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A Preliminary Study of Small Mammal Presence and Response to Plague Control at Wind Cave National Park

Natural Resource Technical Report NPS/WICA/NRTR—2013/697

ON THE COVER
Hispid pocket mouse on newly acquired lands at Wind Cave National Park.
Photograph by Daniel S. Licht

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Contents

Figures

Page

Tables

Page

Abstract

Wind Cave National Park, located in South Dakota on the southern edge of the Black Hills, is well-known for its rich and diverse wildlife resources. Park managers place a high priority on conducting scientific research and using adaptive management principles to make informed management decisions.

To protect the black-tailed prairie dog (*Cynomys ludovicianus*) ecosystem the park has been treating prairie dog colonies with the insecticide deltamethrin (aka "delta dust") for purposes of plague control. The insecticide prevents plague outbreaks by killing the fleas that carry the plague bacterium (*Yersinia pestis*). However, there are unknowns about the impacts of the insecticide to non-target organisms.

In the summer of 2012 small mammal trapping was conducted in portions of a prairie dog colony treated (i.e., "dusted") with deltamethrin in 2011 and a portion of the colony left untreated. Six plots of 25 traps each were placed in each of the two strata for 5-7 days. In the dusted portion of the colony there were 4.4 deer mouse (*Peromyscus maniculatus*) captures per 100 trap nights versus 3.3 in the undusted portion. In the dusted portion there were 3.2 13-lined ground squirrel (*Ictidomys tridecemlineatus*) captures per 100 trap nights versus 0.2 in the control sites. The results suggest that dusting for purposes of preventing plague epizootics in prairie dogs may be benefitting other small mammals; however, the sample sizes were small as the field work was considered a pilot study for a more intense study planned for 2013.

In 2011 the park acquired 5,555 acres of new land south of the park. The park is currently developing management plans for the site. To aid in that planning effort six small mammal trapping plots were placed in the new lands in the fall of 2012. A primary goal of the effort was to see if the northern grasshopper mouse (*Onychomys leucogaster*)—a species not previously documented in the park—was present on the new lands. The trapping effort did not capture any grasshopper mice; however, it did document the presence of deer mice, hispid pocket mice (*Chaetodipus hispidus*), and the bushy-tailed woodrat (*Neotoma cinerea*). The trapping effort was spatially and temporally small and should not be viewed as a complete small mammal inventory.

Both the trapping effort on the prairie dog colony and the trapping on the newly acquired land were small efforts and the results should be viewed cautiously. The trapping on the prairie dog colony was viewed as a pilot study for a larger effort planned for 2013. In spite of the limited sample sizes, the methods and results are of value to managers and other researchers and are worthy of being documented in a report.

Acknowledgments

I thank Dan Roddy for initiating and supporting the study and for his concern about the non-target impacts of dusting for plague control. I thank Dr. Dan Uresk and the U.S. Forest Service for the use of small mammal traps. The study could not have been conducted without his support. I thank Alexandra Licht for helping to check the traplines. I thank Dan Roddy, Barbara Muenchau, Dr. Robert Gitzen, and Lenora Dombro for reviewing the manuscript.

Introduction

Wind Cave National Park in western South Dakota is one of the premier wildlife parks in the U.S.A. The park is famous for conserving the prairie ecosystem including iconic, keystone, and imperiled species such as the bison (*Bison bison*), black-tailed prairie dog (*Cynomys ludovicianus*), and black-footed ferret (*Mustela nigripes*). Prairie dog towns are an important part of the prairie ecosystem and contribute greatly to the park's biological diversity.

Fleas were collected from prairie dog burrows in the park during 2009-2011. Approximately 6% of the fleas contained genetic material from the plague bacterium *Yersinia pestis* (Dr. Hugh Britten, U. of South Dakota, unpub. data). Although no plague-induced prairie dog epizootics have been observed in the park the disease has the potential to devastate the park's prairie dog population and the species that depend on it (Cully et al. 2006). Therefore, the park is proactively "dusting" prairie dog towns with the insecticide deltamethrin in hopes of preventing a plague epizootic of prairie dogs, the main food source of the black-footed ferret. The insecticide reduces the likelihood of a plague outbreak by killing the fleas that harbor the plague bacterium. However, there are many uncertainties about the impacts to non-target organisms that reside in the prairie dog ecosystem.

