

**CANDIDATE AND LISTING PRIORITY ASSIGNMENT FORM**

**SCIENTIFIC NAME:** *Cynomys ludovicianus*

**COMMON NAME:** Black-tailed prairie dog

**LEAD REGION:** Region 6

**INFORMATION CURRENT AS OF:** March 18, 2002

**STATUS/ACTION:**

New candidate

Continuing candidate

Non-petitioned

Petitioned - Date petition received: July 31, 1998

90-day positive - FR date: March 25, 1999

12-month warranted but precluded - FR date: February 4, 2000

Is the petition requesting a reclassification of a listed species?

Listing priority change

Former LP:

New LP:

Date species first became a candidate: February 4, 2000

Candidate removal: Former LP:  (Check only one reason)

A - Taxon more abundant or widespread than previously believed or not subject to a degree of threats sufficient to warrant issuance of a proposed listing or continuance of candidate status.

F - Range is no longer a U.S. territory

M - Taxon mistakenly included in past notice of review.

N - Taxon may not meet the Act's definition of "species."

X - Taxon believed to be extinct.

**ANIMAL/PLANT GROUP AND FAMILY:** Mammal, *Sciuridae*

**HISTORICAL STATES/TERRITORIES/COUNTRIES OF OCCURRENCE:** Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Wyoming, Canada, Mexico

**CURRENT STATES/TERRITORIES/COUNTRIES OF OCCURRENCE:** Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Wyoming, Canada, Mexico

**LEAD REGION CONTACT:** Susan Linner, (303) 236-7400, ext. 279

**LEAD FIELD OFFICE CONTACT:** Pierre, SD  
Pete Gober, (605) 224-8693, ext. 24

**INTRODUCTION:** This review presents new information that we have received during approximately the past 12 months and reevaluation of previously acquired information regarding the black-tailed prairie dog. This is the second annual candidate assessment since publication of the 12-month Finding (U.S. Fish and Wildlife Service 2000) on February 4, 2000. The first annual candidate assessment was completed February 7, 2001.

**BIOLOGICAL INFORMATION:** Some additional information regarding biological information related to the black-tailed prairie dog has been obtained since the previous candidate assessment. The following is a brief summary of currently available information.

There are five species of prairie dogs in North America. They are rodents within the squirrel family (*Sciuridae*) and include the black-tailed prairie dog, the white-tailed prairie dog (*Cynomys leucurus*), the Gunnison's prairie dog (*C. gunnisoni*), the Utah prairie dog (*C. parvidens*), and the Mexican prairie dog (*C. mexicanus*) (Pizzimenti 1975). The Utah and Mexican prairie dogs are currently listed as threatened (49 FR 22339) and endangered (35 FR 8495), respectively. Generally, the black-tailed prairie dog occurs east of the other four species in more mesic habitat. Based upon the information currently available, the Service concurs with Pizzimenti's (1975) assessment of the species as monotypic.

The Endangered Species Act directs the Service to consider a species' status in foreign countries as well as in the United States. In Canada, the black-tailed prairie dog has been considered vulnerable by the Committee On the Status of Endangered Wildlife in Canada (COSEWIC) since 1978 due to its restricted distribution. Its status was recently reevaluated and remains vulnerable (COSEWIC 1998). In Mexico, black-tailed prairie dog populations have been reduced, largely due to control efforts and agricultural conversion (Ceballos et al. 1993) and the species is considered threatened (SEMARNAP 1994).

Black-tailed prairie dogs are diurnal, burrowing animals. Historically, they generally occurred in large colonies that contained thousands of individuals, covered hundreds or thousands of acres, and extended for miles (Bailey 1905). At present, most colonies are much smaller. Groups of colonies comprise a complex. Coloniality offers an effective defense mechanism by aiding in the detection of predators and by deterring predators through mobbing behavior. It increases reproductive success through cooperative rearing of juveniles and aids parasite removal via shared grooming.

