SOUTH DAKOTA BLACK-TAILED PRAIRIE DOG CONSERVATION AND MANAGEMENT PLAN



FINAL DRAFT – February, 2005

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EXECUTIVE SUMMARY

The State of South Dakota has been participating in interstate prairie dog discussions and planning efforts since late 1998 in a coordinated attempt to avoid any present or future need for threatened species listing under the authority of the federal Endangered Species Act and thereby protect property rights. The overriding general goals of the state planning effort have been to maintain state authority for the black-tailed prairie dog by demonstrating a meaningful, long-term commitment to its conservation needs, to lessen potential negative impacts to private landowners, and to minimize the impact on species dependent on the black-tailed prairie dog in South Dakota.

Two Prairie Dog Working Groups assisted the South Dakota Departments of Agriculture and Game, Fish and Parks in the controversial but critical task of drafting a state management plan. A draft plan was released for public comment on November 5, 2001 for a 30-day comment period. The comment period was extended for an additional two weeks and closed on December 21, 2001. A total of 157 written comments and 19 petitions were received.

Following input from the 2nd advisory group an additional public comment period was held from May 25 through June 25, 2004. A total of 180 letters or emails were received and considered by the Secretaries of Agriculture and Game, Fish and Parks. Significant changes resulting from this comment period included the elimination of discussions about wildlife species dependent on the prairie dog ecosystem and the elimination of strategies to increase and evaluate public awareness about the prairie dog ecosystem. A significant commitment to protect landowners from undesired encroachment of prairie dogs on private land has also been incorporated into this plan.

<u>Plan goal</u>

The primary goal of the South Dakota Black-tailed Prairie Dog Management Plan is to manage for long-term, self-sustaining prairie dog populations in South Dakota while avoiding negative impacts to landowners that do not wish to accommodate prairie dogs on their properties. An associated effect of the Plan is the increased long-term viability of species closely dependent on the prairie dog ecosystem.

Plan objectives

- Objective 1: Determine a statewide population goal and identify special management areas.
- Objective 2. Determine an effective tool to monitor changes in estimated occupied acreage.
- Objective 3. Develop a disease monitoring protocol for detecting sylvatic plague and other diseases detectable on prairie dog colonies, to include a contingency plan in case sylvatic plague is detected in South Dakota.

Objective 4. Determine and accommodate conservation needs of black-footed ferrets. Objective 5. Use public involvement techniques to gather input.

Objective 6. Use adaptive management method to evaluate progress of prairie dog planning effort and adjust as needed to accomplish program goals.

Objective 7. Identify and implement management actions that provide environmentally sound habitat for a sustainable population of healthy prairie dogs acceptable to landowners and managers in the state of South Dakota.

I. Introduction

I-A. Background events:

On July 31, 1998 the National Wildlife Federation (Federation) submitted a "Petition for Rule Listing the Black-tailed Prairie Dog (*Cynomys ludovicianus*) as Threatened Throughout its Range." The petitioner further asked the Secretary of Interior to use emergency powers to list the species, because of the fear that poisoning of prairie dog colonies would increase because of the threat of federal listing. The Biodiversity Legal Foundation and Predator Project (now known as the Predator Conservation Alliance) submitted a second petition, which the U. S. Fish and Wildlife Service treated as supplemental to that of the Federation. The U.S. Fish and Wildlife Service (Service) denied the emergency listing request of the Federation.

On March 2, 1999 the Service published a positive 90-Day Finding on the Federation's petition (U. S. Fish and Wildlife Service 1999). The Service concluded that the petition presented sufficient information to indicate that federal listing may be warranted. Following publication of the finding, the Service began a status review for the black-tailed prairie dog to gather information needed to determine whether federal listing was warranted. This status review included published requests for information and specific requests of state, federal, and tribal wildlife entities for information to assist the Service in its decision making.

On February 4, 2000 the Service published a positive 12-Month Finding on the Federation's petition (U. S. Fish and Wildlife Service 2000). The Service announced that listing of the black-tailed prairie dog was warranted but precluded by higher listing priorities, an action that designated this species as a federal candidate species for listing. The Service's action was based on their interpretation of the significance of threats, including sylvatic plague, inadequate regulatory mechanisms, and general population declines since 1980. The Service assigned a listing priority of 8, based on a moderate overall magnitude of threats and an imminent overall immediacy of threats.

In response to the threat of removal of state authority for the black-tailed prairie dog, state wildlife and agriculture agencies began coordination activities following receipt of the Federation's petition in 1998. South Dakota began its participation in multi-state activities in November 1998 with a meeting with representatives from the state wildlife and agriculture departments in Wyoming and Montana. The primary focuses were to discuss current prairie dog legal and population statuses and to develop strategies to avoid federal listing of the species.

This multi-state, multi-agency cooperative effort expanded in 1999 with a meeting in Colorado to discuss rangewide conservation planning for the black-tailed prairie dog. States included Montana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Arizona, New Mexico, Colorado, and Wyoming. Meeting participants committed themselves to the development of a conservation agreement to "manage, maintain, and enhance habitat and populations of black-tailed prairie dogs across its historic range

and reduce the number of threats impacting their viability through the cooperation of private, tribal, federal, and state landowners." (Van Pelt 1999).

"The Black-tailed Prairie Dog Conservation Assessment and Strategy" (Van Pelt 1999) summarizes the current status of the species and includes goals, objectives, and strategies designed to provide for long-term viability and, as a result of commitment to completion of these activities, avoid the need for federal listing. The conservation strategy portion of the document includes a tiered approach with opportunities for involvement of states, federal agencies, tribes, and private entities. The South Dakota Department of Game, Fish and Parks (SDGFP) and the South Dakota Department of Agriculture have participated in development of the conservation assessment and strategy document and will integrate its prairie dog management activities with this national planning effort as closely as possible while maintaining state responsibilities to protect private property rights.

An additional document built on the Conservation Assessment and Strategy document's foundation by listing specific actions to be taken by the participating state wildlife agencies and other interested entities. "A Multi-State Conservation Plan for the Black-tailed Prairie Dog, *Cynomys ludovicianus,* in the United States" (Luce 2003) listed the following goal: "The goal of the CA&S, the MSCP, and eleven state management plans is to remove enough threats to the black-tailed prairie dog that long-term conservation of the species is assured." Purposes of the MSCP include actions proposed by the Conservation Team to provide long-term conservation for the species to preclude the need for federal listing and to establish a standard for umbrella Candidate Conservation Agreement with Assurances (CCAAs) between the USFWS and states interested in participating in this voluntary approach. The general multistate approach to black-tailed prairie dog management was presented at the North American Wildlife and Natural Resources Conference in 2001 (Luce et al. 2001).

On August 18, 2004 the Service announced that an updated evaluation of the best available scientific information has determined that the black-tailed prairie dog is not likely to become an endangered species within the foreseeable future and no longer meets the Endangered Species Act definition of threatened. New information shows that the species is more able to persist over time in light of ongoing impacts. The announcement also noted that during the past few years some state and tribes made substantial progress in initiating management efforts for the black-tailed prairie dog, including completing surveys to provide more accurate estimates of occupied habitat. Additional activities included drafting management plans, enacting laws that change the status of the species from pest to a designation that recognizes the need for special management, establishing regulations that allow for better management of recreational shooting and setting future goals for occupied habitat that will address population management needs for disease and other threats (U.S. Fish and Wildlife Service 2004).

I-B. Management plan scope and goals:

The scope of South Dakota's prairie dog management plan is limited by land ownership and prairie dog distribution patterns in the state. Approximately 20% of South Dakota's 46,873,315 acres are in federal, state, or tribal trust ownership (Table 1). The State of South Dakota recognizes tribal sovereignty and the respective directives of federal land management agencies. In light of the state's land ownership and prairie dog distribution patterns, the State of South Dakota is interested in working cooperatively with interested land managers, whether private, federal, tribal, or state entities.

The primary goal of the South Dakota Black-tailed Prairie Dog Management Plan is to manage for long-term, self-sustaining prairie dog populations in South Dakota while avoiding negative impacts to landowners that do not wish to accommodate prairie dogs on their properties.

Table 1. Land acreages by ownership categories in South Dakota (Source: Smith 2001, unless otherwise noted)

| Ownership | statewide acres | % of statewide |
|---|-----------------|----------------|
| | | total |
| private land | 36,875,256 | 78.7% |
| U.S. Forest Service | 2,019,258 | |
| national grasslands (866,902) | | |
| national wildlife preserves (27,038) | | |
| national forests (1,125,318) | | |
| U.S. Army Corps of Engineers ¹ | 138,446 | |
| U.S. Bureau of Land Management | 266,278 | |
| U.S. Fish and Wildlife Service | 194,855 | |
| waterfowl production areas (148,142) | | |
| national wildlife refuges (46,713) | | |
| National Park Service ² | 248,217 | |
| U.S. Bureau of Reclamation ³ | 34,185 | |
| Federal lands subtotal | 2,901,239 | 6.2% |
| Tribal trust lands⁴ | 5,202,811 | 11.1% |
| S.D. Office of School and Public Lands ⁵ | 807,000 | |
| SDGFP ⁶ | 285,622 | |
| game production areas and water access | | |
| areas (185,670) | | |
| Division of Parks and Recreation and | | |
| Custer State Park (99,952) | | |
| Other state lands | 373,282 | |
| State lands subtotal | 1,465,904 | 3.1% |
| water | 428,105 | 0.9% |
| TOTAL (based on the identified sources) | 46,873,315 | |

¹Source: Eric Morrison, U.S. Army Corps of Engineers; acreage reflects Corps-owned land above normal pool lines on Missouri River reservoirs

²Does not include South Unit of Badlands National Park (133,000 acres), which lies within Pine Ridge Indian Reservation and is managed cooperatively by Oglala Sioux Tribe and Badlands National Park.

³Source: Faye Streier, Bureau of Reclamation, Rapid City

⁴Source: Bureau of Indian Affairs, Aberdeen, SD; includes North Dakota portion of Standing Rock Reservation.

⁵Source: SD Office of School and Public Lands, Pierre

⁶Source: Paul Coughlin, SDGFP, Pierre

II. Historical Background

II-A. South Dakota historical prairie dog acreage:

Estimated historical prairie dog acreage has been compared to current estimated acreage in supporting conclusions that the black-tailed prairie dog presently occupies only a small fraction of its former range in South Dakota (USFWS 1999, USFWS 2000). The historical range of the black-tailed prairie dog is often represented in a format similar to the distribution map found in Hall (1981), although this portrayal was apparently derived from connecting the outermost collection sites for the species. In fulfilling a portion of its commitments under the Endangered Species Act, the U.S. Fish and Wildlife Service (Service) is required to base its decisions on the best available information. The Service's approach to describing historical occupied habitat was to apply a uniform standard across the range, arriving at a conclusion that, at a given time, approximately 20% of potential habitat was inhabited by prairie dogs (P. Gober, pers. comm.) In its 12-Month Finding for a Petition to List the Black-tailed Prairie Dog as Threatened, the Service reported historical estimates for South Dakota as ranging from 33,000 acres to 1,757,000 acres (USFWS 2000).

No statewide prairie dog inventory had been conducted in South Dakota prior to a recent transect survey coordinated by SDGFP, completed in 2004. See Section V-A, Objective 1 for a description of the methodology and results of this survey.

II-B. Statewide prairie dog control efforts:

Several entities have had statewide influence or authority for prairie dog control in South Dakota. Federal prairie dog control or technical assistance has been provided by the Bureau of Biological Survey, U.S. Department of Agriculture (USDA); the U.S. Fish and Wildlife (USFWS), U.S Department of Interior; and the Animal and Plant Health Inspection Service (APHIS) – Wildlife Services, USDA. The Bureau of Biological Survey was transferred from the U.S. Department of Agriculture to the U.S. Department of Interior in 1940 to become the USFWS. The USFWS delegated its animal damage control authority in South Dakota to the SDGFP in 1974 under a Grant-in-Aid Agreement. In 1985, federal animal damage management responsibilities were transferred from the U.S. Fish and Wildlife Service to the U.S. Department of Agriculture, under a program called Animal Damage Control, which was eventually renamed Wildlife Services.

The SDGFP and the South Dakota Department of Agriculture (SDDA) have provided statewide prairie dog control or technical assistance, in cooperation with state or county weed and pest control entities. In addition, various public, tribal, and private landowners have conducted prairie dog control for many years.

Hansen (1988) presented a summary of historical events related to prairie dog control in South Dakota. According to Hansen, a rodent control law was passed by the South Dakota legislature in 1919. Nearly 400,000 acres were treated in 1920 in nine counties

west of the Missouri River. By 1930, prairie dogs were reduced to small, scattered colonies. Hansen also stated that acreage increased during the drought years of the 1930s, and federal emergency work programs focused on prairie dog control and reduced prairie dogs to possibly the lowest levels in recent history. Hansen estimated that 20,000-50,000 acres were treated annually from the 1940s to the mid-1950s. In 1972, President Nixon's Executive Order 11643 prohibited toxicant use on federal lands or with federal funds, halting affected prairie dog control through 1975. Beginning in 1976, zinc phosphide became the standard prairie dog control tool. From 1980-1984, nearly 1 million acres were baited for subsequent control in the state, including 464,000 acres on the Pine Ridge Indian Reservation. During 1985-1986, 329,000 acres were baited, including 240,000 acres on Pine Ridge Indian Reservation, with control work on Pine Ridge costing an estimated \$7.88 per acre. Hansen concluded that, during the period 1920-1980, South Dakota's prairie dog population appeared to peak approximately every 15 years. APHIS-Wildlife Services has not conducted direct prairie dog control in South Dakota since the mid-1980s (T. Pugh, pers. comm.).

SDGFP has two main roles in prairie dog control in South Dakota (Appendix 1). SDGFP provides direct control of prairie dogs that have moved from adjacent public lands onto private lands, as per SDCL 34A-8-7. SDGFP current policy is to provide one-time direct control at no initial cost to the landowners with prairie dogs that have moved from adjacent, previously uncontrolled public lands. Upon completion of control on both private and public lands, the landowner assumes maintenance responsibility for prairie dog control.

SDGFP also provides technical assistance to landowners for control of colonies 160 acres or larger. SDGFP field personnel provide equipment and time to supervise prebaiting and bait application. Landowners are responsible for the cost of bait material, for applying the bait, and for follow-up treatment and continued maintenance. During the years 2000-2003, SDGFP provided direct control of 180 acres and technical assistance for prairie dog control on a total of 240 acres. All SDGFP-related control occurred in 2000 (A. Smith, pers. comm.) until the 2004 prairie dog control activities.

Following designation of the black-tailed prairie dog as a federal candidate species, the U.S. Forest Service and Bureau of Land Management modified policies for prairie dog control on their lands, except for limited situations. However, in February 2004, the Forest Service lifted a moratorium on prairie dog control on national grasslands in South Dakota, North Dakota, Wyoming, and Nebraska, since prairie dog control issues had been incorporated into Forest Plans. A July 31, 2002 Record of Decision for the Nebraska Forest Land and Resource Management Plan stated that the Forest Service would work cooperatively with the state of South Dakota to implement prairie dog management plans to the extent allowable by law and policy. On May 5, 2004, USDA Deputy Under Secretary David Tenney directed Forest Service personnel to work with state and county officials and landowners to implement the spirit of a good neighbor policy; specifically to use a full suite of management tools to reduce potential for prairie dog expansion from federal onto adjacent nonfederal lands. On May 11, 2004, Regional Forester Rick Cables outlined actions to be taken in Forest Service Region 2

regarding unwanted prairie dog colonization of adjacent nonfederal lands by applying appropriate management tools and consulting state prairie dog management plans for guidance. The Forest Service will implement measures in the South Dakota plan to the extent allowable and with appropriate coordination and consultation (June 25, 2004 letter from Don Bright, Nebraska National Forest).

III. Current Situation

III-A. Relevant state statutes and administrative rules:

This section is not inclusive of every statute or rule dealing with prairie dogs in South Dakota's state laws and administrative rules. The most relevant statutes and rules are described.

The black-tailed prairie dog has state designations under several legal authorities. The species is a game species and a predator/varmint species, regulated by the SDGFP (South Dakota Codified Laws {SDCL} 41-1-1.21). Among other relevant statutes are SDCL 34A-8-7, which states that "The Secretary of Agriculture and the Secretary of Game, Fish and Parks shall establish programs, with legislative approval and may enter into cooperative agreements with federal and state agencies or with private persons as deemed necessary for the management of nongame, endangered or threatened species. The secretaries shall establish and conduct control programs at state expense on private lands that are encroached upon by prairie dogs from contiguous public lands."