Small mammals are one group of non-target organisms that could be impacted by dusting. It is possible that small mammals such as mice may survive better in dusted towns as they too are vulnerable to plague. Although the scientific literature is scant as to whether plague effects small mammal populations, some evidence indicates that population level impacts can occur. For example, Holmes (2003) found more deer mice (*Peromyscus maniculatus*) in prairie dog colonies with no history of plague suggesting that plague can reduce deer mouse populations.

However, it's also possible that dusting could negatively impact small mammal populations either directly, such as through toxicity (although this seems unlikely), or indirectly via reducing available prey for small mammals. Studies have shown that arthropods are a significant portion of the diet of deer mice that reside in prairie dog towns (Agnew et al. 1987). It's possible that dusting could reduce insect abundance to a point that it reduces small mammal health and abundance. This in turn could affect other species such as raptors that feed on mice and other small mammals. These unknowns and concerns make small mammals an excellent focal group for assessing the non-target impacts of dusting.

To better understand the impacts of dusting on small mammal populations the park developed and submitted a proposal to systematically compare small mammal abundance in treated (i.e., dusted) and untreated portions of prairie dog towns. The proposal has been accepted for funding with field work scheduled to start in 2013. To prepare for that project a pilot study was conducted in the summer of 2012. The results of the 2012 field work are presented in this report.

In 2011 the park acquired 5,555 acres of new land on the south boundary of the park. There is some habitat on the new land that may support the northern grasshopper mouse (*Onychomys leucogaster*), a species found throughout South Dakota (Higgins et al. 2000), but not yet documented in the park. In the fall of 2012 traps were placed in the new land in an attempt to document the presence of the grasshopper mouse and to see what other small mammals may be present on the new lands. Those results are also presented in this report.

Study Area

Wind Cave National Park is located in western South Dakota on the southern edge of the Black Hills. The 34,000-acre park is comprised of a mosaic of ponderosa pine (*Pinus ponderosa*) stands and mixed-grass prairies. Within the prairies are approximately 2,200 acres of prairie dog towns (Wind Cave National Park 2006). The prairie dog colonies support and benefit many other wildlife species including the endangered black-footed ferret.

Due to the ecological value of the prairie dog ecosystem, and the potential for a catastrophic prairie dog epizootic, the park has been actively dusting prairie dog colonies since 2008 to prevent a disease outbreak. However, due to financial and logistical constraints not all prairie dog colonies are dusted nor are all portions of colonies (Figures 1-4). The insecticide is believed to typically be effective in field situations for 1 year. The insecticide has been documented in tiger salamanders (*Ambystoma tigrinum*) that reside in the prairie dog towns (Brian Smith, Black Hills State U., unpub. data; Kolbe et al. 2002). No other studies of the impacts of dusting have been conducted at the park.

The most extensive recent inventory of small mammals at the park was conducted in 1999-2000 by Duckwitz (2001). He documented 18 species of small mammals in the park (defined as mammals weighing less than 10 pounds excluding bats). The most common species captured in his study was the deer mouse, white-footed mouse (Peromyscus leucopus), least chipmunk (*Tamias minimus*), and red-backed vole (*Cleithrionomys gapperi*). Of those, only the deer mouse is associated with grassland habitats. Deer mice were especially common in the prairie dog town vegetation alliance and 13-lined ground squirrels were more abundant in that alliance than any other vegetation alliance. He stated that "the rare species" included the hispid pocket mouse (*Chaetodipus hispidus*) and least shrew (*Cryptotis parva*).

In 2011 the National Park Service acquired approximately 5,555 acres immediately south of the park. The land is comprised primarily of open mixed-grass prairies inter-mingled with stands of mountain mahogany (*Cercocarpus ledifolius*), cedar (aka Rocky Mountain juniper; *Juniperus scopulorum*)/ green ash (*Fraxinus pennsylvanica*) draws, and other habitats. Some knolls within the prairie have bare ground and exposed sandy soils, a habitat often associated with northern grasshopper mice. No studies of the faunal community of the site had been conducted prior to this study.