However, coloniality also promotes the transmission of disease, which can significantly suppress populations (Biggins and Kosoy 2001, Hoogland 1995, Olsen 1981). Accordingly, disease may play a major role in the population dynamics of the species. Black-tailed prairie dogs have little immunity to sylvatic plague, a disease that has only been in North America for approximately 100 years (Biggins and Kosoy 2001, Eskey and Haas 1940). Accordingly, the species has not evolved genetic or population mechanisms sufficient to ensure its persistence (U.S. Fish and

Wildlife Service 2000). Plague currently occurs in most of the species' range and could spread into the remainder of its range (Cully and Williams 2001). However, recent information suggests that black-tailed prairie dogs may not be as vulnerable to this disease in some situations as previously thought (see discussion under Factor C).

Black-tailed prairie dogs are not prolific in comparison to many other rodents. Several biological factors determine the reproductive potential of the species. Females usually do not breed until their second year, live 3-4 years, and produce only a single litter, usually 4-5 pups, annually (Hoogland 1995, Hoogland 2001, King 1955, Knowles and Knowles 1994). Therefore, one female may produce 0-20 young in its lifetime. Nevertheless, the species is capable of rapid population increases subsequent to significant reductions (Seery, U.S. Fish and Wildlife Service, in litt. 2001).

The historic range of the black-tailed prairie dog included portions of 11 States, Canada, and Mexico. Today it occurs from extreme south-central Canada to northeastern Mexico and from approximately the 98<sup>th</sup> meridian west to the Rocky Mountains. The species is currently present in 10 States including: Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. It is extirpated in Arizona. Significant range contractions have occurred in the southwestern portion of the species' range in Arizona, western New Mexico, and western Texas and in the eastern portion of the species' range in Kansas, Nebraska, Oklahoma, South Dakota and Texas. These range contractions, largely due to habitat destruction through cropland development in the east (Black-footed Ferret Recovery Foundation, in litt. 1999) and through conversion of grasslands to desert shrublands in the southwest (Pidgeon et al. 2001), represent approximately 20 percent of the species' original range. Only a few individuals, or none at all, remain in these areas (see discussion under Distribution, Abundance, and Trends). The species is absent from a significant portion of its historic range, both peripheral and interior, despite perceptions to the contrary engendered in part by its conspicuous life history, e.g., its diurnal behavior, its modifications to the landscape, and its persistence in small remnant populations across much of its former range.

Approximately 66 percent of black-tailed prairie dog range in the United States is affected by sylvatic plague (Black-footed Ferret Recovery Foundation, in litt. 1999), approximately the western two-thirds of the species' range. Another important factor which has affected the species historically is the conversion of rangeland to cropland. Conversion of the native prairie to cropland has largely progressed across the species' range from east to west, with the more intensive agricultural use in the eastern portion of the species' range. The Black-footed Ferret Recovery Foundation (in litt. 1999) evaluated the amount of habitat (grass/shrub lands) currently available to the species. In the plague-free portion of the species' range (34 percent), less than 33 percent of the land is available to the species as non-cropland. Therefore, only approximately 10 percent of the black-tailed prairie dog range is both plague-free and currently suitable (i.e., not tilled). Most of this suitable habitat and other habitat modified by the presence of disease is unoccupied at present. The 12-month Finding stated that "the majority of plague-free, suitable range occurs in South Dakota." A more accurate statement is that more plague-free, suitable

range occurs in South Dakota than in any other State within the historic range of the species.