SDCL 40-36-1 states that: "The Department of Game, Fish and Parks shall cooperate and enter into cooperative agreements with the United States Fish and Wildlife Service or any other agency in the control and disposition of coyotes, feral dogs, fox, prairie dogs, and other wild animals in this state that are injurious to livestock, poultry, game, land, and the public health." SDCL 40-36.3 states that "The Department of Agriculture may enter into cooperative agreements with other governmental agencies, counties, associations, corporation or individuals if such cooperation is necessary to promote the control and disposition of animals pursuant to § 40-36-1." SDCL 40-36.3.1 states that "The Secretary of Game, Fish and Parks shall establish a program to continue prairie dog control on private lands at the written request and with the cooperation of the participating landowner. The program is to be funded from revenues in the state animal damage control fund."

SDCL 41-11-15 refers to the reintroduction of the black-footed ferret: The Department of Game, Fish and Parks and the Department of Agriculture may participate in programs to reintroduce the black-footed ferret if the following conditions are being met:

(1) Areas containing prairie dogs but not having the potential to support black-footed ferrets shall be identified, evaluated and declared ferret-free;

(2) The existing United States Forest Service Prairie Dog Management Plan for the Conata Basin, Buffalo Gap National Grasslands shall be strictly adhered to, and if

future increases in prairie dog acres are needed, a funding mechanism shall be established to provide financial compensation to landowners suffering lost income; (3) No additional land may be acquired for ferrets through condemnation, and the multiple use concept of the United States Forest Service shall be continued; (4) The initial ferret reintroduction efforts shall be concentrated within the boundaries of Badlands National Park, and once release techniques are refined, the prairie dog management plan on the Buffalo Gap National Grasslands is functioning and local citizens have had the opportunity to view the progress, then reintroduction efforts may be expanded to the grasslands; and

(5) The United States Fish and Wildlife Service shall attempt to provide for the continued meeting on a regular basis during and after the ferret reintroduction of the local level committee consisting of representatives of the United States Forest Service, Pine Ridge Indian Reservation, United States National Park Service, United States Fish and Wildlife Service, affected state agencies, private organizations and local landowners.

The South Dakota Departments of Agriculture and Game, Fish and Parks worked with the U.S. Fish and Wildlife Service in developing "An Evaluation of the Block Clearance Process in South Dakota." This process was followed and submitted to the U.S. Fish and Wildlife Service's Region 6 Director for review and comment. As a result of Regional Director Ralph Morgenweck's approval of this process, black-footed ferret surveys are no longer required in South Dakota when using prairie dog control pesticides in compliance with label restrictions. Regional Director Morgenweck further stated that the South Dakota model would be distributed to USFWS offices in Regions 2 and 6 to assist in similar block clearance evaluations in other states (May 16, 2003 letter from Ralph Morgenweck to SDGFP Secretary John Cooper).

Senate Bill 64, passed during the 2001 session of the South Dakota Legislature, created a new "species of management concern" category. The black-tailed prairie dog has been placed in this category, an action that removed the species from the state list of declared pests.

The South Dakota Prairie Dog Working Group addressed the federal listing criteria identified in the 12-Month Finding of overutilization for commercial, recreation, scientific, or educational purposes (ex: prairie dog shooting) and inadequacy of existing regulatory mechanisms (ex: prairie dog control) by discussing alternatives to unregulated prairie dog shooting and statewide animal pest designation. The South Dakota Department of Game, Fish and Parks' Commission passed a regulation on January 11, 2001 to establish a regulated prairie dog shooting season (Appendix 2). In November of 2004 and in cooperation with the US Forest Service, the GFP Commission removed the shooting closure from the Conata Basin. The US Forest service will deal with the issue of prairie dog shooting in this area as they develop an Environmental Impact Statement for future prairie dog management.

The second action item resulting from Working Group recommendations was a bill to create a new category (species of management concern) for wildlife species with both

negative and positive aspects associated with their presence on private lands (Appendices 3-5). The species of management concern bill became SDCL 34A-8A (Appendix 6), which was amended during the 2002 South Dakota legislative session to address the state prairie dog planning effort.

III-B. Description of current prairie dog management plans and inventory efforts:

The following text contains prairie dog acreage estimates by agency, based on information received by SDGFP. Note that SDGFP's results may differ from the estimates provided by the following agencies because of different survey times or techniques.

1. South Dakota Department of Game, Fish and Parks

SDGFP Division of Wildlife Game Production Areas currently support a few, small, scattered prairie dog colonies, although total acreage is minimal. Because of the relatively low prevalence of livestock grazing on Division of Wildlife Game Production Areas, these lands are not likely to provide extensive prairie dog habitat (P. Coughlin, pers. comm.).

SDGFP contracted with the U.S. Forest Service to gather baseline data on prairie dog town locations and estimated acreages. This work was begun in March 2002 and concluded in May 2004. See Section V-A, Objective 1 for discussion of the survey methodology and results.

2. South Dakota Office of School and Public Lands

Update provided by A. Canham, consultant for the Office:

"The Black Tailed Prairie Dog Project was initiated during the 2000 summer season. Up until that time the Black Tailed Prairie Dog has received little management perspective in South Dakota. This project's goal is to provide a database of information for management decision making through mapping known dog towns on public and adjacent private lands, while creating support for proper management procedures.

"South Dakota School and Public Lands personnel and contracting agents met with officials from South Dakota Game Fish and Parks, Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife and lessees of state lands to gather input to develop criteria for data collection that was consistent with the other agencies. Pertinent information was used to develop the data dictionary of inhabited and uninhabited towns.

"GPS techniques were widely used both on the ground and by air. The South Dakota Game Fish and Parks provided a preliminary aerial survey to focus in on areas for ground truthing. Once these areas were identified the groundwork began. The finished product will be available for comparisons with remote sensing. "Identifying and map access to occupied towns was done utilizing available maps and work in the field. With the help of South Dakota Game Fish and Parks and Bureau of Land Management, we were able to develop and utilize a process to score vegetation and habitat quality.

"Information has been collected and the project will continue collecting information. So far information has been used for land transfers, wildlife habitat improvement, and grazing rates. With more information added to the database every year this project will prove to be an invaluable tool in the management of state owned lands.

"Through collaboration with US Forest Service and Buffalo Gap National Grassland, we learned that the process of mapping public land areas adjacent to Black Footed Ferret recovery sites has already been completed and is available. We received this information from them.

"We would like to thank the National Fish and Wildlife Foundation. This project was started by the funding from NFWF but will be a long-term project and is expected to continue for at least ten years so that the information gathered can be used in developing a long term management plan. This project will continue in 2004."

3. Bureau of Land Management

Bureau of Land Management (BLM) administered lands in South Dakota occupy approximately 275,000 acres and presently have an estimated 1500 acres of prairie dogs, based on field surveys using GPS equipment. BLM is presently conducting a prairie dog mapping projects with upland assessments. Also waiting for the aerial census data to find all town locations. These mapping projects will provide BLM with prairie dog distribution data for Harding and Butte counties as well as the other eleven counties we administer public lands. A management concern for South Dakota BLM lands supporting prairie dogs is the potential for conflicts with adjoining private landowners, due to the fractured land ownership patterns. Specific future prairie dog acreage goals have not been established for lands owned by BLM in South Dakota (C. Berdan, pers. comm.).

4. Badlands National Park

Badlands National Park occupies 107,000 acres within the North Unit and 133,000 acres within the South Unit. The South Unit is contained within the boundaries of Pine Ridge Indian Reservation and is managed cooperatively by Badlands National Park and the Oglala Sioux Tribe. Badlands National Park currently has 3,656 acres of prairie dogs in the North Unit, and 1,972 acres of prairie dogs in the South Unit, based on GPS mapping conducted during the spring of 2003, producing an estimated total of 5,628 acres within the North and South Units of Badlands National Park (D. Albertson, pers. comm.). Badlands National Park does not currently have a specific prairie dog management plan (D. Albertson, pers. comm.).

Prairie dog inventories have been conducted with GPS mapping following the active burrow line and the vegetation clip line. Prairie dog density estimates are derived from two published techniques, Biggins et al. (1993) for burrow line transects and Severson and Plumb's (1998) visual count model. Badlands National Park's prairie dog management direction allows for natural population expansion or contraction within the park's interior, with a prairie dog objective of 4,000-5,000 acres. Prairie dogs have been live-trapped for use as food for black-footed ferrets on park boundaries adjacent to private lands. Future resolution of this potential conflict will involve live-trapping and translocation to the park's interior. Current prairie dog research activities include the efficacy of trapping and translocation to control migration onto adjoining private lands, ungulate-prairie dog-plant interactions in Badlands National Park, and the study of dispersal rates and distances of individual prairie dogs from coteries in relation to disease events (D. Albertson, pers. comm.).

5. Wind Cave National Park

Wind Cave National Park occupies 28,295 acres, with an estimated current prairie dog acreage of 1,800 acres and a tentative prairie dog acreage goal of 1,500-2,000 acres (B. Muenchau, pers. comm). Previous prairie dog acre estimates include 1,580 acres in 2000 based on GPS mapping, and 1,296 acres in 1995 based on photointerpretation of infrared photography. GPS mapping of all park prairie dog colonies is nearing completion for 2004, based on vegetation clip lines and presence of active prairie dog burrows. Wind Cave's most recent Prairie Dog Management Plan (WICA-N-0001) is outdated, and the Park has recently received funding to complete a new Prairie Dog Management Plan and Environmental Assessment in 2004/2005. This Plan will incorporate the concept of expansion of prairie dogs within the interior of Wind Cave.

Dr. Mike Antolin and Lisa Savage of Colorado State University have recently completed a research project on "The Effects of Fragmentation on the Population Genetics of Black-tailed Prairie Dogs." The final report is pending. Primary research objectives include delineation of the relationship between the factors of genetic variability, degree of isolation of a given colony, colony size, and extinction risk in prairie dog metapopulations. Antolin examined prairie dog populations in fragmented vs. unfragmented colonies in plague-free and plague-affected areas and included study sites at Wind Cave National Park, an additional South Dakota area, and two areas in Colorado (B. Muenchau, pers. comm.).

A second research project is being conducted by Dr. Jack Cully, Kansas Cooperative Fish and Wildlife Research Unit. The topic is a study of the community and landscape dynamics of sylvatic plague in black-tailed prairie dogs, with the following objective: Develop a more complete understanding of the ecology of plague in the black-tailed prairie dog ecosystem and the long-term consequences for prairie dog conservation. Wind Cave National Park is one of three areas, with no history of plague, being studied and compared to areas where plague is present (B. Muenchau, pers. comm.). Wind Cave will comply with a National Park Service goal of maintaining and restoring black-tailed prairie dog populations. Wind Cave will consider control of prairie dogs in specific situations, such as sites with potential human health hazards and areas where prairie dogs conflict with other park management objectives. Wind Cave will consider prairie dog control within the Park, such as live trapping with translocation or other nonlethal means of control, if prairie dogs expand onto adjoining private lands. Wind Cave personnel suggest that these adjoining private lands be considered for financial incentive payments or prairie dog easements, if such programs are instituted, to enhance existing, contiguous colonies (B. Muenchau, pers. comm).

6. Bureau of Reclamation

Bureau of Reclamation lands in South Dakota presently have an estimated 65 acres of prairie dogs. These lands are managed in cooperation with SDGFP (F. Streier, pers. comm.)

7. USDA Forest Service

Prairie dog management actions in South Dakota involve two Forest Service regions, Region 2, for the Nebraska National Forest and Region 1 for the Dakota Prairie National Grasslands.

Regarding the Nebraska National Forest - The black-tailed prairie dog is designated by the Forest Service as a sensitive species and management indicator species on the national grasslands in South Dakota. These designations require additional management considerations for these species. These considerations are reflected in the objectives, standards, guidelines and monitoring direction in the Land and Resource Management Plans for these areas. Other applicable federal law, regulation and policy also guide management of these species.

The USDA Forest Service manages various lands in South Dakota including the Black Hills National Forest, the Custer National Forest, The Buffalo Gap National Grassland, Fort Pierre National Grassland, and Grand River National Grassland. A total of only five small colonies occur on the Black Hills and Custer National Forests. The Buffalo Gap and Fort Pierre National Grasslands are part of the Nebraska National Forest, headquartered in Chadron, Nebraska. The Grand River National Grassland is a part of the Dakota Prairie Grasslands, headquartered in Bismarck, North Dakota. Management of National Grasslands and Forests is guided by land and resource management plans.

Nebraska National Forest lands include 590,000 acres on Buffalo Gap National Grassland and 116,000 acres on Fort Pierre National Grassland. Current prairie dog acreage estimates are 763 acres on Fort Pierre and 20,948 acres on Buffalo Gap, based on the aerial transect survey and GPS mapping in 2003 and 2004. The Nebraska National Forest Land and Resource Management Plan (LRMP) and associated Record of Decision emphasize prairie dog conservation and management. The LRMP anticipates the prairie dog colonies could expand on the Buffalo Gap to

22,000-36,000 acres and on the Fort Pierre to 1,200-1,900 acres during the next ten years.

On the Buffalo Gap and Fort Pierre National Grassland, the Forest Service utilizes a strategic approach to prairie dog management that includes landownership adjustments, appropriate livestock grazing management through allotment management plans and grazing permits, prescribed fire, live-trapping/relocation, and the use of rodenticides. The land exchange program has been critical to the Conata Basin area and the black-footed ferret reintroduction. In 1984, the common boundary between private land and national grasslands in the Conta Basin was nearly 225 miles. In 2004 the common boundary has been reduced to less than 90 miles utilizing land exchanges. The Forest Service has utilized grazing management systems and adjustment to stocking levels to manage the distribution of prairie dogs. The live-trapping/relocation program has resulted in over 30,000 prairie dogs being trapped from or adjacent to private lands in Conata Basin area. Prairie dogs have been relocated to other areas on the National Grasslands, Badlands National Park and Bad River Ranches or provided to USFWS for the captive black-footed ferret program.

As part of being a good neighbor, aggressive management actions will be taken to achieve LRMP objectives and minimize conflicts with adjacent landowners. The Forest Service will accelerate active management of unwanted colonization by applying appropriate tools. Prairie dog conservation plans developed by the states will be consulted for guidance on the appropriate response to unwanted colonization onto adjacent nonfederal lands. As stated in the Record of Decision (7/31/2002) for the LRMP, the Forest Service intends to implement the South Dakota prairie dog plan to the extent allowable by law and policy in providing direction for the control of unwanted colonization of the prairie dog onto private lands. Should the State prairie dog conservation plan conflict with the provisions of the LRMP for the Buffalo Gap and Fort Pierre National Grasslands, the Forest Service will consider amending the LRMP to be consistent with the State Plan. Any changes in direction for prairie dog control will be done with appropriate consultant and coordination.

Regarding the Dakota Prairie Grasslands - The Grand River National Grassland covers approximately 154,200 acres in Perkins and Corson counties. The black-tailed prairie dog is also listed as both a sensitive species and a management indicator species on the Dakota Prairie Grasslands. The extent of occupied colonies was estimated at 1,520 acres in 1997 and 1,509 acres in 2002. Occupied colonies will be remapped in 2005. Inventory methods have and will include: colony identification from the air, extensive on-the-ground surveys, and intensive mapping of each colony by GPS. The Grand River's recently revised land and resource management plan designated the black-tailed prairie dog as a management indicator species, and directed that prairie dog expansion be emphasized on the Grand River National Grassland will be between 2,500 and 3,900 acres within 10 years. This assumes limited prairie dog control during this time period. The Grassland is currently developing a site-specific Prairie Dog Management Strategy

Plan. This plan will address buffers, shooting restrictions, conservation easements, and habitat management within a landscape context (D. Svingen, pers. comm.).

Dakota Prairie Grassland personnel are committed to a good neighbor policy regarding prairie dog expansion onto adjacent nonfederal lands. A site-by-site evaluation will consider a full suite of management tools, including land exchange, visual barriers, prescribed fire, and prescribed grazing, after which poisoning may be used if determined to be the most appropriate method (letter from David M. Pieper, Grasslands Supervisor, referring to ROD for Dakota Prairie Grasslands FEIS and Land and Resource Management Plan, U.S. Forest Service).

8. The Nature Conservancy

The Nature Conservancy (TNC) is a private, non-profit organization dedicated to the conservation of worldwide biological diversity. This mission is achieved with land acquisition and management, through various cooperative endeavors with land managers and landowners, and with a variety of stewardship and data collection efforts. TNC owns or has primary management responsibility for approximately 15,710 acres in South Dakota. The largest property within the range of the black-tailed prairie dog in South Dakota is the Whitney Preserve, located in Fall River County, currently 4,601 acres in size (B. Paulson, pers. comm.).