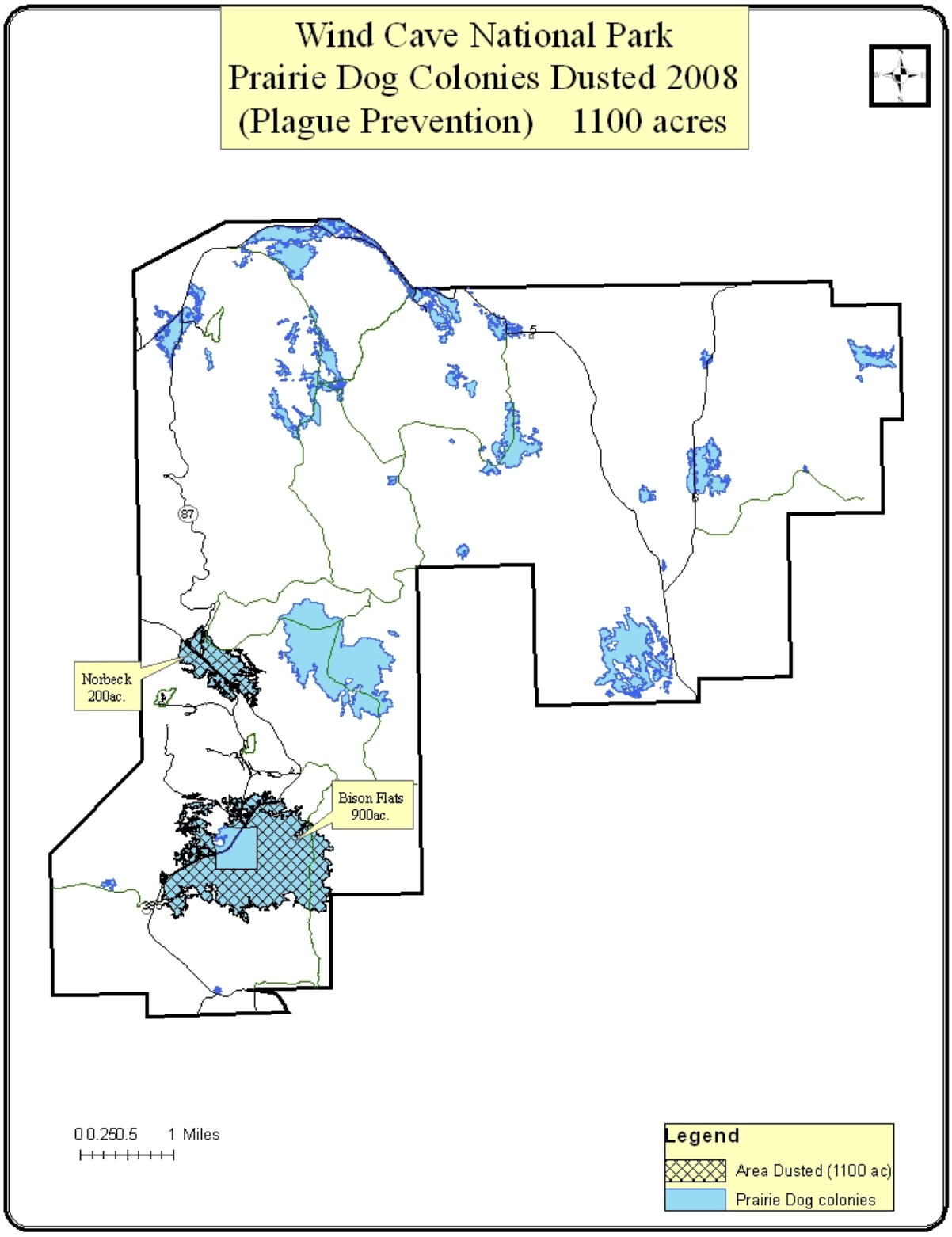

Figure 1. Map of prairie dog town dusting in 2008.