### Distribution, Abundance, and Trends

Some recent statewide estimates of black-tailed prairie dog occupied habitat provided by State agencies since the previous candidate assessment were larger than some similar estimates reported in the 12-month Finding. However, the importance of these differences is difficult to interpret given--(1) the difficulty of accurately determining the amount of occupied habitat extant and the consequent variability and accuracy of various estimates, (2) the difficulty of identifying population trends between estimates acquired in different manners and at different times, and (3) the catastrophic impacts that plague can cause to relatively large populations in a short period of time. Because of these difficulties it is appropriate to evaluate the species' status based on the significance of the various threats as evidenced by comparable trend information, rather than on variations in gross occupied habitat estimates. Trend information acquired from closely monitored sites, evaluated by relatively consistent methodologies is especially important. Inferences that area-wide or range-wide populations have behaved and will behave in a similar manner to these closely monitored sites are key to Service evaluations in this assessment.

Previous evaluations of area-wide or range-wide population trends reported in the 12-month Finding are now inconclusive due to new estimates and the variables mentioned above. In particular, data presented in Figures 4 and 5 should be disregarded due to new information pertaining to statewide estimates in Colorado, Kansas, Texas, and Wyoming. Nevertheless, Service conclusions with regard to likely general downward black-tailed prairie dog population trends remain as stated in the 12-month Finding.

Additional information regarding distribution, abundance and trends of black-tailed prairie dog occupied habitat has been obtained from State and Federal agencies and other parties since the previous candidate assessment. Information regarding historic and recent occurrence of the black-tailed prairie dog is presented in Table 1. Dates of estimates that differed by more than 1 year from date of publication are noted. The dates, methodologies, and ultimately the reliability of these estimates varied. In an effort to avoid repetition, we have removed two columns from Table 1 which were present in earlier versions of this table. We removed the data sets from Mulhern and Knowles (1995) and Knowles (1995). These data sets were largely reiterations of other references. In some cases several estimates were provided for a single State during the past year. In these instances the most recent estimate from the Black-tailed Prairie Dog Conservation Team Meeting in Las Cruces, NM on January 7-8, 2002 (Luce, Wyoming Game and Fish Department, *in litt.* 2002) has been added to Table 1. All of the new information for States, Tribes, and Countries is summarized in the narrative which follows Table 1.

**Table 1. Summary of Estimates of Black-tailed Prairie Dog Occupied Habitat in Various Areas for Selected Dates (estimates in thousands of acres)**

State* or Country	Historic	BSF W 1961*	Other Recent	BFFR F 1998**	States 1998	Knowles 1998	USFWS 2000	States 2000	States 2001 (new information)
Arizona	650 (Van Pelt in litt. 1998))	0	0	0	0	0	0	0	0
Colorado	3,000 (Clark 1989) 7,000 (Knowles 1998)	96	89 in 1979 (Van Pelt 1999)	326	973 in 1990 (CO Dept AG)	44	93	214 (CO DOW)	300-500 (CO DOW)
Kansas	2,000 (Lantz 1903) 2,500 (Knowles 1998)	50	57 (Smith 1958) 36 (Henderson & Little 1973) 47 (Vanderhoof & Robel 1992)	147		36	42		125 (KS DW&P)
Montana	1,471 (Flath & Clark 1986) 6,000 (Knowles 1998)	28	125 (Flath & Clark 1986) >100 (Campbell 1989)		66 (MT FW&P)	65	65	80-90 (MT FW&P)	90 (MT FW&P)
Nebraska	6,000 (Knowles 1998)	30	15 in 1971 (Lock 1973) 81 in 1999 (Sidle 2001)	80	60-80 (NE G&P)	60	60	80 (Luce pers. comm.)	27-70 (NE G&P)
New Mexico	>6,640 (Bailey 1932)	17	137 (Bodenchuck 1981)	107		15	39	<50 (NM G&F)	< 50 (NM G&F)
North Dakota	2,000 (Knowles 1998)	20	>7 (Grondahl 1973) 10 (Stockrahm 1979) 35 in 1999 (Sidle 2001)	15	30 (ND G&F)	20	25	30 (ND G&F)	33 (ND G&F)
Oklahoma	950 (Knowles 1998)	15	10 (Tyler 1968) 15 (Lewis & Hassien 1973) 18 (Shackford et al. 1990) 8 in 1999 (Lomolino & Smith 2001)	70	18 (OK DWC)	<9.5	9		19 (OK DWC)