TNC recently completed an ecoregional conservation planning effort for the Northern Great Plains Steppe Ecosystem. The Northern Great Plains Steppe Ecosystem includes the majority of western South Dakota outside of the Black Hills and a portion of northcentral South Dakota east of the Missouri River. The planning effort included identification of "primary conservation target species." The black-tailed prairie dog was one of six mammal species identified as target species. This species is an important component of the following "ecologically significant areas" in South Dakota described in this plan: Grand River National Grassland, Harding County – Slim Buttes, Bad River Prairie, Badlands National Park Complex, Cheyenne River – Cherry Creek, White River, and Thunder Basin – Cheyenne River. Future management planning efforts at these sites will incorporate the needs of the black-tailed prairie dog ecosystem (Martin 1999).

9. Bad River Ranches

The Bad River Ranches, owned by R. E. Turner, has an estimated 140,000 acres in portions of Jones and Stanley counties. Prairie dogs currently occupy 1,443 acres in 78 colonies; an estimate based on annual GPS mapping (K. Bly Honness, pers. comm.). Inventory methods include visual counts (as described by Severson and Plumb 1998) to determine minimum population densities and recruitment of prairie dogs. The average density of prairie dogs in colonies on the Bad River Ranches in 2003 was 25 per acre. Restoration work carried out by the Turner Endangered Species Fund involves establishing a prairie dog complex, through translocations, suitable for a future black-footed ferret reintroduction. In the future, 10% or more of the Bad River Ranches could support prairie dogs based in part on a GIS prairie dog habitat suitability model of the

ranch (M. Phillips, pers. comm.). Management principles and planned actions for prairie dog restoration on Turner properties are included in a ten-year management plan (Truett 2000).

10. Yankton Agency

The Yankton Agency, Bureau of Indian Affairs, occupies 36,000 acres, including one 20-acre prairie dog town. Prairie dog management is not addressed in land management plans, but limited shooting is allowed on this town (L. Thompson, pers. comm.).

11. Other tribal and trust lands in South Dakota

SDGFP used available resources to create a tribal landownership layer for use with the 2002-2004 prairie dog mapping results. Tribal and tribal trust acreages within reservation boundaries were defined as tribal acres for the purpose of determining whether South Dakota has reached its agreed-upon tribal and nontribal acreage goals.

Because of the intermingling of private and tribal lands within reservation boundaries and the need for meaningful ecosystem planning, the State of South Dakota is hopeful that cooperative prairie dog management planning with Native American tribes will occur. The State of South Dakota will encourage the USFWS to serve in its capacity as an intermediary between the State and the South Dakota tribes.

In May 2004, SDGFP received a digital copy of tribal trust lands from the Regional Director, Bureau of Indian Affairs, in Aberdeen, with the exception of Cheyenne River Reservation, which did not permit this data transfer for their trust lands. If differences are found in tribal trust ownership, BIA/tribal information will be used. SDGFP has shared digital information from the state transect survey with BIA and requested that this information be distributed to tribes located in South Dakota.

12. U.S. Fish and Wildlife Service

As of August 18, 2004, The black-tailed prairie dog is no longer a candidate for federal listing under the authority of the Endangered Species Act. The prior designation as a candidate for federal listing has had management repercussions for all federal agencies, which are required to assist in the implementation of the Endangered Species Act.

Lacreek National Wildlife Refuge in southwestern South Dakota has approximately 345 acres of prairie dogs. Due to the small relative size of Lacreek Refuge, compared to blocks of other federal lands, colonies are maintained at this level to provide habitat diversity and viewing opportunities while not conflicting with other refuge habitat goals. Lacreek staff are presently developing a site specific prairie dog management plan for the refuge (T. Koerner, Refuge Manager, pers. comm.).

- IV. Management Strategies Outline
- IV-A Prairie dog acreage goal

Objective 1: Determine a statewide population goal and identify special management areas.

Strategy 1.1: Determine current prairie dog acreage in South Dakota.

Strategy 1.2: Coordinate state population goals with standards established by Multistate Black-tailed Prairie Dog Conservation Team.

Strategy 1.3: Population objectives included in the multi-state conservation plan for the black-tailed prairie dog.

- Strategy 1.4: Implement administrative measures to assist in meeting and maintaining statewide population goal.
- IV-B Population monitoring

Objective 2. Determine an effective tool to monitor changes in estimated occupied acreage.

Strategy 2.1: Evaluate existing data sources for their usefulness in monitoring estimated acreage of prairie dogs.

- Strategy 2.2: Evaluate supplemental data sources for their usefulness in monitoring estimated acreage of prairie dogs.
- Strategy 2.3: Implement selected monitoring tool to estimate South Dakota's estimated acreage of prairie dogs at three-year intervals.
- Strategy 2.4: Evaluate effectiveness of selected monitoring tool by comparison with other data sources.
- IV-C Disease monitoring and contingency plan

Objective 3. Develop a disease monitoring protocol for detecting sylvatic plague and other diseases detectable on prairie dog colonies, to include a contingency plan in case sylvatic plague is detected in South Dakota.

Strategy 3.1: Review existing information on plague occurrence in South Dakota.

- Strategy 3.2: Develop plague contingency plan, to include consideration of prairie dog colony dusting, quarantine procedures, follow-up surveillance strategies, public awareness strategies, and interagency coordination, particularly with agricultural interests.
- Strategy 3.3: Participate in national plague reporting system established by Interstate BTPD Conservation Team.

IV-D Black-footed ferret management actions

Objective 4. Determine and accommodate conservation needs of black-footed ferrets.

Strategy 4.1. Review available information on state status of black-footed ferrets

Strategy 4.2. Determine inventory needs for black-footed ferrets as they relate to prairie dogs.

Strategy 4.3. Incorporate conservation needs of black-footed ferrets into prairie dog management opportunities.

Strategy 4.4. Investigate opportunities for cooperative conservation activities.

IV-E Public outreach

Objective 5. Use public involvement techniques to gather input.

Strategy 5.1. Establish a South Dakota Prairie Dog Working Group.

IV-F Evaluation of planning effort

Objective 6. Use adaptive management method to evaluate progress of prairie dog planning effort and adjust as needed to accomplish program goals.

Strategy 6.1. Formulate interagency team to review progress toward meeting objectives at three-year intervals to coincide with population monitoring intervals.

Objective 7. Identify and implement management actions that provide environmentally sound habitat for a sustainable population of healthy prairie dogs acceptable to landowners and managers in the state of South Dakota.

Strategy 7.1. In order to provide environmentally sound habitats, the similarity index/range condition should be maintained at no less than a similarity index/range condition of 20% of the historic climax plant community, as described in the Natural Resources Conservation Service South Dakota State Technical Guide.

V. Management Strategies

V-A. Prairie dog acreage goal

<u>Objective 1</u>: Determine a statewide population goal and identify special management areas.

<u>Strategy 1.1</u>: Determine current prairie dog acreage in South Dakota.

Progress toward objective:

SDGFP and USDA Forest Service conducted an aerial transect survey of South Dakota's primary black-tailed prairie dog range, which equates to the counties west of the Missouri River and those counties bordering the east bank of the river, with the exception of extreme southeastern South Dakota. The visual detection of prairie dog colonies from aircraft has been carried out effectively in various surveys throughout the Great Plains (Sidle et al. 2001, Sidle et al. 2002). At least three other states (Colorado, Kansas, and Oklahoma) have used this technique or variations of it to determine baseline acreage estimates.

The inventory in South Dakota consisted of two general phases: 1) locate and digitally image colonies and 2) measure their size on a computer.

A total of 411,424 acres of prairie dogs were documented during the aerial transect survey, divided as follows: 216,750 acres on tribal lands and 194,673 acres on nontribal lands (Table 2). Although prairie dogs are known to occur in several additional counties in eastern South Dakota, their numbers and distribution are relatively small, reflect only a minor contribution to the overall state total and thus were not included in Table 2.

The purpose of this aerial survey was to be as thorough as possible in detecting the prairie dog colonies in South Dakota and to develop a better estimate of prairie dog colony acreage than obtained from previous aerial-line intercept methods (Sidle et al. 2001). Colonies are usually very visible from an aircraft and can even be seen on satellite images (Sidle 1999, Sidle et al. 2001, 2002). Colony mounds and prairie dog herbivory that imparts a different color to the ground than adjacent rangeland usually allows easy detection of colonies. Moreover, colony size ranges from less than one acre to several thousand acres increasing their visibility. However, no matter how thorough the aerial survey, the survey likely missed some colonies.

The confidence associated with the estimate of prairie dog colonies in South Dakota can be estimated through Program Distance or a secondary data set. Program Distance develops a sighting function and a confidence interval based upon colony location, geometric mean of the colony, and the distance from the flight line. However, an alternative or "low tech" estimate of error can be derived from a secondary data set of overlapping digital pictures taken in areas of high colony density in several counties as noted above. A frame-by-frame examination of these pictures yields a complete

census of prairie dog colonies of those areas and serves as a basis to determine the accuracy of Phase I in detecting prairie dog colonies and the resulting changes in area estimates.

Areas such as northern Todd County with large areas of tribal lands contain large numbers of colonies. During Phase I in northern Todd County, for example, the aircraft was constantly maneuvered to record the location of colonies. Flight line departures occurred at least every 0.5 miles. In such areas, the chance of missing colonies increased as the workload increased. During Phase I in 2002, 513 colonies in northern Todd County were detected and were imaged and measured in 2003 for a total of 38,431 acres. In 2003, another 26 colonies (426 acres) were detected on overlapping digital pictures taken. The 4.8% undercount of colonies in northern Todd County had an associated undercount of area equal to 1.1%. Similar comparisons in high-density colony areas in Mellette, Shannon, Dewey, and Ziebach counties indicated similar undercounts of numbers of colonies for a combined undercount colony area of 1.4%. Applying the 1.4% undercount area value to the 411,423 acres of prairie dog colonies in the state indicates an overall undercount of 5,760 acres.

Note: Our state survey information was collected during 2002, 2003 and early 2004. Changes to individual prairie dog colonies since the survey was conducted have probably occurred. Prairie dog colonies are dynamic natural systems and will increase or decrease in size depending on a number of natural and/or human caused factors.

| County | Total | State | Federal | Tribal Acres | Private | Nontribal |
|-------------|---------|-------|---------|--------------|---------|-----------|
| | Acres | Acres | Acres | | Acres | Acres |
| Bennett | 6,511 | 79 | 343 | 1,880 | 4,209 | 4,631 |
| Brule | 1,277 | 3 | 18 | 0 | 1,256 | 1,277 |
| Buffalo | 1,983 | 0 | 0 | 734 | 1,249 | 1,249 |
| Butte | 2,009 | 163 | 618 | 0 | 1,228 | 2,009 |
| Charles Mix | 245 | 15 | 20 | 15 | 196 | 231 |
| Corson | 26,213 | 225 | 1,427 | 14,989 | 9,572 | 11,224 |
| Custer | 13,213 | 127 | 3,410 | 0 | 9,677 | 13,213 |
| Dewey | 48,342 | 141 | 0 | 33,207 | 14,994 | 15,134 |
| Fall River | 9,291 | 151 | 2,043 | 0 | 7,097 | 9,291 |
| Gregory | 1,131 | 12 | 0 | 28 | 1,091 | 1,103 |
| Haakon | 1,483 | 0 | 2 | 0 | 1,481 | 1,483 |
| Hand | 252 | 0 | 0 | 0 | 251 | 252 |
| Harding | 2,976 | 760 | 97 | 0 | 2,114 | 2,976 |
| Hughes | 1,449 | 0 | 52 | 228 | 1,168 | 1,220 |
| Hyde | 729 | 0 | 0 | 181 | 548 | 548 |
| Jackson | 11,586 | 23 | 564 | 4,681 | 6,318 | 6,905 |
| Jones | 2,536 | 36 | 161 | 0 | 2,339 | 2,536 |
| Lyman | 5,781 | 100 | 354 | 2,167 | 3,161 | 3,614 |
| Meade | 18,116 | 358 | 387 | 0 | 17,371 | 18,116 |
| Mellette | 37,960 | 190 | 0 | 21,936 | 15,833 | 16,024 |
| Pennington | 36,804 | 788 | 20,692 | 0 | 15,325 | 36,804 |
| Perkins | 8,093 | 439 | 929 | 0 | 6,725 | 8,093 |
| Shannon | 90,736 | 0 | 679 | 84,069 | 5,988 | 6,667 |
| Stanley | 5,813 | 99 | 654 | 704 | 4,356 | 5,109 |
| Sully | 815 | 0 | 1 | 0 | 815 | 815 |
| Todd | 49,884 | 0 | 0 | 38,865 | 11,019 | 11,019 |
| Tripp | 3,359 | 0 | 0 | 290 | 3,070 | 3,070 |
| Ziebach | 22,835 | 260 | 0 | 12,774 | 9,800 | 10,060 |
| | | | | | | |
| Totals | 411,423 | 3,972 | 32,449 | 216,750 | 158,252 | 194,673 |

Table 2. Prairie dog acreage distribution

Definitions:

total acres: total number of prairie dog acres

state acres: prairie dog acreage on state agency lands federal acres: prairie dog acreage on federal agency lands

tribal acres: prairie dog acreage on tribal trust lands

nontribal acres: sum of prairie dog acreage on private, state, and federal lands

 Table 3. Prairie dog acreage distribution by government agency

| Agency | Acres |
|----------------------------------|--------------------|
| SD School and Public Lands | 3,645 |
| SDGFP – Wildlife Division | 126 |
| SDGFP – Parks Division | 179 |
| U.S. Army Corps of Engineers | 1,215 |
| Bureau of Land Management | 981 |
| Bureau of Reclamation | 12 |
| Fort Pierre National Grassland | 763 |
| Grand River National Grassland | 1,627 |
| Wall Ranger District | 19,020 |
| Fall River District | 1,928 |
| Buffalo Gap Total | 20,948 |
| National Grassland Total | 23,338 |
| Badlands Bombing Range | 679 |
| Ellsworth | 76 |
| National Forest Lands | 56 |
| Wind Cave National Park | 1,467 |
| Badlands National Park | 4,003 |
| National Parks Service | 5,470 |
| Lacreek NWR | 345 |
| Tribal Lands Non Tribal Lands | 216,750 194,673 |
| TOTAL ACRES | 411,424 |

<u>Strategy 1.2:</u> Coordinate state population goals with standards established by the Multistate Black-Tailed Prairie Dog Conservation Team.

Progress toward objective:

SDGFP has participated in multistate prairie dog management planning since 1998, when representatives from the state wildlife and agriculture departments from South Dakota, Wyoming, and Montana met in Gillette, Wyoming. SDGFP has also participated in the Multistate Black-tailed Prairie Dog Conservation Team since its inception. In this role, SDGFP has participated in developing and testing various proposals for setting a national standard for prairie dog acreage goals as a percentage of historical potential habitat.

During a March 8-9, 2001 meeting of the Multistate BTPD Team, Team members evaluated the usefulness and biological defensibility of Bailey's ecoregions (Bailey et al. 1994) as a base map for determining state and rangewide prairie dog acreage goals (Figure 1). Ecosections within a core area (solid line on Figure 1) were identified as the core management area to be managed to retain at least 1% of the historical black-tailed prairie dog acreage. Total acres were multiplied by 0.01 to obtain the 1% acreage estimate. Obviously unsuitable habitats were identified, such as wetlands and slopes greater than 10%, when historical potential acreage was identified. Ecosections within a secondary management area (outer line on Figure 1) will be managed to retain at least 0.1% of historical potential acreage. Acreages by ecoregion were determined for each state. A rank of 0.1 or 1.0 was assigned based on the relative importance of an ecoregion to prairie dogs. Three ecoregions found in South Dakota occur within the historical range of the black-tailed prairie dog and were ranked according to their suspected importance to prairie dog distribution. Since the northwestern great plains ecoregion section contains the majority of South Dakota's prairie dog range, this technique apportions 1% of this acreage to the state's historical prairie dog goal. Acreages in other ecoregion sections on the periphery of the state's prairie dog range are apportioned at a rate of 0.1% to the state's prairie dog goal. Using this technique, South Dakota's estimated statewide acreage goal (including tribal lands), is 199,472 (Table 4).

To accommodate the separate prairie dog planning by Native American tribes in South Dakota, the acreage goal of 199,472 must in some way be apportioned between tribal and nontribal lands. Based on an estimate that 4,897,482 acres of tribal trust lands occurring within the prairie dog range in South Dakota (30,037,400 acres) (Table 5), approximately 16.3% of the acreage goal can be assigned as "tribal" prairie dog acreage, resulting in an acreage goal on nontribal lands (federal, state, and private lands combined) of 166,958 acres. This assignment was made at the request of South Dakota tribes that have expressed an opinion on this topic. No other land management entity made such a request of the State of South Dakota.

