

It should be noted that even though the survey methods used by the state wildlife agencies between 1999 and 2007 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 2007 does not represent a true measurement of trend, but reflects better and more intense survey methods, the more recent trend (2002-2007) for the species appears to be upward. 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 the current estimate of 625,410 acres. As a result of this trend information, a negative finding on the August

2007 black-tailed prairie dog petition would be the most appropriate determination. 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 2007.

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 have implemented this monitoring strategy in 2007. However, at this time, Utah and Colorado are the only states that have data to report during this comment period. Arizona and New Mexico are conducting further surveys to refine their estimates.

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

In Utah, observed occupancy for the original 124 plots was 14.5% (see attached). 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%. While these occupancy levels were within the range computed for Colorado, this is the first year Utah, and a range wide population trend cannot be determined this year using this method.

In Arizona, in association with their black-footed ferret reintroduction effort, the Aubrey Valley GPD Complex (AVC) was mapped using a density mapping method. In 2007, it was estimated the occupied acreage for the AVC is 47,785 acres. This is an approximate 14% increase from the 2005 estimate, which is similar to the percentage of increase reported by Colorado using the Occupancy Model methodology during the same timeframe.

WHITE-TAILED PRAIRIE DOGS

For 2008, Colorado and Utah are gearing up for the Occupancy Monitoring, as agreed to by the WAFWA Prairie Dog Conservation Team (PDCT). Results will be available in the fall of 2008, and at least for CO, a comparison can be done with 2004 data. Wyoming is conducting surveys as well in

2008 but has opted for a method that will allow them to not only determine occupancy rates but also map the towns as well. Wyoming has assured the PDCT that the data will be comparable to the occupancy modeling and used for an assessment across the range. Current known acreage of white-tailed prairie dogs in Montana is 102.5 ha (253 acres) across 10 colonies. In 2007, translocation of animals within the state was initiated for white-tailed prairie dogs at risk of poisoning or extirpation due to highway construction. Translocation of white-tailed prairie dogs from Wyoming, which are intended to augment Montana's population, will commence in 2009 and are planned through 2010.

Intensive monitoring of active prairie dog burrows associated with black-footed ferret (BFF) program continues within the range of WTPD. In 2007, CO continued monitoring the Wolf Creek Management Area (WCMA) and Utah continued monitoring northeastern Utah. Population attributes of the WCMA and northeastern Utah are measured using the methodology described by Biggins et al. (1993). The burrow density transects were completed in June and July, 2007, on 18,197 acres of white-tailed prairie dog colonies in the WCMA. For Utah, currently 134,450 acres of active colonies have been mapped of which 49,043 acres are located within the ferret management area.

It is because of this pending data collection and analysis, WAFWA would like to request an extension on the comment period for the WTPD status review until October 31, 2009. We believe closing the comment period in July 2008 is premature and will exclude possibly 2 years worth of population information for the species that could significantly contribute to the status review. Forcing the states to comment right now is a waste of time and money, especially if the intention is to open the comment period at a later date to allow additional information. The Service needs to be proactive now and extend the comment period so people are not pulled from the field to comment on this interim commenting period.

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 appear to be local, or impacting only about 50% of a complex and widespread die-off for any species was not documented in 2007. 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.

For example, to proactively manage for plague in Conata Basin, South Dakota a prophylactic effort was conducted in September and October 2006 in association with black-footed ferret recovery efforts. Approximately 1,600 acres (647 ha) were dusted by applying Delta Dust (deltamethrin) to all prairie dog burrows in selected towns. Selected prairie dog towns dusted in 2006 also were treated in 2005. Agencies and organizations involved included the USFWS, U. S.

Forest Service, National Park Service and Prairie Wildlife Research. In 2007, similar efforts were conducted, which may prove being very insightful.

In January of 2008, a plague outbreak in a black-tailed prairie dog colony in Dewey County, South Dakota was confirmed. The Dewey County outbreak is approximately 30 miles from the Cheyenne River Indian Reservation a black-footed ferret reintroduction site. Then in May 2008, a plague outbreak was confirmed in another ferret reintroduction site, Conata Basin, Pennington County, South Dakota. The impacted area continues to expand currently affecting approximately 8,000 acres and is currently being monitored by managers.

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 and access to the vaccines has been difficult. In addition to the vaccine is the test for plague detection. WAFWA is supportive in these efforts and will contribute in to the extent possible.

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 2007, four states report 33 landowners (2 in SD, 25 in OK, 5 in TX, and 1 in WY) enrolled in some form of incentive program involving prairie dog conservation. These efforts affect a minimum of 22,448 acres of occupied and unoccupied habitat. In the case of TX and OK, these two states have respectively conserved 5-6% of their known occupied acres through incentive programs.

CONTROL INFORMATION

Once again, one of the more controversial elements faced by the states this past year revolved around lethal control of prairie dogs using two chemicals, chlorophacinone (Rozol) and diphacinone (Kaput). Since our 2007 letter it has been learned by WAFWA these chemicals have been approved via FIFRA Special Local Needs permits for poisoning prairie dogs in CO, KS, NE, OK, TX, and WY. 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 these two chemicals 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-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.

We bring this issue to your attention, because 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. This summer WAFWA will consider putting additional pressure on EPA to reinitiate consultation regarding the new uses now allowed for Rozol and Kaput. Until these concerns are addressed, if prairie dog control is necessary, the use zinc phosphide should be supported, rather than anticoagulants.

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 to 625,410 acres. Once again this information supports a negative finding for the August 2007 to list the black-tailed prairie dog under the Endangered Species Act.

STATE REGULATIONS

Many of the states have established shooting dates for prairie dogs. However, in most cases, except Arizona, the closure only occurs on public lands. 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 (data from 2007 not available yet)

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 and cooperators
Larry Crist, USFWS

BLACK-TAILED PRAIRIE DOG STATUS
11 JUNE 2007

State	Historic Habitat[a]	Gross Habitat[b]	Minimum 10-year Objective Acres[c]	Acreage Objective in State Management Plan	Current Occupied Habitat
AZ	7,047,137	7,047	4,594	4,594 (Draft)	0
CO	27,352,880	273,529	255,773	255,773	788,674
KS	35,835,079	150,714	148,596	148,596	130,521
MT	60,442,757	297,286	240,367	104,000[d]	90,000
NE	36,035,433	146,741	137,254	137,254 (Draft)	136,991
ND	11,045,269	110,453	100,551	33,000[e]	22,396
NM	39,021,449	96,661	87,132[f]	87,132[f]	43,639 [f]
OK[g]	21,606,120	70,868	68,657	68,657	57,677
SD	29,262,553	218,121	199,472	166,958	303,237
TX	78,592,452	310,945	293,129	293,129	132,515 [h]
WY	22,067,599	179,072	158,170	158,170 (Draft)	229,607
Total	368,308,727	1,861,463	1,693,695	1,457,263	1,935,257

[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 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 derived from 2005 imagery and from data collected from 7 of 12 focal areas.

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

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).