State* or Country	Historic	BSF W 1961*	Other Recent	BFFR F 1998**	States 1998	Knowles 1998	USFWS 2000	States 2000	States 2001 (new information)
South Dakota	1,757 (Linder et al. 1972)	33	37 in 1967 (Henderson et al 1974) 60 in 1968 (Rose 1973) 700 in 1980 (Tschetter 1988) 184 in 1987 (Tschetter 1988) 142 in 1999 (Sidle 2001)	175	231 in 1996 (SD GF&P)	245	147	>150 (SD GF&P)	142 (SD GF&P)
Texas	58,000 (Bailey 1905)	26	>13 (Cottam & Caroline 1965) 90 (Cheatheat 1977) >68 (Lair & Mecham 1991)	227		23	71	86 (TX P&W)	150-200 (TX P&W)
Wyoming	16,000 (Knowles 1998)	49	133 in 1971 (Clark 1973) 329 in 1999 (Sidle 2001)	422	131-204 in 1987 (WY G&F) 362 (WY Dept AG)	70-180	125	300 (WY G&F)	<300 (WY G&F)
<b>U.S Total</b>	<b>111,000 (Knowles 1998)</b>	<b>364</b>		<b>1,686</b>		<b>677</b>	<b>676</b>	<b>1,041</b>	<b>1,383*****</b>
Canada	1.5 - 2 (Knowles 1998)		1.9 (Millson 1976) 1.6 (Laing 1986) 2.3 (Fargey pers. comm. 1998)			2	2		2.6 (Fargey <u>in litt.</u> )
Mexico	1,384 (Ceballos et al. 1993)		136 (Ceballos et al. 1993)			90	90		>49 (List <u>in litt.</u> )
<b>N. America</b>	104,000 (Anderson et al 1986)**** 99,000-247,000 (Miller et al. 1996)**** 384,000 historic range (Seton 1953)					<b>769</b>	<b>768</b>		<b>1435</b>

\* Includes Tribal lands within State boundaries

\*\* Bureau of Sport Fisheries and Wildlife (1961))

\*\*\* Black-footed Ferret Recovery Foundation phone survey. September 1998

\*\*\*\* Includes all prairie dog species present

\*\*\*\*\* Where a range is provided as the State estimate, the mid-point is used for the purpose of totaling estimates

Arizona - The black-tailed prairie dog is extirpated at present in Arizona. No additional information regarding distribution, abundance, and trends of the species in Arizona has been obtained since the 12-month Finding.

Colorado - Statewide in 2001, the Colorado Division of Wildlife reported an estimate of 214,000 acres (87,000 hectares) of black-tailed prairie dog occupied habitat based upon a compilation by EDAW (2000) of all known data sets from the 1970's to the present (Pusateri, Colorado Division of Wildlife, *in litt.* 2001). At the Black-tailed Prairie Dog Conservation Team meeting in Las Cruces, NM on January 7-8, 2002 (Luce, Wyoming Game and Fish Department, *in litt.* 2002), it was noted that based upon on-going aerial surveys, the Colorado Division of Wildlife anticipates revising its statewide estimate to 300,000 - 500,000 acres (121,500 - 202,500 hectares). This estimate is substantially higher than the Service estimate in the 12-month Finding of 93,000 acres (38,000 hectares). However, EDAW's 2000 estimate and the anticipated revised 2002 estimate are much lower than that reported by Colorado Department of Agriculture (1990) of approximately 970,000 acres (393,000 hectares).