The current estimate of active black-tailed prairie dog colonies on all federal lands is 32,449 acres, which represents approximately 19% of the statewide non-tribal goal. Under current Forest Service plans in South Dakota, total colony acreage on the national grasslands were projected to be somewhere between 25,700 to 41,000 acres, depending on weather patterns and colony expansion rates, by 2012. This projected increase of prairie dog colony acreage on the national grasslands alone would push the federal lands contribution to 21 to 30% of the statewide goal for nontribal lands.



Figure 1. Bailey's Ecoregions overlaid on black-tailed prairie dog range.

Table 4. State acreage goal components by ecoregions within historical black-tailed prairie dog range in South Dakota*

| Ecoregion sections | Total available habitat by section in SD ¹ | Ranked acres in ecoregion in SD ² | Suitable habitat by section ³ |
|---|---|--|--|
| Nebraska Sand Hills (within secondary management area) | 131,297 | 131 (131,297 * .001 = 0.1%) | 129 |
| Northcentral Great Plains (within secondary management area) | 8,146,940 | 8,147 (8,146,940 * .001 = 0.1%) | 7,654 |
| Northwestern Great Plains (within core management area) | 20,984,316 | 209,843 (20,984,316 * .01 = 1%) | 191,689 |
| TOTAL | 29,262,553 | 218,121 | 199,472 |

¹Includes acres within specific ecoregion sections, regardless of prairie dog occupancy. ²Ranked acreage formulas determined by relative importance of the ecoregion section to prairie dogs.

³Unsuitable acreage was subtracted from ranked acres to determine suitable habitat acreage.

* Suitable habitat estimate is not available for the Northern Glaciated Plains Section portion that occurs in South Dakota

| County | Code | County Land | County Land | County Land | Tribal Trust |
|------------|-------|-------------|-------------|-------------|-------------------------|
| | | Area | Area | Area | Land Total ¹ |
| | | Non Federal | Federal | Total | |
| Bennett | 46007 | 745,800 | 16,300 | 762,100 | 248,985 |
| Brule | 46015 | 533,900 | 7,900 | 541,800 | 0 |
| Buffalo | 46017 | 304,000 | 8,000 | 312,000 | 68,237 |
| Butte | 46019 | 1,290,200 | 160,300 | 1,450,500 | 0 |
| Charles | 46023 | 716,900 | 19,300 | 736,200 | 36,701 |
| Mix | | | | | |
| Corson | 46031 | 1,570,500 | 48,400 | 1,618,900 | 546,011 |
| Custer | 46033 | 594,800 | 403,100 | 997,900 | 0 |
| Dewey | 46041 | 1,525,900 | 39,400 | 1,565,300 | 837,299 |
| Fall River | 46047 | 821,700 | 297,800 | 1,119,500 | 0 |
| Gregory | 46053 | 661,500 | 12,700 | 674,200 | 23,621 |
| Haakon | 46055 | 1,165,800 | 3,800 | 1,169,600 | 1,091 |
| Harding | 46063 | 1,611,100 | 102,600 | 1,713,700 | 0 |
| Hughes | 46065 | 499,400 | 12,900 | 512,300 | 33,777 |
| Hyde | 46069 | 554,000 | 700 | 554,700 | 24,188 |
| Jackson | 46071 | 1,075,700 | 122,000 | 1,197,700 | 416,678 |
| Jones | 46075 | 601,900 | 20,000 | 621,900 | 0 |
| Lawrence | 46081 | 238,100 | 274,100 | 512,200 | 0 |
| Lyman | 46085 | 986,900 | 105,700 | 1,092,600 | 115,735 |
| Meade | 46093 | 2,147,500 | 81,400 | 2,228,900 | 757 |
| Mellette | 46095 | 838,300 | 0 | 838,300 | 284,820 |
| Pennington | 46103 | 1,014,500 | 767,500 | 1,782,000 | 0 |
| Perkins | 46105 | 1,705,000 | 145,200 | 1,850,200 | 480 |
| Shannon | 46113 | 1,202,300 | 139,600 | 1,341,900 | 1,105,706 |
| Stanley | 46117 | 893,800 | 77,100 | 970,900 | 29,094 |
| Sully | 46119 | 645,100 | 40,000 | 685,100 | 0 |
| Todd | 46121 | 889,500 | 700 | 890,200 | 502,256 |
| Tripp | 46123 | 1,035,200 | 0 | 1,035,200 | 66,639 |
| Ziebach | 46137 | 1,258,900 | 2,700 | 1,261,600 | 555,407 |
| TOTAL | | 27,128,200 | 2,909,200 | 30,037,400 | 4,897,482 |

Table 5. General land ownership for counties considered within the state distribution range for black-tailed prairie dog.

¹Source: Dept. of the Interior, Bureau of Indian Affairs web-site, <u>www.doi/gov/bia/realty/report97.html</u>

- <u>Strategy 1.3:</u> Population objectives included in the "Multi-state Conservation Plan for the Black-tailed Prairie Dog, *Cynomys ludovicianus*, in the United States" (Luce 2003) are:
- 1. Maintain at least the currently occupied acreage of black-tailed prairie dogs in the U.S.
- 2. Increase to at least 1,693,695 acres of occupied black-tailed prairie dog acreage in the U.S. by 2011.
- 3. Maintain at least the current black-tailed prairie dog 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 9 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 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. All eleven states currently meet this objective except Arizona in which the black-tailed prairie dog was extirpated.

South Dakota's prairie dog management plan has identified our own goals and objectives, which are specific to South Dakota. We reserve the right to preserve our own management authority.

Regarding objective 5, four prairie dog colonies found on nontribal lands are greater than 1,000 acres. These total 9,794.63 acres or 2.4% of the total occupied nontribal acreage (A. Nickolas, pers. comm.). Analysis of complex sizes has not yet been completed.

At present, prairie dog complexes equal to or greater than 5,000 acres exist on the following federal lands in South Dakota:

Badlands National Park, Pennington, Jackson and Shannon counties Wall Ranger District, Custer, Jackson and Pennington counties

Several large prairie dog complexes exist on tribal lands in South Dakota, which will be addressed by individual tribes in cooperation with the U.S. Fish and Wildlife Service.

<u>Strategy 1.4:</u> Implement administrative measures, if necessary, to assist in meeting and maintaining statewide population goal.

SDGFP and SDDA have various authorities to implement needed legal measures to help meet and maintain population goals on lands under state jurisdiction in South Dakota. The following substrategies detail progress to date in exercising these authorities. <u>Strategy 1.4a</u>: Establish a prairie dog shooting closure to protect litters.

Progress toward objective:

On January 11, 2001, the South Dakota Game, Fish and Parks Commission finalized a proposal to prohibit prairie dog shooting on public lands in South Dakota from March 1 through June 14. This closure will allow litters to be reared by females before shooting begins. The closure does not apply to private or tribal lands, which may implement their own closures. The closure is in addition to year-round shooting restrictions on state parks and recreation areas, lands owned by the National Park Service and U.S. Fish and Wildlife Service, and black-footed ferret reintroduction areas, presently located on Cheyenne River Reservation and Conata Basin, located within the Forest Service's Buffalo Gap National Grassland. In November of 2004, the GFP Commission removed the Conata Basin closure and deferred shooting regulations for this specific area to the US Forest Service.

Since shooting restrictions on nontribal lands can be made via SDGFP Commission rule action, changes will be implemented in response to population changes.

Strategy 1.4b: Determine an alternative to state declared pest species status.

Progress toward objective:

Senate Bill 64 (Appendix 3) was signed by Governor Bill Janklow on March 5, 2001 and became effective on July 1, 2001. This bill was designed to replace the state pest status of the black-tailed prairie dog in South Dakota with the designation of "species of management concern." Follow-up actions included preparation of rules by the South Dakota Departments of Agriculture and Game, Fish and Parks for implementing this law, which will treat prairie dog complaints as nuisance cases for civil resolution, as contrasted with the former punitive aspect of the pest species designation.

The South Dakota Game, Fish and Parks Commission finalized its rule creating the species of management concern category at the June 7-8, 2001 meeting (Appendix 4). Administrative Rule 41:10:03:01 (Appendix 5) became effective on August 28, 2001, which resulted in the removal of the black-tailed prairie dog from the state list of declared animal pests.

<u>Strategy 1.4c</u>: Investigate methods to assure that South Dakota continues to meet its nontribal acreage goal of 166,958.

Progress toward objective:

Incentives: Because of the importance of private lands to wildlife management in general and to prairie species in particular, a number of entities have identified grassland habitats as areas to focus funding for long-term management. Examples include the U.S. Fish and Wildlife Service's Partners for Wildlife Program and the Farm

Bill's Grassland Reserve Program. Additional programs are available through special appropriations and through several private conservation organizations. These voluntary programs focus on maintaining or restoring native habitats for the benefit of grassland-dependent species while sustaining compatible land uses, such as grazing. The State of South Dakota will encourage landowner incentive priorities by governmental and private entities to help assure that the state continues to meet its acreage goal.

Minimum acreage levels and management action "triggers" when inventoried prairie dog acreages are at certain levels:

If the inventoried nontribal acreage estimate is greater than 160,000 acres the following actives are proposed:

- Conduct prairie dog acreage surveys at 3-year intervals
- Continue periodic surveys of prairie dog shooting
- Full use of joint Dept. of Ag./GFP control of prairie dogs on private land adjacent to public lands
- Use public outreach to share information about sylvatic plague
- Annually review GFP prairie dog shooting rules, closure areas and seasonal shooting restrictions on public lands.
- For the black-footed ferret recovery area and on private lands adjoining USFS, tribal, NPS and/or BLM land, offer incentives to cooperating landowners to maintain prairie dogs/colonies on their property in accordance with the good neighbor policy as defined in this plan.

If the inventoried nontribal acreage is between 125,000 and 160,000 acres:

- Conduct prairie dog acreage surveys at 3-year intervals
- Estimate annual sales of prairie dog rodenticides and determine the prairie dog acreage undergoing annual treatment in South Dakota.
- Continue periodic surveys of prairie dog shooting
- Prioritize the use of state financed control efforts to involve only those areas of encroachment from federal to private land. Limited technical assistance may occur.
- Implement multi-state plague monitoring protocol
- Focus increased incentive payments on high priority sites
- Implement seasonal shooting closures by GFP Commission rule on public land and/or other site-specific closures as needed

If the inventoried nontribal acreage falls below 125,000 acres:

- Conduct prairie dog acreage surveys at 3-year intervals
- Implement multi-state plague monitoring protocol
- Implement shooting restrictions on all public lands in South Dakota by GFP Commission.
- Expand incentive payments to any privately owned land, provided a 1-mile buffer zone exists between the incentive area and other private land.

And if the **total** statewide prairie dog estimate falls below 145,000 acres:

 Sales of prairie dog toxicants in South Dakota will cease except for control by special permit and only in specific instances where high concentrations are impacting private property, or when health, economic and human safety situations exist.

Strategy 1.4d: Prevent prairie dogs from encroaching upon adjoining private lands.

When prairie dogs are at or above the 125,000 acre level, programs need to be in place to prevent the encroachment of unwanted prairie dogs on private land. The most effective efforts are likely those that encourage partnerships among state, private, federal, and tribal landowners which avoid punitive measures. SDGFP and the SD Department of Agriculture are committed to investigating such opportunities for prairie dog management to incorporate the needs of adjoining landowners while maintaining the nontribal acreage goal.

For purposes of this planning document, encroachment is defined as "when a prairie dog colony on public land or private land has expanded to the point where colonization of adjoining land occurs and is unwanted by the impacted owner and/or land manager".

The state of South Dakota will execute a "good neighbor" policy on all lands by developing a "no tolerance" standard for prairie dogs moving onto lands where they are not wanted. When prairie dog colonies expand to another property and the property owner being encroached upon files a valid complaint, the primary landowner must control the prairie dogs back to one mile of said land boundary; such control must be ongoing so as to prevent future incursions.

In order for this policy to be meaningful and enforceable, the State will need to enact legislation or a rule modification that will require formulation of a plan to mitigate the impact of species of management concern on adjoining landowners.

It is the desire of this plan that all land managers, both public and private, will work aggressively, using all available management tools, to prevent the encroachment of prairie dogs from their land onto adjoining land. In situations where the encroachment is allowed to occur, then control techniques, including the use of approved rodenticides shall be used to control the prairie dogs back to where they are no longer an encroachment problem.

All land managers should consider using the full array of management tools. A variety of techniques have been successfully used in the past to manage prairie dogs at acceptable levels, to prevent the unwanted encroachment of prairie dogs across land boundaries and to maintain prairie dog densities at levels that promote sound wildlife habitat management principles. The best success for proper management should utilize the full slate of management options, including the prudent use of approved rodenticides.

These may involve:

- land trades to deal with isolated private land in-holdings that occur within the exterior of the manager's boundary
- use of vegetative barriers and/or grazing management adjustments to establish vegetative barriers
- conservation easements
- incentive payments
- the use of fencing and other visual barrier techniques
- live trapping and translocation of prairie dogs
- directed sport shooting to site-specific areas
- use of approved rodenticides to control prairie dog populations

Specific to the Forest Service national grasslands in South Dakota and in accordance with the Great Plains Grasslands Management Plan Record of Decision, the USFS is encouraged to cooperate with the state of South Dakota to control prairie dogs on USFS lands to the extent allowable by law and policy. We fully expect the USFS to honor our "good neighbor policy" by developing a "no tolerance" standard for prairie dogs moving onto lands where they are not wanted. Ideally, the "no tolerance" standard shall require the USFS to control prairie dogs back to a distance of one-mile on USFS property whenever an encroachment is confirmed on a landowner complaint basis.

In the case of irregular land boundaries, control efforts will use a buffer developed with US Fish and Wildlife Service assistance extending up to one mile from public-private boundaries, with variations in buffer width to adjust for the effect of irregular boundaries, such as "peninsulas" of federal land and private in-holdings. In cases where the buffer zone for control will be less than ½ mile, approval for the reduced buffer will be required between the USFS, SDGFP and the SD Dept. of Agriculture.

In addition, the USFS will modify the Forest Supervisor's order regarding prairie dog shooting in Conata Basin. The shooting zone will use a buffer extending up to one mile from public-private boundaries, with variations in buffer width to adjust for the effect of irregular boundaries, such as peninsulas of federal land and private in-holdings. The USFS will also take steps to encourage outfitter guides to increase shooting pressure.

The USFS will continue to live trap prairie dogs on their own lands, to increase efforts and to focus on complaint zones.

Complaint zones will be developed and mapped using the following protocol:

The USFS, SDGFP and SDDA will work closely together in developing, maintaining, and coordinating recent data of complaint zones. Locations (point data) collected on all landowner complaints will be collected by SDGFP and provided to USFS. Consultation between the USFS and the US Fish and Wildlife Service will occur as soon as affected acreages are known. Private land prairie dog towns will be mapped using Trimble GPS equipment. Outside dimensions as well as perpendicular distance from public/private boundary will be collected (by SDGFP). Public land areas will be mapped by SDGFP

and USFS using the same methods as applied on private land. Mapped data will be compared to USFS recent prairie dog town measurements; if no significant differences exist, assume USFS recent mapping efforts reflect current acreages, and no further USFS mapping will be required at the time.

<u>Strategy 1.4e</u>: Provide funding for prairie dog control.

A SDGFP will provide no less than \$130,000 annually from the Animal Damage Control Fund to implement control and/or incentive strategies outlined in Strategies 1.4c and 1.4d.

B SD Department of Agriculture will provide no less than \$150,000 annually from program funds to implement control and/or incentive strategies outlined in Strategies 1.4c and 1.4d.

C SDGFP will also fund all objectives aimed at monitoring, inventories, research, and updating the South Dakota Black-tailed Prairie Dog Conservation and Management Plan as noted in the management strategies.

Strategy 1.4f: Respond to private landowner complaints.

SDGFP will respond to private landowner complaints of prairie dogs encroaching off public lands following guidelines set forth in the "SOUTH DAKOTA BLACK-TAILED PRAIRIE DOG CONTROL PROGRAM GUIDELINES" dated January 2005 (Appendix 7).

Strategy 1.4g: Provide annual report of state activities

SDGFP and the SD Department of Agriculture will prepare an annual summary report to the South Dakota State Legislature of work conducted during the previous year, including present population status, funds expended, and projects completed, such as control areas, monitoring and inventory, research, and landowner incentives.

V-B. Population monitoring

Objective 2. Determine an effective tool to monitor changes in estimated occupied acreage.

<u>Strategy 2.1</u>: Evaluate existing data sources for their usefulness in monitoring estimated acreage of prairie dogs.

Progress toward objective:

In December 2000, SDGFP contracted with the Wildlife and Fisheries Sciences Department at South Dakota State University to conduct a feasibility study to determine whether landsat satellite imagery is a viable alternative for prairie dog population monitoring in western South Dakota (Project No. W-75-R, Amendment No. 134, Study No. 100). SDSU staff worked with the U.S. Geological Survey's EROS Data Center in Garretson, South Dakota and coordinated with personnel in other states also involved in this task. The specific study objective was to determine the season when spectral, chromatic and infrared characteristics of satellite imagery differentiate prairie dog towns from other western South Dakota land or vegetation categories. The study area included Wind Cave National Park, Badlands National Park and portions of Buffalo Gap National Grassland. Six high-resolution scenes were photo-interpreted and accuracy was assessed with ground-truthing and compared to digital data collected by the Forest Service for Buffalo Gap National Grassland.

Study results indicated poor accuracy of predicting prairie dog town locations with this technique, potentially due to intensive cattle grazing in some areas, which produced similar spectral characteristics to prairie dog towns and soil types that contributed to sparse vegetative cover, which also produced a pattern similar to that of a prairie dog town. The authors recommended that other techniques, such as an aerial line intercept survey, might prove more useful to the State of South Dakota in identifying prairie dog towns and monitoring the status of populations (Wolbrink et al. 2002). See Section V-A Objective 1 for a discussion of the 2002-2004 aerial transect survey conducted by SDGFP.

<u>Strategy 2.2</u>: Evaluate supplemental data sources for their usefulness in monitoring estimated acreage of prairie dogs.

Progress toward objective:

Following discussions at several South Dakota Prairie Dog Work Group meetings, SDGFP and SDDA met to discuss the need for monitoring and estimating the amount of chemical control of prairie dogs being conducted in South Dakota. SDDA will design an annual survey of farmers and ranchers to estimate prairie dog rodenticide use in South Dakota to be implemented when prairie dog populations warrant.

SDGFP will conduct a regular prairie dog shooting survey to estimate shooting mortality and other aspects of prairie dog shooting, such as activity by month, total days of participation, and landownership of lands visited. The survey sample will be derived from predator/varmint licensees and a sample of small game licensees. Survey results will provide an estimate of the number of prairie dog shooters, total days of shooting, and total prairie dogs taken by shooters.

The executive summary from the 2001 prairie dog shooting survey is presented below (Gigliotti 2002). Shooting surveys will be repeated at regular intervals to detect changes in effort or results.

Executive Summary, Prairie Dog Shooting in South Dakota (2001), (Gigliotti 2002)

 The total number of participants shooting prairie dogs on non-tribal lands in South Dakota for 2001 was 10,316 residents and 5,695 nonresidents.

- Total recreational shooting days was 54,849 for residents and 20,210 for nonresidents.
- Recreational shooters killed 1.52 million prairie dogs on non-tribal lands in South Dakota for the year 2001 (795,219 by residents and 720,955 by nonresidents). About 86.3% of these 1.52 million prairie dogs were shot on private land. This estimate is higher than the 1.19 million estimated for 2000 (note that this value is slightly different than that reported in the 2000 report on prairie dog shooting in South Dakota due to a correction added after printing).
- Prairie dog shooting occurs throughout the year by residents with the peak occurring during the summer. Most nonresidents with the predator/varmint license do most of their shooting in May and June while most nonresidents with a small game license do most of their shooting in October.
- Most prairie dog shooting occurs on private land.

<u>Strategy 2.3</u>: Implement selected monitoring tool to estimate South Dakota's estimated acreage of prairie dogs at three-year intervals.

Progress toward objective:

The aerial transect survey represents the first thorough prairie dog acreage estimate in South Dakota and is considered by the State of South Dakota as the baseline acreage estimate. This survey was conducted by John Sidle, Threatened, Endangered, and Sensitive Species Coordinator for the Great Plains National Grasslands, U.S. Forest Service under contract with SDGFP. Sidle has recommended that SDGFP develop a protocol that will examine a sample of the nearly 7,000 colonies in the state at regular intervals. An example of a monitoring design was described in Sidle et al. 2002, using the North Dakota black-tailed prairie dog range as the monitoring area.

The multistate conservation plan includes the following proposed action: Develop a monitoring method applicable across the eleven states and monitor occupied habitat and distribution approximately every three years (Luce 2003). SDGFP will continue to participate in efforts to design and implement a rangewide population monitoring method, since a coordinated effort will present a stronger biological basis for maintaining state jurisdiction for the black-tailed prairie dog.

<u>Strategy 2.4</u>: Evaluate effectiveness of selected monitoring tool by comparison with other data sources.

Progress toward objective:

The aerial transect survey that was contracted to the U.S. Forest Service did not include specific ground-truthing verification. It is assumed that once prairie dog acreage maps are available for review by respective agencies, tribes, and private landowners, specific problems with the methodology may be revealed. In addition, a number of entities in South Dakota regularly map prairie dog town locations and estimated acreages on their properties. Allowing for differences in the time period covered, such on-the-ground

examples can serve a ground-truthing function. If differences in the aerial transect method and on-the-ground mapping are greater than the identified confidence interval, changes will be made in the methodology prior to additional aerial transect surveys.

V-C. Disease monitoring and contingency plan

<u>Objective 3</u>: Develop a disease monitoring protocol for detecting sylvatic plague and other diseases detectable on prairie dog colonies, to include a contingency plan in case sylvatic plague is detected in South Dakota.

Strategy 3.1: Review existing information on plague occurrence in South Dakota.

Progress toward objective:

In association with the black-footed ferret reintroduction on the Conata Basin/Badlands site in South Dakota, carnivores have been sampled for diseases during 1990 and from 1993 to present. To date, plague has been detected at only extremely low levels involving two predators from extreme southwestern and south central South Dakota. Plague has not been detected in prairie dogs that died during quarantine periods or were found dead on-site (Williams et al. 1991, Williams et al. 1996, Williams et al. 1998).

Two additional black-footed ferret reintroduction projects have been conducted in South Dakota, beginning in 2000 on the Cheyenne River Sioux Tribe Reservation and beginning in 2004 on the Rosebud Sioux Tribe Reservation. Both projects have involved predator sampling for disease analysis. No plague has been detected to date.

SDGFP contacted the South Dakota Department of Health for information on human health aspects of this disease. Dr. Lon Kightlinger, SD Department of Health, shared a copy of the protocol that his agency follows (CDC 1996). Dr. Kightlinger also summarized plague occurrence in humans in South Dakota in an email dated October 8, 2001, in which he stated: "There has not been a case of human plague in South Dakota since 1923, according to our records."

In the fall of 2004, a plague suspected prairie dog was collected in extreme western Fall River County. The animal was confirmed plague positive by the State Veterinarian (Dr. Sam Holland, pers. comm.) Subsequent follow-up surveys in the area have to date, failed to identify any additional plague locations. Monitoring in this area will continue into the foreseeable future.

<u>Strategy 3.2</u>: Develop plague contingency plan, to include consideration of prairie dog colony dusting, quarantine procedures, follow-up surveillance strategies, public awareness strategies, and interagency coordination, particularly with agricultural interests.

Progress toward objective:

The multistate black-tailed prairie dog conservation plan includes a draft sylvatic plague monitoring protocol (Luce 2003). The protocol summarizes potential plague-detection methods, lists suggested actions within a state related to plague detection and monitoring, and includes relevant contributions from the Centers for Disease Control and Dr. Beth Williams of the Wyoming State Veterinary Laboratory. The draft plague protocol was developed in cooperation with well-respected wildlife and human disease experts and agencies. The document incorporates input from state, federal, and tribal entities with experiences in dealing with plague monitoring and outbreaks. Rangewide participation in the protocol adds strength to the continued effort to maintain state authority for this species. For these reasons, SDGFP and the SD Department of Agriculture recommend that the multistate conservation team's plague monitoring protocol be adopted in South Dakota. SDGFP and the SD Dept. of Ag. will explore and may implement additional measures which are deemed appropriate in achieving the goal of protecting and/or minimizing South Dakota's prairie dog population from a widespread plague outbreak.

<u>Strategy 3.3</u>: Participate in national plague reporting system established by Interstate BTPD Conservation Team.

Progress toward objective:

At present, only human plague cases are reported in a systematic way under the authority of the Centers for Disease Control. A similar system for sylvatic plague reports among wild rodents has been discussed by the multistate conservation team. SDGFP will participate in such a reporting system once it is developed.

V-D. Black-footed ferret management actions

Objective 4. Determine and accommodate conservation needs of black-footed ferrets.

Strategy 4.1: Review available information on state status of black-footed ferrets.

Progress toward objective:

During the course of South Dakota's prairie dog management plan development, it became apparent that the terms "associated with" and "dependent on" prairie dog are confusing to the general public. The focus of this strategy is on the black-footed ferret, a species that directly depends on prairie dogs, rather than other species that may sometimes be associated with them, but do not directly depend on prairie dogs for their survival. Although many species may inhabit prairie dog colonies at various times, few are as dependent on prairie dogs in South Dakota as the black-footed ferret.

The black-footed ferret is a federal and state endangered species. Its state heritage rank is G1/S1, indicating imperiled global and state statuses because of extreme rarity

or because certain factors make it especially vulnerable to extinction. Heritage ranks range from 1 to 5, with 1 assigned to species that are most imperiled and 5 assigned to species that are most abundant and secure.

The black-footed ferret was considered extirpated in South Dakota prior to reintroduction into the Conata Basin/Badlands site located in portions of Badlands National Park and Buffalo Gap National Grassland, Wall Ranger District. The second reintroduction in South Dakota began in 2000 on the Cheyenne River Reservation. A third reintroduction project began in 2004 on Rosebud Reservation. Reintroduction projects to date in South Dakota have the advantage of using black-tailed prairie dog habitat that is presently plague-free and that is distributed in large, densely populated colonies.

All black-footed ferret populations in South Dakota are the result of reintroductions and are classified by section 10(j) of the Endangered Species Act as "nonessential experimental" populations. This designation is described in the Final EIS on Blackfooted Ferret Reintroduction (USFWS, Contata Basin/Badlands, South Dakota - pp. 25-28). The purpose of the designation is to "relieve concerns of private landowners, Indian tribes, and other land managers by providing the flexibility to relocate blackfooted ferrets. The experimental population area also acts as a buffer zone to help keep reintroduced black-footed ferrets from migrating beyond the boundaries of the experimental population area where they would be classified as endangered. The designation also provides sufficient flexibility for biologists to manage the black-footed ferret population and existing habitat for optimum benefit of the population. The released animals and any wild-reared offspring would be part of the nonessential experimental population. This designation should facilitate landowner cooperation in these reintroduction efforts by easing the most prohibitive restriction in the ESA, specifically the "jeopardy" prohibition of Section 7(a)(2) on nonfederal lands. A nonessential experimental population designation would also assure landowners the reintroduction site would not be designated critical habitat - a designation landowners may perceive as restricting their land management prerogatives".

State law mandates management and recovery of black-footed ferrets, as well as other wildlife species, for SDGFP and the SD Department of Agriculture. SD Codified Law 34A-8-6 states: "The Department of Game, Fish and Parks and the Department of Agriculture shall perform those acts necessary for the conservation, management, protection, restoration, and propagation of endangered, threatened, and nongame species of wildlife". The black-footed ferret is a state endangered species.

<u>Strategy 4.2</u>: Determine inventory needs for black-footed ferrets as they relate to prairie dogs.

Progress toward objective:

Black-footed ferret populations resulting from reintroductions on the Conata Basin/Badlands site and Cheyenne River Reservation are presently being monitored with spotlight surveys and snowtracking surveys at a minimum. Other monitoring techniques have included reading implanted transponder chips and radio telemetry. An additional method of detecting movements has been through reports from adjoining landowners, particularly near the Conata Basin/Badlands site. As reintroduced populations expand beyond the designated experimental areas, cooperating agencies will need to determine monitoring strategies for black-footed ferret populations and address landowner concerns for actual and potential economic impacts to their livelihoods. An additional concern is the impact on soil and plant communities caused by high densities of prairie dogs concentrated in specific geographic areas.

<u>Strategy 4.3</u>: Incorporate conservation needs of black-footed ferrets into prairie dog management opportunities.

Progress toward objective:

Of special note is the direction given to black-footed ferret reintroductions by the late Governor George Mickelson and subsequent action by the South Dakota legislature noted in section III-A Relevant state statues and administrative rules. The issues of initial ferret reintroductions into South Dakota were so controversial that special conditions were placed on this effort. A major concern expressed by those living in the Conata Basin area was that the reintroduction of ferrets would eventually cause a subsequent increase in prairie dogs. File correspondence involving this issue indicates that as a condition of support for the reintroduction of black-footed ferrets, the State of South Dakota required that the prairie dog acreages remain between 8,000 and 12,000 acres. And if this acreage were to expand in the future, landowners should be provided compensation for any losses in revenue created by the expansion. Written assurances were received from the USFWS that this request would be honored and these acreage goals remain as the position of the State of South Dakota.

Although smaller prairie dog complexes may be considered for future black-footed ferret reintroductions, projects to date have occurred on large (>10,000 acres) prairie dog complexes. Therefore, commitments to maintain substantial prairie dog complexes on public and private lands in South Dakota will likely benefit reintroduced populations of black-footed ferrets. In addition, disease monitoring (Objective 3) will help detect prevalence of plague and canine distemper, diseases with serious ramifications for black-footed ferrets.

Specific to ongoing prairie dog control efforts on private land and potentially public land in the Conata Basin, steps are being taken avoid jeopardizing black-footed ferrets as much as possible. All prairie dog colonies with known or suspected ferrets are surveyed and any ferrets located are being_trapped and transferred to other locations as part of an accelerated ferret relocation program. The protocol as established by the black-footed ferret reintroduction program will be followed.

The prairie dog colonies impacted by this control effort are those outlined in Strategy 1.4d, dealing with the encroachment of prairie dog colonies from US Forest Service land onto private land in southwestern South Dakota.

Strategy 4.4: Investigate opportunities for cooperative conservation activities.

Progress toward objective:

This is an ongoing activity, and SDGFP has worked cooperatively with a number of entities on projects of mutual interest in the area of black-footed ferret conservation. A firmer commitment in terms of specific plans and concomitant funding will hopefully broaden SDGFP's ability to participate in future activities that benefit species such as black-footed ferrets.

Finally, the use of voluntary incentives for private lands in areas involved with blackfooted ferrets reintroduction areas will be made a high priority.

V-E. Public outreach

Objective 5: Use public involvement techniques to gather input.

<u>Strategy 5.1</u>: Establish South Dakota Prairie Dog Working Group

Progress toward objective:

The South Dakota Prairie Dog Working Group was formed as a citizens working group representing a cross section of interests to provide input in the development of a South Dakota Black-tailed Prairie Dog Management Plan.

On December 23, 1999 SD Secretary of Agriculture Darrell Cruea and SD Secretary of Game, Fish and Parks John Cooper invited 12 South Dakotans to participate on a citizen advisory group called the South Dakota Prairie Dog Working Group. The Working Group met for the first time on February 15, 2000, when ground rules and general agreements were reached under the facilitation of Donna Fjelstad of Coterie Consulting (Appendices 8 and 9). Personnel from state, federal, and tribal agencies and private organizations constituted resource personnel, who assisted the Working Group by providing technical information and advice (Appendix 10).

The Working Group met 9 times during 2000. Primary discussion topics during 2000 were prairie dog shooting regulations, alternatives to prairie dog designation as a statewide declared animal pest, techniques for determining current prairie dog acreage, strategies for providing balanced information in public outreach activities, and private landowner incentives. The Working Group completed its advisory function with the release of a draft management plan in November 2001.

A summary of the various public involvement activities used during the preparation of the management plan are included in a companion document (SDGFP and SD Dept. of Agriculture 2002). In addition, in the interim period while awaiting results of the aerial transect survey, SDGFP produced and circulated three progress reports. Progress reports included an overview of the potential federal listing and rationale for state prairie dog planning, a discussion of the transect population survey, and a discussion of prairie dogs and plague.