For specific sites, Cully and Johnson (2001) reported 3,689 acres (1,493 hectares) of black-tailed prairie dog occupied habitat at Comanche National Grassland, an 87 percent increase from 1999, but still approximately 900 acres (365 hectares) or 20 percent less than the 1995 estimate (Cully 1998). Maynard (U.S. Army, *in litt.* 2001) provided information regarding current occupied habitat at Army installations including: 1,676 acres (679 hectares) at Fort Carson (a 52 percent decline from last year's estimate due to plague) and approximately 300 acres (122 hectares) at Pinon Canyon Maneuver Site. Additionally, Hoefert (U.S. Army, *in litt.* 2001) reported significant reductions due to plague at Pueblo Army Depot, where there are now approximately 2,623 acres (1,062 hectares) of occupied habitat. The Rocky Mountain Arsenal National Wildlife Refuge experienced a 62 percent decline from 1,645 acres (666 hectares) in 2000 to 618 (250 hectares) in 2001 due to plague (Seery, U.S. Fish and Wildlife Service, *in litt.* 2001).

In general, populations of the black-tailed prairie dog in Colorado appear to be stable over the short-term, but may be declining over the long-term. Trend information at most sites in the State continues to indicate declines due to plague, with partial recovery in subsequent years, but without complete recovery to pre-plague numbers. The black-tailed prairie dog appears to be widely distributed throughout its historic range in Colorado.

Kansas - Statewide in 2001, the Kansas Department of Wildlife and Parks conducted aerial surveys. Its preliminary estimate, as noted at the Black-tailed Prairie Dog Conservation Team meeting in Las Cruces, NM on January 7-8, 2002 (Luce, Wyoming Game and Fish Department, *in litt.* 2002), was 125,000 acres (51,000 hectares) of black-tailed prairie dog occupied habitat. Estimates of colony size within one-half mile of the aerial transects were used in this effort, which is a different approach from the methodology developed by Sidle et al. (2001) which has been used by several States reporting aerial survey information. This estimate is substantially higher than the Service estimate in the 12-month Finding of 42,000 acres (17,000 hectares). The Service estimate represented the mid-point between estimates of Vanderhoof and Robel (1992)

and Knowles (1998) for Kansas; and was similar to Smith (1958) and Henderson and Little (1973). The recent Kansas Department of Wildlife and Parks estimate is substantially larger than most other estimates of recent decades; it may represent an increase, or be the result of a difference in the methodology of enumeration.

For specific sites, the only recent estimate of occupied habitat is 2,439 acres (987 hectares) at Cimarron National Grassland (a 44 percent increase from 1999) (Cully and Johnson 2001).

In general, black-tailed prairie dog populations in Kansas may be increasing, but appear to be at least stable. The species' range appears to be somewhat restricted in the eastern portion of the State.

Montana - Statewide in 2001, the Montana Department of Fish, Wildlife and Parks provided an estimate (including Tribal lands) of 90,000 acres (36,000 hectares) of black-tailed prairie dog occupied habitat (Hagener, Montana Department of Fish, Wildlife and Parks, *in litt.* 2001). This estimate is larger than the Service estimate in the 12-month Finding of 65,000 acres (26,000 hectares).

For specific sites, recent estimates of occupied habitat are available for Tribal lands in Montana including: 7,000 acres (2,800 hectares) at the Crow Reservation and 3,300 acres (1,300 hectares) at the Northern Cheyenne Reservation, an increase of 500 acres (200 hectares), or 18 percent, from last year's estimate (Kaiser, U.S. Bureau of Indian Affairs, *in litt.* 2001); but still 7,000 acres (2,800 hectares) less than, or 30 percent of, the 1990 estimate by Young (1997) of 10,458 acres (4,235 hectares) of occupied habitat. Current occupied habitat estimate in 2001 for Ft. Belknap Reservation was 12,000 (Vosburgh 2002); Vosburgh (Ft. Belknap Fish and Wildlife Department, *in litt.* 2001) notes that 3,200 acres (1,300 hectares) have been lost due to plague during the past three years. Prior to recent plague epizootics, Ft. Belknap Reservation had approximately 16,000 acres (6,500 hectares) of occupied habitat (Montana Prairie Dog Working Group 2001). Cumulative losses in occupied habitat of approximately 20 percent at Ft. Belknap Reservation and 70 percent at Northern Cheyenne Reservation have been experienced in approximately the last decade due to plague.