A second group of interested individuals met with SDGFP and the SD Department of Agriculture on February 27, April 7, and May 11, 2004 regarding the state management plan. The individuals were:

Richard Kjerstad or Don Kelly, representing the South Dakota Farm Bureau; Mark DeVries, representing the South Dakota Stockgrowers Association; Todd Mortensen, representing the South Dakota Cattlemen's Association; Marvin Jobgen, landowner in Conata Basin; Chris Hesla, representing the South Dakota Wildlife Federation; and Bob Paulson, representing The Nature Conservancy.

V-F. Evaluation of planning effort.

<u>Objective 6.</u> Use adaptive management method to evaluate progress of prairie dog planning effort and adjust as needed to accomplish program goals.

<u>Strategy 6.1.</u> Formulate interagency team to review progress toward meeting objectives at three-year intervals to coincide with population monitoring intervals.

<u>Objective 7</u>. Identify and implement management actions that provide environmentally sound habitat for a sustainable population of healthy prairie dogs acceptable to landowners and managers in the state of South Dakota.

<u>Strategy 7.1</u>. In order to provide environmentally sound habitats, the similarity index/range condition should be maintained at no less than a similarity index/range condition of 20% of the historic climax plant community, as described in the Natural Resources Conservation Service South Dakota State Technical Guide.

Literature Cited

Albertson, D. (pers. comm.) Badlands National Park, Interior, South Dakota.

Bailey, R. G., P. E. Avers, T. King, and W. H. McNab, editors. 1994. Ecoregions and subregions of the United States. U.S. Forest Service, Washington, DC.

Berdan, C. (pers. comm.) Bureau of Land Management, Belle Fourche, SD.

Biggins, D. E., B. J. Miller, L. R. Hanebury, B. Oakleaf, A. H. Farmer, R. Crete, and A. Dood. 1993. A technique for evaluating black-footed ferret habitat. Pages 73-88 *in* Proceedings of the symposium on the management of prairie dog complexes for the reintroduction of the black-footed ferret. U.S. Dept. of Interior, U.S. Fish and Wildlife Service Biological Report 13, Washington, DC.

Bly Honness, K. (pers. comm.) Turner Endangered Species Fund, Fort Pierre, SD.

Centers for Disease Control. 1996. Prevention of plague: recommendations of the Advisory Committee on Immunization Practices (ACIP). Morbidity and Mortality Weekly Report Vol. 45, No. RR-14. 15 pages.

Coughlin, P. (pers. comm.) South Dakota Department of Game, Fish and Parks, Pierre.

Gigliotti, L. M. 2002. Prairie dog shooting in South Dakota (2001). HD-8-02.AMS. South Dakota Department of Game, Fish and Parks, Pierre.

- Hall, E. R. 1981. Mammals of North America. John Wiley & Sons, Inc., New York, 2 Vols. (I: v + 1-600 + 90, II: v + 601-1181 + 90).
- Hansen, R. M. 1988. Chronology of prairie dog control operations and related developments in South Dakota. Pages 121-122 *in* Eighth Great Plains Wildlife Damage Control Workshop Proceedings, 28-30 April 1987, Rapid City SD. USDA Forest Service Gen. Technical Report RM-154.

Luce, R. 2003. A multi-state conservation plan for the black-tailed prairie dog, *Cynomys ludovicianus*, in the United States – an addendum to the Black-tailed Conservation Assessment and Strategy, November 3, 1999.

Luce, R. J., P. Gober, B. Van Pelt, and S. Grassel. 2001. A multi-state, range-wide approach to black-tailed prairie dog conservation and management. Trans. N. American Wildl. and Nat. Res. Conf. 66:464-479.

Martin, B. (Team Leader). 1999. Ecoregional conservation in the Northern Great Plains Steppe. Produced by Northern Great Plains Steppe Ecoregional Planning Team. TNC Montana Field Office, Helena.

Muenchau, B. (pers. comm.) Wind Cave National Park, Hot Springs, South Dakota.

Nickolas, A. (pers. comm.) South Dakota Department of Game, Fish and Parks, Pierre.

Paulson, B. (pers. comm.) The Nature Conservancy, Rapid City, South Dakota.

Phillips, M. (pers. comm.) Turner Endangered Species Fund, Gallatin Gateway, Montana.

Pugh, T. (pers. comm.) USDA Animal and Plant Health Inspection Service – Wildlife Service, Pierre, South Dakota.

Severson, K. E. and G. E. Plumb. 1998. Comparison of methods to estimate population densities of black-tailed prairie dogs. Wildlife Society Bulletin 26:859-866.

Sidle, J.G. 1999. PPS prairie dog patrol: GPS aerial surveys of dog towns. GPS World 10(9):30-35.

Sidle, J. G., D. H. Johnson, and B. R. Euliss. 2001. Estimated aerial extent of black-tailed prairie dog colonies in the Northern Great Plains. Journal of Mammalogy 82:928-936.

Sidle, J. G., D. H. Johnson, B. R. Euliss, and M. Tooze. 2002. Monitoring black-tailed prairie dog colonies with high-resolution satellite imagery. Wildlife Society Bulletin 30:405-411.

Smith, A. (pers. comm.) South Dakota Department of Game, Fish and Parks, Pierre.

Smith, V. J. 2001. Mammal distributions and habitat models for South Dakota. M.S. Thesis, South Dakota State University, Brookings.

South Dakota Department of Game, Fish and Parks and South Dakota Department of Agriculture. 2002. Summary of public involvement process used in South Dakota's state prairie dog management planning. Pierre, SD.

Streier, F. (pers. comm.) Bureau of Reclamation, Rapid City.

Svingen, D. (pers. comm.) USDA Forest Service, Grand River National Grassland, Bismarck, North Dakota.

Thompson, L. (pers. comm.) Yankton Agency, Bureau of Indian Affairs, Wagner, South Dakota.

- Truett, J. 2000. Grasslands conservation on Turner ranches: A ten-year plan to restore blacktailed prairie dog.
- U. S. Fish and Wildlife Service. 1999. Fed. Reg., Vol. 64, No. 57, March 25, 1999. Endangered and Threatened Wildlife and Plants; 90-day finding for a petition to list the black-tailed prairie dog as threatened. Pages 14424-14428. Dept. of the Interior, Washington, DC.
- U. S. Fish and Wildlife Service. 2000. Fed. Reg., Vol. 65, No. 24, February 4, 2000. Endangered and Threatened Wildlife and Plants; 12-month finding for a petition to list the black-tailed prairie dog as threatened. Pages 5476-5488. Dept. of the Interior, Washington, DC.
- U.S. Fish and Wildlife Service. 2004. Fed. Reg., Vol. 69, No. 159, August 18, 2004. Endangered and Threatened Wildlife and Plants; Finding for the Resubmitted Petition To List the Black-Tailed Prairie Dog as Threatened.
- Van Pelt, W. E. 1999. The black-tailed prairie dog conservation assessment and strategy final draft. Nongame and Endangered Wildlife Program. Arizona Game and Fish Department, Phoenix, Arizona.
- Williams, E. S., J. Cavender, C. Lynn, K. Mills, C. Nunamaker, and A. Boerger-Fields. 1991. Survey for diseases of carnivores in the Conata Basin/Badlands, South Dakota. Final report to South Dakota Game, Fish and Parks.
- Williams, E. S., J. Edwards, S. Anderson, C. Lynn, V. Welch, W. Edwards, and S. Dubay. 1996. Survey of carnivores for diseases at Conata Basin/Badlands, 1994. Pages 37-52 in Blackfooted ferret reintroduction: Year one completion report, Conata Basin/Badlands, South Dakota. McDonald, P. M., P. E. Marinari, and G. E. Plumb, eds. 1996. U.S. Forest Service, Wall, SD.
- Williams, E. S., J. Edwards, W. Edwards, A. McGuire, S. Dubay, S. Anderson, and P. Jaeger.
 1998. Survey of carnivores for diseases in the Conata Basin/Badlands black-footed ferret reintroduction site, 1996-1997. Final report to South Dakota Game, Fish and Parks.
- Wolbrink, G. A., J. A. Jenks, D. E. Hubbard, and R. W. Klaver. 2002. Feasibility of using landsat satellite imagery to monitor black-tailed prairie dog towns in western South Dakota. Final report to South Dakota Department of Game, Fish and Parks.

Appendix 1. South Dakota Department of Game, Fish and Parks Rodent Control Policy

DIRECT CONTROL

The Department of Game, Fish and Parks will provide "Direct Control," at no cost to the landowner, when rodents encroach on their private land from adjacent public land. Annual direct control will be the responsibility of the Department of Game, Fish and Parks upon receipt of a complaint.

TECHNICAL ASSISTANCE PROGRAM

The Department of Game, Fish and Parks will provide "technical assistance" to landowners in controlling large rodent colonies. Rodent infested lands, 160 acres or larger in size, will qualify for assistance from our field personnel. This will include equipment and manpower to supervise in both pre-bait and bait application. Landowners will be responsible for cost of bait material and will be required to do the bait application. Follow-up treatment and continued maintenance will also be the responsibility of the landowner.

EXTENSION CONTROL

The Department of Agriculture and Department of Game, Fish and Parks will jointly develop an "Extension Control" program. This will include the services of the county agent and local Weed and Pest Control boards. Educational programs as well as actual field demonstrations will be made available upon request. We will be able to show landowners proper bait application, timing of application, necessity for pre-baiting and desirable bait quality, all necessary for good, consistent control. This function will be for those who do not have a problem too large for them to handle themselves.

Appendix 2. SDGFP Commission action finalized on January 11, 2001 to establish a regulated prairie dog shooting season on public lands

GAME, FISH AND PARKS COMMISSION ACTION FINALIZATION

Prairie Dog Shooting Season Chapter 41:06:57

Commission Meeting Dates:

Proposal Public Hearing Finalization December 7-8, 2000 Pierre January 11-12, 2001 Pierre January 11-12, 2001 Pierre

COMMISSION PROPOSAL

Establish a prairie dog shooting season as follows:

Open unit: Statewide except Conata Basin* in the Buffalo Gap National Grasslands

Season: Closed beginning March 1, 2001, through April 30, 2001;

Open beginning May 1, 2001, through February 28, 2002, and June 15 through last day of February thereafter, except that landoperators** may shoot anytime on the land they own or operate. This is not in Conata Basin.

Daily and possession limits: No restrictions

Shooting hours: No restrictions

<u>License requirements</u>: Residents: Predator/varmint license, or Any resident hunting license or the furbearer license

> Nonresidents: Nonresident predator license, or Any nonresident hunting license

* Conata Basin is described as that portion of Buffalo Gap National Grassland east and south of Badlands National Park, north of Pine Ridge Indian Reservation, and west of the Jackson County line.

** Landoperator is a person, and immediate family residing with the person, who owns or operates land.

STAFF COMMENTS

Proposed changes from last year: Provision for prairie dog shooting restrictions as noted above.

Recommended changes from proposal:

- 1. Change season closure so that it would apply only to public lands, and also not allow lessees of public land to shoot prairie dogs on public lands during the closed period.
- 2. End the season closure in 2001 on June 14 rather than April 30.

SUPPORTIVE INFORMATION

The black-tailed prairie dog is presently a federal candidate species. The U.S. Fish and Wildlife Service has determined that the species is warranted for listing as a federal threatened species, but its listing is precluded by higher endangered species listing priorities within the Service. South Dakota has been working cooperatively with 10 other states within the present and historical range of the black-tailed prairie dog to promote retention of state management authority for this species. An identified area of vulnerability for state wildlife agencies is the failure of agencies to set limits on prairie dog shooting. During periods of prairie dog abundance, lack of limits was rarely questioned. However, the spread of sylvatic plague within the range of the black-tailed prairie dog and the increasing rarity of several species dependent on prairie dogs have drawn attention to the issue of prairie dog shooting regulations. This vulnerability is enhanced by the fact that state agencies, such as the SD Department of Game, Fish and Parks, have not monitored the prairie dog populations on which the agencies have allowed unlimited take.

Resident prairie dog shooters in South Dakota must have a predator/varmint license, a furbearer license, or any resident hunting license. Nonresident prairie dog shooters must have a nonresident predator license or any nonresident hunting license. Tribal fish and game departments have their own license requirements. Prairie dogs can presently be shot at any time of the year in any quantity, except for closed areas such as state parks, national parks, and black-footed ferret reintroduction sites.

In the northern Great Plains, black-tailed prairie dog pups typically first appear above ground from mid-May to early June, or about 5-8 weeks after birth. They are weaned a week or more after emergence. The pups are approximately half the size of adults at the time of emergence aboveground and reach adult size by fall. A closure from March through June 15 would provide protection for young of the year following their emergence from natal burrows.

Gigliotti (Prairie Dog Shooting in South Dakota {1999}, HD-4-00.SAM) estimated that 19% of residents and 2% of nonresidents shot prairie dogs in 1999. Resident shooting activity was highest from June through October with an average of 2.6 months of prairie dog shooting during 1999. A small sample size did not allow the same estimates for nonresidents. After sampling adjustments were made, Gigliotti estimated that 17,800 resident prairie dog shooters and 3,319 nonresidents harvested an estimated1.4 million prairie dogs in South Dakota in 1999.

Some landowners shoot prairie dogs on their lands or allow shooters access to their lands to keep their local towns in check and perhaps avoid use of toxicants. For this reason, the shooting closure would not apply to landowners shooting prairie dogs on their own property. Also, since some landowners have already booked prairie dog hunters for May and June, 2001, these months will not be closed to hunting in 2001 but will be closed through June 15 thereafter, along with the months of March and April.

Appendix 3. South Dakota species of management concern bill (S-64)

State of South Dakota

SEVENTY-SIXTH SESSION LEGISLATIVE ASSEMBLY, 2001

AN ACT

ENTITLED, An Act to authorize the Department of Agriculture and the Department of Game, Fish and Parks to designate certain species as needing both control and protection. BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF SOUTH DAKOTA:

Section 1. Terms used in this chapter mean:

(1) "Departments," the Department of Game, Fish, and Parks and the Department of Agriculture;

(2) "Species of management concern," a species designated by the secretary of the Department of Agriculture and the Game, Fish and Parks Commission as a species which shares the dual status of requiring both control and protection.

Section 2. The secretary of the Department of Agriculture and the Game, Fish and Parks Commission shall establish, by rules promulgated pursuant to chapter 1-26, a list of species of management concern. In determining whether a species should be listed, the following factors are to be considered:

(1) Whether the species or its habitat, or both are of value ecologically and aesthetically and at the same time burdensome for property owners; and

(2) Whether the species may warrant protection at times and control at others depending on the rate of reproduction, climate, disease, population viability, and other factors.

Section 3. Rules promulgated pursuant to section 2 of this Act shall be conducted jointly by both the Department of Agriculture and the Game, Fish and Parks Commission, including joint notice, publication, hearings, and decision-making.

Section 4. If so requested, the departments may render assistance and advice regarding species of management concern including:

(1) Providing information to the public and property owners regarding the species of management concern and its characteristics, ecosystem values, and habitat; and

(2) Providing assistance in the development of conservation plans or control projects regarding the species of management concern.

Section 5. The following acts or omissions constitute nuisances:

(1) Engaging in practices which allow or cause a species of management concern to encroach upon the property of another or injure or endanger the property of another; or

(2) Failure to control the species of management concern thereby causing encroachment on the property of another or causing injury to or endangering the property of another.

Section 6. In addition to any other remedies at law, the remedies set forth in chapter 21-10 apply to the nuisances described in section 5 of this Act. These remedies include civil action, including injunctive relief and recovery of damages, and abatement. Abatement, if ordered by the court, shall include reimbursement for any reasonable and necessary costs incurred in abating the nuisance.

Section 7. Designation as a species of management concern abrogates any previous designation as a weed or pest.

Appendix 4. South Dakota Game, Fish and Parks Commission Action to create species of management concern rules.

GAME, FISH AND PARKS COMMISSION ACTION FINALIZATION

| Species of Management Concern Chapter 41:15:01 | | | | | | | | |
|---|--|---|---------------------------------------|--|--|--|--|--|
| Commission Meeting Dates: | Proposal Public Hearing Finalization | May 3-4, 2001 June 7-8, 2001 June 7-8, 2001 | Custer State Park Lemmon Lemmon | | | | | |

COMMISSION PROPOSAL

Establish black-tailed prairie dogs (<u>Cynomys</u> <u>ludovicianus</u>) as a species of management concern.

STAFF COMMENTS

Proposed changes from last year: Establishment of this chapter and designation of black-tailed prairie dog as a species of management concern as noted above.

Recommended changes from proposal: None.

SUPPORTIVE INFORMATION

Legislation enacted this year allows the GFP Commission and the Secretary of the Department of Agriculture to designate a species as a "species of management concern". The legislation basically provides recognition that a species can have both positive and negative impacts and provides a process where both the GFP Commission and the Secretary of Agriculture, shall jointly add or remove a species to this list by formal rule. The law also more clearly defines how the species is considered nuisance as it applies to civil court action and removes the species from the list of noxious weeds and declared pests.

Prairie dogs clearly meet these categories. In cooperation with the Dept. of Agriculture, we are both working to make this a joint rule process.

Finally, this action will remove prairie dogs from the declared pest list while still providing a measure of protection for private landowners. Not having prairie dogs listed as a declared pest also helps with our efforts to better manage the species and hopefully assists in efforts to avoid listing the species as a federally threatened species.

Appendix 5. Administrative Rule to establish species of management concern list

CHAPTER 41:10:03 SPECIES OF MANAGEMENT CONCERN

Section 41:10:03:01 List of species of management concern.

41:10:03:01. List of species of management concern. The following species of animals, which are determined by the Department of Agriculture and the Game, Fish and Parks Commission to be valued ecologically and aesthetically, burdensome at times for property owners, and subject to and warranting protection and control at certain times, are deemed to be species of management concern: (1) Black-tailed prairie dog, *Cynomus Iudovicianus*.

Source: 28 SDR 24, effective August 28, 2001.

General Authority: SDCL 34A-8A-2.

Law Implemented: SDCL 34A-8A-2.

Appendix 6. South Dakota Codified Law 34A-8A (Species of Management Concern)

34A-8A-1. Definitions of terms in § § 34A-8A-2 to 34A-8A-7. Terms used in this chapter mean:
(1) "Departments," the Department of Game, Fish, and Parks and the Department of Agriculture;
(2) "Species of management concern," a species designated by the secretary of the Department of Agriculture and the Game, Fish and Parks Commission as a species which shares the dual status of requiring both control and protection.

34A-8A-2. Promulgation of list of species of management concern -- Factors considered. The secretary of the Department of Agriculture and the Game, Fish and Parks Commission shall establish, by rules promulgated pursuant to chapter 1-26, a list of species of management concern. In determining whether a species should be listed, the following factors are to be considered: (1) Whether the species or its habitat, or both are of value ecologically and aesthetically and at the same time burdensome for property owners; and

(2) Whether the species may warrant protection at times and control at others depending on the rate of reproduction, climate, disease, population viability, and other factors.

34A-8A-3. Joint promulgation of rules. Rules promulgated pursuant to § 34A-8A-2 shall be conducted jointly by both the Department of Agriculture and the Game, Fish and Parks Commission, including joint notice, publication, hearings, and decision-making.

34A-8A-4. Departments authorized to render assistance regarding species of management concern. If so requested, the departments may render assistance and advice regarding species of management concern including:

(1) Providing information to the public and property owners regarding the species of management concern and its characteristics, ecosystem values, and habitat; and

(2) Providing assistance in the development of conservation plans or control projects regarding the species of management concern.

34A-8A-5. Acts or omissions constituting nuisances. The following acts or omissions constitute nuisances:

(1) Engaging in practices which allow or cause a species of management concern to encroach upon the property of another or injure or endanger the property of another; or

(2) Failure to control the species of management concern thereby causing encroachment on the property of another or causing injury to or endangering the property of another.

34A-8A-6. Remedies for nuisances. In addition to any other remedies at law, the remedies set forth in chapter 21-10 apply to the nuisances described in § 34A-8A-5. These remedies include civil action, including injunctive relief and recovery of damages, and abatement. Abatement, if ordered by the court, shall include reimbursement for any reasonable and necessary costs incurred in abating the nuisance.

34A-8A-7. Abrogation of certain previous designations. Designation as a species of management concern abrogates any previous designation as a weed or pest.

34A-8A-8. Prairie dog management plan. The Department of Game, Fish and Parks and the Department of Agriculture are directed to develop a state prairie dog management plan. The plan shall formulate state management actions that will serve to prevent the prairie dog from being listed as a federal threatened or endangered species. If such plan or any agreement adopted pursuant to such plan contains provisions for incentive payments to private landowners for managing prairie dog habitat or restricts private landowner rights to use any means of controlling prairie dogs on their property, the plan or any agreement adopted pursuant to such plan shall be submitted to the South Dakota Legislature, in bill form, for approval, prior to it becoming effective.

Appendix 7. SDGFP Black-tailed Prairie Dog Control Program Guidelines

SOUTH DAKOTA BLACK-TAILED PRAIRIE DOG CONTROL PROGRAM GUIDELINES

February 2005

Purpose:

The purpose of this document is to provide guidance for field operations on prairie dog control in South Dakota starting in 2005. This is a related document to the South Dakota Black-tailed Prairie Dog Management Plan. The Management Plan is a strategic plan, not an operational plan as this document is.

Area of Coverage:

This document covers all prairie dog control in South Dakota performed by Game, Fish & Parks personnel. GFP does not have any authority to operate on any federal or tribal lands, and therefore this document does not address control issues on those land types.

Field Operations:

Game, Fish and Parks will continue to provide direct control of prairie dogs that have encroached from adjacent public lands onto private lands, as per SDCL 34A-8A-5 (Policy appears as Appendix 1).

Field operations are primarily focussed towards the livestock producers. Lands not in livestock production may be considered for this program, but will not receive first consideration for control work.

Prairie dog control efforts using pre-bait and zinc phosphide bait will address landowner complaints of black-tailed prairie dogs coming off public lands onto private lands. The control will be limited to private lands where prairie dog colonies originate and encroach from the adjoining public land.

Sequence of Events Upon Complaint:

- 1. Landowner contacts GFP about prairie dog encroachment off public land onto their private land.
- 2. GFP representative visits landowner and determines if control is warranted and what control options will be used.

A. First the GFP representative first determines if the prairie dog colony originated on the public or private land. If the colony originated on the private land, no control option will be offered.

B. If it is determined that the prairie dogs are encroaching from the public lands, the GFP representative will then decide if a non-lethal option exists

to alleviate the situation and if the non-lethal option is practical, effective, and efficient. The non-lethal option will be utilized if such an option exists and will solve the complaint if practical, effective, and efficient.

C. If it is determined that non-lethal control options cannot be used, the GFP representative will then use lethal control (usually zinc phosphide) and decide if GFP will provide control or if a commercial applicator will be employed to alleviate the complaint.

GFP control:

- 1. GFP representative and landowner fill out *Agreement for Control of Prairie dogs on Private Property* ADC form (Appendix 7A).
- 2. GFP representative provides control.

Commercial control:

- 1. GFP representative provides program description to landowner.
- 2. GFP representative and landowner fill out *Agreement for Control of Prairie dogs on Private Property* ADC form (Appendix 7A).
- 3. GFP representative estimates # of 'dogs (area and gross number).
- 4. Cost estimate derived from area of 'dog town(s) and a contract is prepared for that amount (Appendix 7B). Included in the contract are minimum performance criteria that must be met by commercial applicator to get full payment.
- 5. GFP representative contacts commercial applicator for poisoning and sign contract. Commercial applicators willing to perform prairie dog poisoning will be made available by the GFP Wildlife Damage Program Administrator (example list Appendix 7C, will be updated as needed). Choice of commercial applicators will be made by GFP Regional staff including, but not limited to, the Regional Supervisor and local GFP Extension Trappers.
- 6. Commercial applicator treats 'dogs and submits bill to GFP for work completed (25% of total contract amount this cost approximately represents the costs for pre-bait, bait, and an additional 10% of the total contract amount).
- 7. GFP pays commercial applicator partial payment.
- 8. GFP representative visits landowner and confirms that the minimum removal criteria (e.g., % dogs killed) was met (Appendix 7D), and approves the applicator's work by signing the contract a final time.
- 9. GFP pays commercial applicator remaining balance of bill.

For any contract determined not to meet the minimum performance criteria through the fault of the commercial applicator (i.e., no other agency personnel, private individuals, or environmental influence(s) caused the minimum performance criteria to not be met), complete written and picture proof will need to be collected and copies sent to GFP Regional office and the Wildlife Damage Program Administrator in Pierre. A letter will be sent to the commercial applicator by the Wildlife Damage Program Administrator indicating that the contract will not be paid in full and indicating the reason for the non-payment.

For those contracts where the minimum performance criteria were not met, the landowner's property will be treated for prairie dogs in a manner and at a time deemed most appropriate as determined by GFP Extension Trappers and Regional staff, while keeping GFP Pierre staff fully informed on further control work.

Agreement for Control of Prairie Dogs on Private Property

South Dakota Department of Game, Fish, and Parks Animal Damage Control Program

Division of Wildlife

| SECTION 1 (LANDOWNER - check appropriate box) <i>I</i> , the undersigned, hereby request and give my consent to the South Dakota Department of Game, Fish, and Parks (SDGFP) to use, upon lands owned, leased or otherwise controlled by me, the following methods and/or devices intended to control prairie dogs: |
|--|
| Technical Assistance: Private lands with prairie dog towns of 160 acres or larger in size qualify for technical assistance from SDGFP. This will include: 1) at least one SDGFP employee to provide technical assistance and flagging of the prairie dog town during pre-baiting and zinc phosphide baiting operations as weather, grass conditions, and work loads permit; 2) four-wheel ATVs (if available); and 3) mountable bait dispensers (if available). |
| Landowner will purchase the pre-bait and zinc phosphide bait, and have on location. These may be purchased from the South Dakota Department of Agriculture or the local County Weed and Pest board. Landowner will provide persons to operate ATVs for pre-baiting and certified applicators for the baiting operations, and will be available within the agreed time frame to facilitate coordination of the project. Landowner is responsible for future maintenance of the prairie dog town to acceptable levels. |
| Direct Control by GFP: Using zinc phosphide treated bait, the Department of Game, Fish, and Parks will provide direct control at no cost to the landowner, when prairie dogs encroach on their private land from adjacent public lands. |
| Direct Control by a Commercial Applicator: Using zinc phosphide treated bait, the Commercial Applicator will provide direct control at no cost to the landowner, when prairie dogs encroach on their private land from adjacent public lands. <i>This option requires a minimum control performance of a 90% population reduction.</i> |
| |
| SECTION 2 (LANDOWNER - please print and sign) In consideration of these understandings, I, the undersigned landowner, agree to take reasonable precautions to prevent injury to livestock and other domestic and wild animals other than those listed in Section 1; to assume responsibility for any injury to my property, or to property under my control, not due to the negligence of the South Dakota Department of Game, Fish, and Parks; and to warn persons I authorize to enter upon such lands of the hazards. |
| I, the undersigned, will inform the Extension Trapper, by written notice, of any change in land ownership or leased land, and agree to the location of control and the amount of acres listed below. |
| No. of acres to control: Location of prairie dog town (s): |
| Landowner ID: Phone: () |
| Name: County: Last First MI County: |
| Address: City State Zip |
| Signature: Date: |

This agreement may be revoked by any party by a 30-day written notice.

REGION'S COPY – white COOPERATOR'S COPY – yellow GFP REPRESENTATIVE'S COPY – pink Rev. 2/2005

STATE OF SOUTH DAKOTA SERVICES CONTRACT/AGREEMENT DEPARTMENT OF GAME, FISH & PARKS

<u>Phone</u>

(CONTRACTOR)

Department of Game, Fish & Parks 523 East Capitol Pierre, South Dakota 57501 (STATE)

It is agreed that all work done will be in accordance with the standards established by the State of South Dakota.

1. CONTRACTOR will bill the STATE at the following rates for services and equipment performed at the private property (properties) described as:

for services to be performed:

and shall commence on the date of the STATE signature of this Contract and will end no later than 6 months after the STATE signature.

WITNESSETH: The CONTRACTOR agrees to utilize appropriate equipment and abide by all South Dakota moving vehicle and labor laws. The CONTRACTOR must furnish a copy of their current and valid South Dakota Commercial Pesticide Applicators License. The CONTRACTOR shall provide any persons required to assist the CONTRACTOR to fulfill the terms of the Contract. All contract work will be under the control of the STATE in all aspects.

| The full contract amount is \$ | in total expenditures during the term of this Contract. Will the |
|--|---|
| CONTRACTOR use state supplies of | r facilities? YES \square NO \square . If yes, specify the conditions under which |
| state supplies or facilities will be use | d: |
| The full contract amount is determined | ed by: |
| \Box Acres to be Treated:* | Charge per Acre: |
| | * Change way A stime Manual |

Mounds to be Treated: ______* Charge per Active Mound: ______
Pounds of Pesticide Applied: ______* Charge per Pound of Pesticide: ______
Hours to Complete Work: ______* Charge per Hour: ______

STATE agrees to a partial payment to the CONTRACTOR after pesticide application, at 25% of the total contract amount. STATE agrees to a remainder payment to the CONTRACTOR after pesticide application and upon minimum removal success of at least 90% of the prairie dogs in area(s) described by Contract, as determined by STATE representative, at 75% of the total contract amount.

All pesticide applications conducted under this Contract will take place only on areas as directed by the local Extension Trapper(s) or the Regional Game Manager. Any animals collected as a result of actions conducted under this agreement shall remain the property of the STATE, unless otherwise agreed to by the STATE

The CONTRACTOR, at all times during the term of this Contract, shall obtain and maintain in force insurance coverage of the types and with the limits as follows:

2. Commercial Liability Insurance: The CONTRACTOR shall maintain occurrence based commercial general liability insurance or equivalent form with a limit of not less than \$ 500,000 for each occurrence. If such insurance contains a general aggregate limit, it shall apply separately to this Contract or be no less than

two times the occurrence limit.

Business Automobile Liability Insurance: The CONTRACTOR shall maintain automobile liability insurance or equivalent form with a limit of not less than \$ 300,000 for each accident. Such insurance shall include coverage for owned, hired, and non-owned vehicles.

Workers' Compensation Insurance: The CONTRACTOR shall procure and maintain Workers' Compensation and employer's liability insurance as required by South Dakota law.

Certificates of Insurance: Before beginning work under this contract, the CONTRACTOR shall furnish the STATE with properly executed Certificates of Insurance which shall clearly evidence all insurance required in this Contract and provide that such insurance shall not be canceled, except on 30 days' prior written notice to the STATE. CONTRACTOR shall furnish copies of insurance policies if requested by the STATE.

CONTRACTOR agrees to report to the STATE any event encountered in the course of performance of this Contract which results in injury to the person or property of third parties, or which may otherwise subject consultant or the State to liability. CONTRACTOR shall report any such event to the STATE immediately upon discovery. CONTRACTOR'S obligation under this section shall only be to report the occurrence of any event to the STATE and make any other report provided for by their duties or applicable law. CONTRACTOR'S obligation to report shall not require disclosure of any information subject to privilege or confidentiality under law (e.g. attorney/client communications). Reporting to the STATE under this section shall not excuse or satisfy any obligation of CONTRACTOR to report any event to law enforcement or other entities under the requirements of any applicable law.

- 3. The State of South Dakota requires that all CONTRACTORS, vendors, and supplies, <u>employing fifteen or</u> <u>more persons</u>, doing business with any State agency, department, or institution, place on file with the STATE a statement of Affirmative Action that said CONTRACTOR does not discriminate in its employment practices with regard to race, religion, age, sex, national origin or disability. CONTRACTOR employs fifteen or more persons: YES □ NO □. (If yes, statement of Affirmative Action is to be attached to this Contract).
- 4. CONTRACTOR agrees to hold harmless and indemnify the State of South Dakota, its officers, agents and employees, from and against any and all actions, suits, damages, liability or other proceedings which may arise as the result of performing services hereunder. This section does not require CONTRACTOR to be responsible for or defend against claims or damages arising solely from errors or omissions of the STATE, its officers, agents or employees.

This Contract is nonexclusive in character, and the STATE shall retain the right to contract for the same or similar services with other persons or entities as it may see fit in its sole and uncontrolled discretion.

5. CONTRACTOR may not use subcontractors to perform the services described herein without the express prior written consent of the STATE. The CONTRACTOR will include provisions in its subcontracts requiring its subcontractors to comply with the applicable provisions of this Contract, to indemnify the STATE, and to provide insurance coverage for the benefit of the STATE in a manner consistent with this Contract. The CONTRACTOR will cause its subcontractors, agents, and employees to comply with applicable federal, state and local laws, regulations, ordinances, guidelines, permits and requirements and will adopt such review and inspection procedures as are necessary to assure such compliance.