Phillips County in north-central Montana encompasses Bureau of Land Management, State, and private lands, as well as portions of Charles M. Russell National Wildlife Refuge. Estimates of black-tailed prairie dog occupied habitat in this county vary, apparently due to differences in estimates of occupied habitat on BLM lands. The Montana Prairie Dog Working Group (2001) reports that 11,100 acres (4,500 hectares) of occupied habitat currently exist on BLM lands compared to 12,346 acres (5,000 hectares) in 1988. Haske (Bureau of Land Management, *in litt.* 2002) estimates that 8,039 acres (3,256 hectares) of occupied habitat currently exist on BLM lands and notes that 5,181 acres (2,098 hectares) are currently unoccupied. These last two



estimates added together equal 13,220 acres (5,354 hectares) of habitat which apparently constitute the previous (1988) estimate for occupied habitat. Haske (Bureau of Land Management, in litt. 2002) also notes that 619 acres (251 hectares) were impacted by plague during the past year.

In general, populations of the black-tailed prairie dog in Montana appear to be stable over the short-term, but declining over the long-term. Trend information at most sites in the State continues to indicate declines due to plague, with partial recovery in subsequent years, but without complete recovery to pre-plague levels. Remnant black-tailed prairie dog populations appear to be distributed throughout most of the species' historic range in Montana.

Nebraska - Statewide in 2001, the Nebraska Game and Parks Commission estimated that there are approximately 70,000 acres (28,000 hectares) of black-tailed prairie dog occupied habitat statewide (Fritz, Nebraska Game and Parks Commission, in litt. 2001). This estimate is similar to the Service estimate in the 12-month Finding of 60,000 acres (24,000 hectares). At the Black-tailed Prairie Dog Conservation Team meeting in Las Cruces, NM on January 7-8, 2002 (Luce, Wyoming Game and Fish Department, in litt. 2002), Nebraska Game and Parks Commission noted an apparent substantial decrease in the amount of occupied habitat. Ground truthing from the aerial photos used to derive the 70,000 acre estimate were able to locate only 27,000 acres (11,000 hectares) of active colonies. Loss of habitat was attributed to control activities and range conversion to cropland. However, it is not known if this lower estimate is an artifact due to sampling techniques. The 27,000 acre estimate was derived from revisiting previously occupied sites. In Texas, Ernst (2001) reported via review of extensive aerial photographs that similar amounts of occupied habitat were present between 1991 and 1998, although the location of many colonies had shifted significantly.

No new information was obtained for specific sites in Nebraska.

In general, populations of the black-tailed prairie dog in Nebraska appear to be stable to declining. The species' range is somewhat restricted in the eastern portion of the State.

New Mexico - Statewide in 2001, the New Mexico Department of Game and Fish noted that their surveys are only partially completed, but based upon available information they believe that it is "unlikely that there will be 50,000 acres (20,000 hectares) of black-tailed prairie dog occupied habitat" (Schmitt, New Mexico Department of Game and Fish, in litt. 2001). This estimate is similar to the Service estimate in the 12-month Finding of 39,000 acres (16,000 hectares). Approximately 50 percent of the ground-truthed black-tailed prairie dog colonies which were active 5 years ago are now inactive (Luce, Wyoming Game and Fish Department, in litt. 2002), but this result may be an artifact of sampling (see Nebraska discussion above).

For specific sites, the Bureau of Land Management reported 216 acres (87 hectares) of black-tailed prairie dog occupied habitat on the White Sands Unit and 583 acres (236 hectares) of occupied habitat on the Roswell Unit on lands it manages (Haske, Bureau of Land Management, *in litt.* 2002). The U.S. Army provided an estimate of 330 acres (134 hectares) of black-tailed prairie dog occupied habitat at a Fort Bliss facility in New Mexico (Hoefert, U.S. Army, *in litt.* 2001).