- 6. While performing services hereunder, CONTRACTOR is an independent contractor and not an officer, agent, or employee of the State of South Dakota.
- 7. CONTRACTOR will comply with all federal, state, and local laws, regulations, ordinances, guidelines, permits and requirements applicable to providing services pursuant to this contract, and will be solely responsible for obtaining current information on such requirements. The CONTRACTOR and any assisting persons must comply with all pesticide label restrictions, and will not disperse pesticide using broadcast applicators or other implements that do not place the pesticide according to label restrictions.
- 8. This Contract shall be governed by and construed in accordance with the laws of the State of South Dakota. Any lawsuit pertaining to or affecting this contract shall be venued in Circuit Court, Sixth Judicial Circuit, Hughes County, South Dakota.
- 9. This Contract can be terminated upon thirty (30) days written notice by either party. In the event the CONTRACTOR breaches any of the terms or conditions hereof, this Contract may be terminated by the STATE at any time with or without notice. If termination for such a default is effective by the STATE, any payments due to CONTRACTOR at the time of termination may be adjusted to cover any additional costs to the STATE because of CONTRACTOR'S default. Upon termination the STATE may take over the work and may award another party a contract to complete the work under this Contract. If after the STATE terminates for a default by a CONTRACTOR it is determined that CONTRACTOR was not at fault, then the CONTRACTOR shall be paid for eligible service rendered and expenses incurred up to the date of termination.
- 10. This Contract may not be assigned without express prior written consent of the STATE. The Contract may not be amended except in writing, which writing shall be expressly identified as a part hereof, and be signed by an authorized representative of each of the parties hereto.
- 11. This Contract depends upon the continued availability of appropriated funds and expenditure authority from the Legislature for this purpose. If for any reason the Legislature fails to appropriate funds or grant expenditure authority, or funds become unavailable by operation of law or federal funds reductions, this Contract will be terminated by the STATE. Termination for this reason is not a default by the STATE nor does it give rise to a claim against the STATE.
- 12. In the event that any court of competent jurisdiction shall hold any provision of this Contract unenforceable or invalid, such holdings shall not invalidate or render unenforceable any other provision hereof.
- 13. All other prior discussions, communications and representations concerning the subject matter of this Contract are superseded by the terms of this Contract, and except as specifically provided herein, this Contract constitutes the entire agreement with respect to the subject matter hereof.
- 14. Any notice of other communications required under this Contract shall be in writing and sent to the address set forth above. Notices shall be given by and to Art Smith, Wildlife Damage Management Program Administrator on behalf of the STATE, and by _______, on behalf of the CONTRACTOR, or such authorized designees as either party may from time to time designate in writing. Notices or communications to or between the parties shall be deemed to have been delivered when mailed by first class mail, provided that notice of default or termination shall be sent by registered or certified mail, or, if personally delivered, when received by such party.
- 15. The STATE agrees to make payment(s) to the CONTRACTOR upon satisfactory completion of the projects and receipt of billing for project(s) on a normal monthly billing cycle. The CONTRACTOR is eligible for

the 75% remainder payment by meeting the minimum removal criteria, where the minimum removal criteria was determined by:

Description of area where prairie dog counts are taken:

Pre-poisoning estimate of prairie dogs: Post-poisoning estimate of prairie dogs: Kill Percentage:_____. The minimum removal criteria WAS met as indicated by the signature of STATE representative: The minimum removal criteria WAS NOT met as indicated by the signature of STATE representative: In witness hereto and with authority to do so, the parties signify their agreement by affixing their respective signatures hereto. (Applicator) (Director of Wildlife) Date_____ Date_____ CONTRACTOR Social Security Number or Employer ID: STATE coding: Center _____ Account: _____ Project: _____ **REVEIWED BY:** _____ Field Manager (Signature) Phone number

Form effective date - 06/30/2004

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| A U | U = I | | / () |

| lastname | firstname | company | address | city | st | zip | work | home | charge for work | area of work |
|------------|------------------|--|---------------------------|------------|----|----------------|-------------------|---------------------------------|--|---|
| Bauer | Winfred | Butte County Weed & Pest Department | 19335 SD Hwy 79 | Vale | SD | 57788 | 456-2971 | 456-1313 | \$5/acre | Butte |
| Beug | Kenneth | Black Hills Pest Control | PO BOX 231 | Sturgis | SD | 57785 | 347-0092 | | \$5.50 to \$8.00 depending on area/size | west central & north west SD |
| Canham | Andrew | Mid Dakota Vegetation Management | 35920 Canham Pl | Miller | SD | 57362 | 530-8089 | 853-3287 | \$8/acre | statewide |
| Cook | Leroy | H & C Prairie Dog Controllers | PO Box 1074 | Mission | SD | 57555- 1074 | 856-2732 | 747-2646 | \$8/acre | west river |
| Deckert | Don | D & L Sales | HC 54 Box 3 | Porcupine | SD | 57772 | 288-1919 | | <pre>\$1/active hole with pills; \$0.50/hole with zinc. Towns hit twice</pre> | statewide |
| Griffin | M (Walt) | Custer Co. Weed/Pest Dept. | 1022 Canal | Custer | SD | 57730- 2402 | 673-5680 | | \$6/acre | Custer |
| Guffey | Scott | Pennington Co. Weed & Pest | 3607 S. Hwy 79 | Rapid City | SD | 57701 | 394-5320 | | <pre>\$8/acre; contact only after first checking with commercial applicators, do not want to compete with private enterprise</pre> | Pennington |
| Hauck | David | | HC1 Box 60 | Martin | SD | 57551 | 685-2048 | | nothing given | Bennett, Shannon, w. Todd, Jackson, e. Fall River, s. Penington |
| Hitchcock | Wes | Wild Wes's Pest Control | HC 13 Box 410 | Sparks | NE | 69220 | 842-5665 | (402) 376-1743 | \$5/acre and up | statewide |
| Hockenbary | Larry | Larry's Pest | 708 W B | Valentine | NE | 69201 | (402) 376-3274 | (402) 376-4550 | \$5/acre >100 acres of town, \$6/acre <100 | statewide |
| Jagim | Nathan | Meade Co. Weed & Pest | 1425 Sherman St. | Sturgis | SD | 57785 | 490-1964 | (CEII) | \$9/acre | Meade |
| Kanable Sr | James | | 267 lst st. NE, Box 46 | Mound City | SD | 57646- 0046 | 955-3351 | jekanable @valleyte l net | ?? | Corson, Dewey, Walworth, ?? |
| Lamb | Duane & Tracy | Lamb Pest Control | PO Box 87 | Kilgore | NE | 69216- 0087 | (402) 966-2148 | (402) 376-6678; 376-5606 | \$5/acre >100 acres, \$6/acre <100 acres | statewide |
| Larson | George | Dinosaur Exterminato r | PO Box 956 | Wagner | SD | 57380- 0956 | 384-3208 | | \$0.75/active hole - 90% kill guarantee | statewide |

| lastname | firstname | company name | address | city | st | zip | work phone | home phone | charge for work | area of work |
|----------|-----------|--|-----------------------|------------------|----|----------------|--------------------|--------------------|--|--|
| Link | John | Lyman Co. Spraying Service | PO Box 526 | Presho | SD | 57568- 0526 | 895-2618 | <u></u> | \$7/acre+ bait or \$25/hour +bait | Haakon, Mellette, Lyman, Stanley, Jones, Jackson |
| Maize | Ray | | PO Box 108 | Philip | SD | 57567- 0108 | 859-2657 | 859-3412 | going rate | area close to Haakon |
| Miller | Fred | | 36643 244 St | Kimball | SD | 57355 | 778-6658 | | depends on density of the town- can walk but cannot use 4- wheeler because only has 1 arm that works | Brule, Aurora |
| Pascoe | Nicholas | | PO Box 487 | Pierre | SD | 57501 | 222-2167 (cell) | 852-3531 | \$15/acre | statewide |
| Pazour | Kenneth | Hyde Co Weed | PO Box 101 | Highmore | SD | 57345- 0101 | 852-2515 | 852-3197 | \$35/acre plus poison oats | Hyde |
| Peterson | Jim | Ag Vantage Pest & Predator | PO Box 14 | Kilgore | NE | 69216- 1800 | (402) 996-2066 | | \$12-15/acre, willing to negotiate | statewide |
| Schomp | Judd | Mid Dakota Vegetation Manatement | 35271 238th St | Pukwana | SD | 57370 | 870-0566 | 870-0695 | \$8/acre | statewide |
| Shoun | Bobby | | 20963 Oxford Pl | New Underwood | SD | 57761 | 985-5937 | | \$8.75 | 5 Meade, Pennington, maybe others |
| Stangle | Leo | Gopher Choker | PO Box 24 | Scenic | SD | 57780- 0024 | 993-3137 | | <pre>\$6/acre or \$4/acre if materials furnished. Amount of acres will affect price.</pre> | statewide |
| Stangle | David | | 20941 Ash Creek Rd | Philip | SD | 57567 | 859-3581 | | \$6/acre | e. Pennington, Haakon, Shannon, Jackson, e. Meade, Bennett, Jones, Stanley, Mellette, Ziebach |
| Stangle | Frank | Sonny Stangle | 22300 Hwy 34 | Milesville | SD | 57553 | 544-3285 | | \$6/acre or \$9/lb of poison incl. pre-bait | e. Pennington, e. Meade, Haakon, Ziebach, Stanley, Jackson, Jones, Hughes, Sully |
| Webster | Duane | | PO Box 323 | Hermosa | SD | 57744- 0323 | 255-4213 | 391-4734 (cell) | \$7-10/acre depending on number of dogs, also mileage from | Custer, Fall River, or where needed |
| Wicks | Tom | | PO Box 303 | Faith | SD | 57626- 0303 | 645-9403 | | Hermosa \$7.50-8/acre depending on gas price | statewide |

Minimum Removal Criteria

The killing technique to be used for this program is zinc phosphide. However, other poisons exist and their use over the zinc phosphide will be determined by the GFP trapper under any guidance provided by the Regional Supervisor and/or Game Manager.

The Minimum Removal Criteria is determined by the percentage of prairie dogs killed, which is set at 90% for this program. To determine the percentage of prairie dogs killed, 2 separate visits by GFP representatives must be made to the treatment site; before poisoning and soon after poisoning.

Visit 1:

Pre-poisoning, the total number of prairie dogs in a specific area must be estimated. This is to be done by first selecting a definable area (quarter field, paced-out rectangle, area between 2 roads, etc.). After the area has been selected, the observer sits and counts the total number of prairie dogs in that area. This count should only take one-half hour, and the total number of prairie dogs observed and a short description of the definable area should be entered on the final page of the commercial applicator's contract.

This visit can be done when the Agreement for Control of Prairie Dogs on Private Property form (Appendix B) is filled out with the landowner.

Visit 2:

Post-poisoning, the total number of surviving prairie dogs must be estimated. This visit should be done within 2 days of the poisoning for a couple of reasons. First, there is less time for prairie dogs to immigrate into the area from any nearby colonies. Also, the sooner the 2nd visit is done, the sooner the commercial applicator can get full payment if the 90% kill rate was met or exceeded. This visit should also be done as close to the same time during the day and under the same weather conditions as the 1st visit. The GFP representative should go to the same area and sit at the same point as the 1st visit and count the total number of prairie dogs in the defined area. This count should also only take one-half hour, or less if the representative is certain all animals have been counted.

The kill percentage is then calculated by:

(total dogs pre-poison) – (remaining dogs post-poison)

----- X 100

(total dogs pre-poison)

The post-poison count and kill percentage should be entered on the final page of the commercial applicator's contract.

If this number is equal to or greater than 90.0, the Minimum Removal Criteria has been met.

If the kill percentage is less than 90.0, the Minimum Removal Criteria has not been met. If this is the case, pictures must be taken and attached to the commercial

applicator's contract (Appendix C). The GFP Regional Supervisor and WDM Program Administrator also must be notified immediately that the minimum performance criteria was not met for the specific contract.

Appendix 8. Ground rules and general agreements of South Dakota Prairie Dog Working Group

GROUND RULES

- 1. Press releases will be agreed upon by the group.
- 2. There will be no individual or individual group statements.
- 3. There will be respect for individual and individual group opinions.
- 4. The group will operate from a consensus model with a "set aside" for serious conflict issues.
- 5. The emphasis is on the work group itself and staff will serve primarily as resources.
- 6. It is understood that our mission is to provide input and recommendations and that our results go to the Secretaries of the Departments of Game, Fish and Parks and Agriculture and ultimately the Governor for the final say.
- 7. The Facilitator, Donna Fjelstad, is in charge.

GENERAL AGREEMENTS:

- 1. The individuals present will constitute the core group of the "Statewide Prairie Dog Working Group."
- 2. Focus will be on ALL prairie dogs in the state regardless of residence.
- 3. There will be continuation of invitation and information to the tribes.
- 4. Others may be included for dissemination of information or as they are invited and choose to participate in the sharing of information. Those groups include: Tribes (Standing Rock, Cheyenne River, Lower Brule, Crow Creek, Rosebud and Pine Ridge), US Fish and Wildlife Service, USDA Forest Service, USDI Bureau of Indian Affairs, USDI Bureau of Land Management, USDI Park Service, USDI Bureau of Reclamation, South Dakota School & Public Lands.
- 5. While the next meeting needs to be held in Pierre, there is a need for discussion and consideration of other locations including somewhere near prairie dog habitat.
- 6. A time (thirty minutes) should be allowed for public comment prior to each PDWG meeting.

Appendix 9. Membership of South Dakota Prairie Dog Working Group

Leonard Benson Pioneer Coop Grazing District HC 56 Box 65A Oral SD 57766

Don Fletcher SD Weed and Pest Commission PO Box 631 32998 244th St Reliance SD 57569 Janet Parker Varmint Hunters Assn. PO Box 759 Pierre SD 57501

Bob Paulson The Nature Conservancy 8100 Sheridan Lake Rd Rapid City SD 57702

Chris Hesla SD Wildlife Federation Box 7075 Pierre SD 57501

Dan Hubbard SD Chapter, Wildlife Society 47913 US Hwy 14 White SD 57276 Skee Rasmussen SD Grassland Coalition HC 76 Box 33 Belvidere SD 57521

Dave Schmidt USDA NRCS Federal Bldg 200 4th St SW Huron SD 57350 Appendix 10. Resource Staff for South Dakota Prairie Dog Working Group

| Denne I Fieleted | Fileer Devid Otvikel |
|--------------------------------|-------------------------------|
| Donna J. Fjelstad | Elleen Dowd Stukel |
| Coterie Consulting | SD Game, Fish and Parks |
| Box 358 | 523 E Capitol |
| Fort Pierre, SD 57532 | Pierre SD 57501 |
| Kevin Fridley | Larry Gigliotti |
| SD Dept. of Agriculture | SD Game, Fish and Parks |
| 523 E Capitol | 523 E Capitol |
| Pierre SD 57501 | Pierre SD 57501 |
| Andy Lindbloom | George Vandel |
| SD Game. Fish and Parks | SD Game. Fish and Parks |
| 523 E Capitol | 523 E Capitol |
| Pierre SD 57501 | Pierre SD 57501 |
| George Williams | Ron Fowler |
| SD Dept. of Agriculture | SD Game. Fish and Parks |
| 523 E Capitol | 523 E Capitol |
| Pierre SD 57501 | Pierre SD 57501 |
| Chuck Berdan | Barry Jennings |
| Bureau of Land Momt | SD School & Public Lands |
| 310 Boundun | 500 E Capitol |
| Belle Fourche, SD 57717 | Pierre SD 57501 |
| Pete Coher | Barbara Muenchau |
| | Wind Cave National Park |
| 420 S. Carfield Suite 400 | DD1 Dox 100 |
| AZU S. Galileiu, Suite 400 | Hat Springs SD 57747 |
| Dill Dorm | Hot Springs, SD 57747 |
| Dill Felly | Creat Diaina Nati Creasianda |
| Netl Forget | Great Plains Nati. Grassianus |
| Nati. Forest | USDA Forest Service |
| USDA Forest Service | 125 N Main Street |
| PO Box 425 | Chadron, NE 69337 |
| Wall, SD 57790-0425 | |
| Dan Svingen | Doug Albertson |
| Dakota Prairie Grasslands | Badlands National Park |
| USDA Forest Service | PO Box 6 |
| 240 West Century Avenue | Interior, SD 57750 |
| Bismarck, ND 58503 | |
| Kristy Bly Honness | Diane Mann-Klager |
| Turner Endangered Species Fund | Bureau of Indian Affairs |
| PO Box 1118 | 115 Fourth Ave. SE |
| Fort Pierre, SD 57532 | Aberdeen, SD 57401 |
| Trudy Ecoffey | Havley Dikeman |
| InterTribal Bison Cooperative | Prairie Momt. Program |
| 1560 Concourse Drive | Chevenne River Sioux Tribe |
| Rapid City SD 57703 | PO Box 590 |
| | Fadle Butte SD 57625 |
| | Lagie Dulle, OD JI 025 |