In general, populations of the black-tailed prairie dog in New Mexico appear to be stable to declining. The species appears to be largely extirpated from western portions of the State.

North Dakota - Statewide in 2001, the North Dakota Game and Fish Department noted that a survey of occupied habitat will be completed by June, 2002 (Hildebrand, North Dakota Game and Fish Department, *in litt.* 2001). At this time its statewide estimate (including Tribal lands) is 33,000 acres (13,000 hectares) of occupied habitat based upon aerial surveys conducted by the U.S. Forest Service (Sidle 2001). This estimate is similar to the Service estimate in the 12-month Finding of 25,000 acres (10,000 hectares).

For specific sites, Bureau of Land Management reported 400 acres (160 hectares) of black-tailed prairie dog occupied habitat on lands it manages throughout North Dakota (Haske, Bureau of Land Management, *in litt.* 2002).

In general, populations of the black-tailed prairie dog in North Dakota appear to be stable. Remnant populations appear distributed throughout most of the species' historic range in the State.

Oklahoma - Statewide in 2001, approximately one-eighth of the black-tailed prairie dog potential habitat was aerially surveyed (Duffy, Oklahoma Department of Wildlife Conservation, *in litt.* 2001). The Oklahoma Department of Wildlife Conservation noted at the Black-tailed Prairie Dog Conservation Team meeting in Las Cruces, NM on January 7-8, 2001 that, based upon this partial aerial survey, it estimates that 18,823 acres (7,600 hectares) of occupied habitat exist statewide (Luce, Wyoming Game and Fish Department, *in litt.* 2002). A final report with more complete information and a description of methods is not available at this time. The Oklahoma Department of Wildlife Conservation estimate is substantially larger than the Service estimate in the 12-month Finding of 9,000 acres (3,600 hectares), which was based on Lomolino and Smith (2001) data from 1999. It is unclear whether differences in estimation methodologies or changes in black-tailed prairie dog populations accounts for this discrepancy.

No new information was obtained for specific sites in Oklahoma.

In general, populations of the black-tailed prairie dog in Oklahoma appear to be stable to increasing over the short-term, but declining over the long term. The species' range is somewhat restricted in eastern portions of the State.

South Dakota - Statewide in 2001, the South Dakota Department of Game, Fish and Parks provided an estimate (including tribal lands) of 142,000 acres (57,500 hectares) of black-tailed prairie dog occupied habitat at the Black-tailed Prairie Dog Conservation Team meeting in Las Cruces, NM on January 7-8, 2001 (Luce, Wyoming Game and Fish Department, in litt.2002). This estimate is similar to the Service estimate provided in the 12-month Finding of 147,000 acres (60,000 hectares).

For specific sites, the National Park Service provided information regarding black-tailed prairie dog occupied habitat of 4,500 acres (1,800 hectares) at Badlands National Park. (Albertson, National Park Service, in litt. 2001). Turner Endangered Species personnel estimate 855 acres (346 hectares) of occupied habitat at Bad River Ranch (Bly Honness, Turner Endangered Species Fund, in litt. 2001). The Bureau of Land Management reports 210 acres (85 hectares) of occupied habitat on lands it manages in South Dakota (Haske, U.S. Bureau of Land Management, in litt. 2002).

In general, populations of the black-tailed prairie dog in South Dakota appear to be stable. The species appears to be widely distributed throughout most of the species' historic range in South Dakota. No changes in occupied habitat (approximately 100,000 acres / 40,500 hectares) were noted for Tribal lands, where most of the occupied habitat currently exists in South Dakota.

Texas - Statewide in 2001, the Texas Parks and Wildlife Department provided a preliminary estimate of 150,000 - 200,000 acres (61,000 - 81,000 hectares) of black-tailed prairie dog occupied habitat (Sullivan, Texas Parks and Wildlife Department, in litt. 2001). This estimate is substantially larger than the Service estimate in the 12-month Finding of 71,000 acres (29,000 hectares).

County estimates are under development by the Texas Parks and Wildlife Department.

In general, populations of the black-tailed prairie dog in Texas appear to be stable to declining. The species' range appears to be somewhat restricted in south-western portions of the State.

Wyoming - Statewide in 2001, the Wyoming Game and Fish Department provided an estimate of 300,000 acres (122,000 hectares) of black-tailed prairie dog occupied habitat based upon information from Sidle et al. (2001). This estimate appears to be substantially larger than the Service estimate in the 12-month Finding of 125,000 acres (51,000 hectares). However, the Wyoming Game and Fish Department noted that it was "very skeptical" of this estimate and believes the actual amount may be somewhat lower (Rothwell, Wyoming Game and Fish Department, in litt. 2001).

For specific sites, the U.S. Army provided an estimate of 700 acres (280 hectares) of black-tailed prairie dog occupied habitat at the Sheridan Training Area (Hoefert, U.S. Army, in litt. 2001). The Bureau of Land Management reports for lands it manages in Wyoming: 310 acres (126 hectares) in the Cody Unit, 500 acres (200 hectares) in the Great Divide Unit, 380 acres

(154 hectares) in the Platte River Unit, 11,132 acres (4,500 hectares) in the Buffalo Unit, and 3,352 acres (1,360 hectares) in the Newcastle Unit (Haske, U.S. Bureau of Land Management, in litt. 2002). The Thunder Basin National Grassland experienced a loss of approximately 8,000-10,000 acres (3,000-4,000 hectares) of occupied habitat due to impacts from plague in 2001 (Rothwell, Wyoming Game and Fish Department, in litt. 2001 and Sidle, U.S. Forest Service, in litt. 2001). This represents an approximate 50 percent loss of the occupied habitat at Thunder Basin National Grassland based upon the most recent previous estimate of 18,240 acres (7,400 hectares) (Sidle, U.S. Forest Service, in litt. 1999).

In general, populations of the black-tailed prairie dog in Wyoming appear to be stable over the short-term, but declining over the long-term. Plague has resulted in notable declines in the State's largest identified complex at Thunder Basin National Grassland. The species appears to widely distributed throughout its historic range in the State.

Canada - Fargey (Grasslands National Park, in litt. 2001) estimated 2,589 acres (1,049 hectares) of black-tailed prairie dog occupied habitat in Canada. This estimate is similar to the Service estimate in the 12-month Finding of 2,000 acres (800 hectares), all at Grasslands National Park.

In general, populations of the black-tailed prairie dog in Canada appear to be stable, but relatively small.

Mexico - List (in litt. 2001) estimated more than 49,000 acres (20,000 hectares) of black-tailed prairie dog occupied habitat in Mexico, almost all of it at one site near Janos, Chihuahua. This estimate is approximately 46 percent lower than the Service estimate in the 12-month Finding of 90,000 acres (36,000 hectares). List noted that 2,889 acres (1170 hectares) had been lost (50 percent of that due to conversion of rangeland to cropland), but that the large difference from earlier estimates was due to earlier mapping errors and did not represent an actual loss of occupied habitat.

In general, populations of the black-tailed prairie dog in Mexico appear to be stable. The species appears to be restricted in its range.

**THREATS:** The Act directs the Secretary of Interior (delegated to the Service) to “determine whether any species is an endangered species or a threatened species because of any of the following factors.” We evaluate the influence of the following factors on the black-tailed prairie dog:

- The present or threatened destruction, modification, or curtailment of its habitat or range;
- Overutilization for commercial, recreational, scientific, or educational purposes;
- Disease or predation;
- The inadequacy of existing regulatory mechanisms;
- Other natural or manmade factors affecting its continued existence.











































