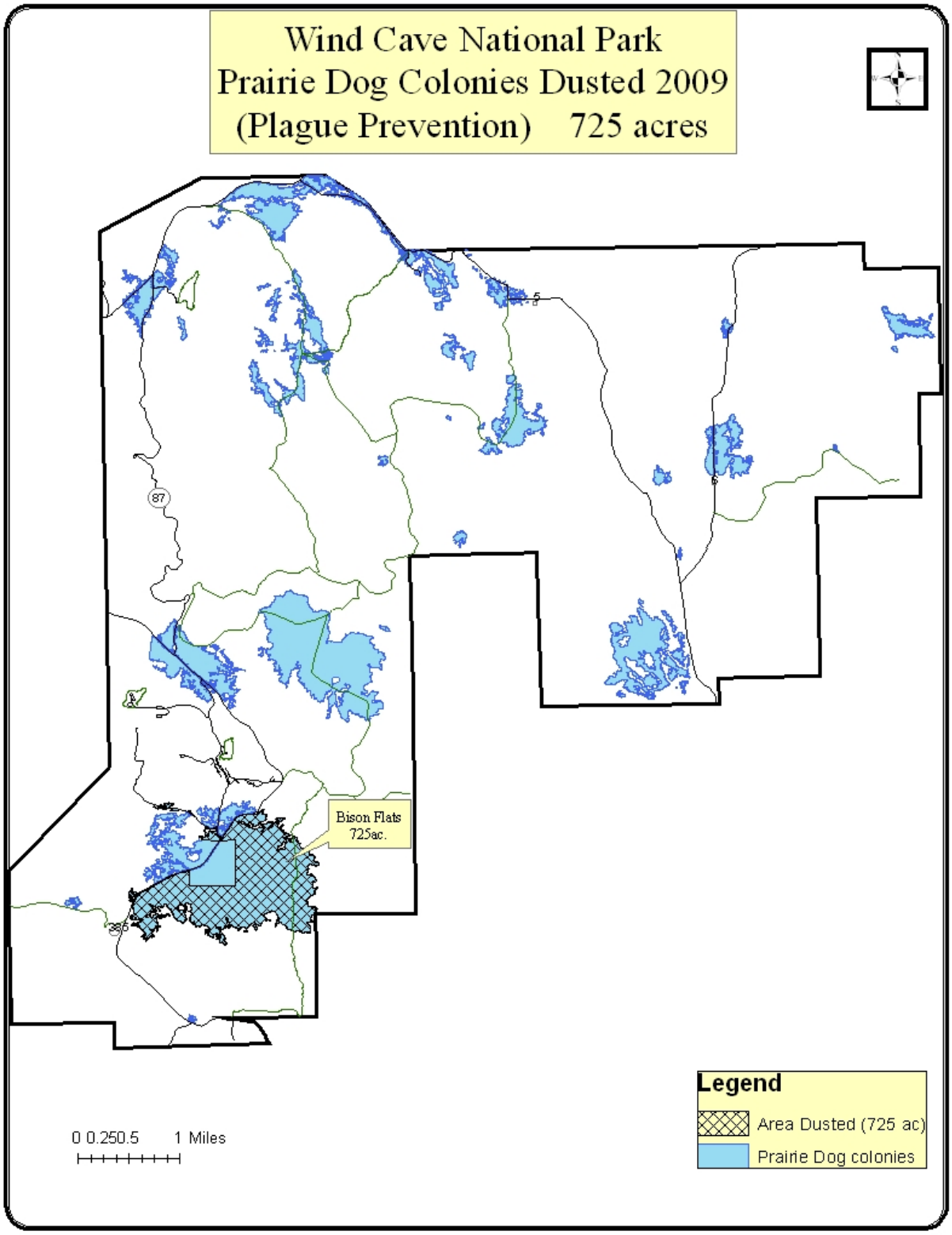

Figure 2. Map of prairie dog town dusting in 2009.

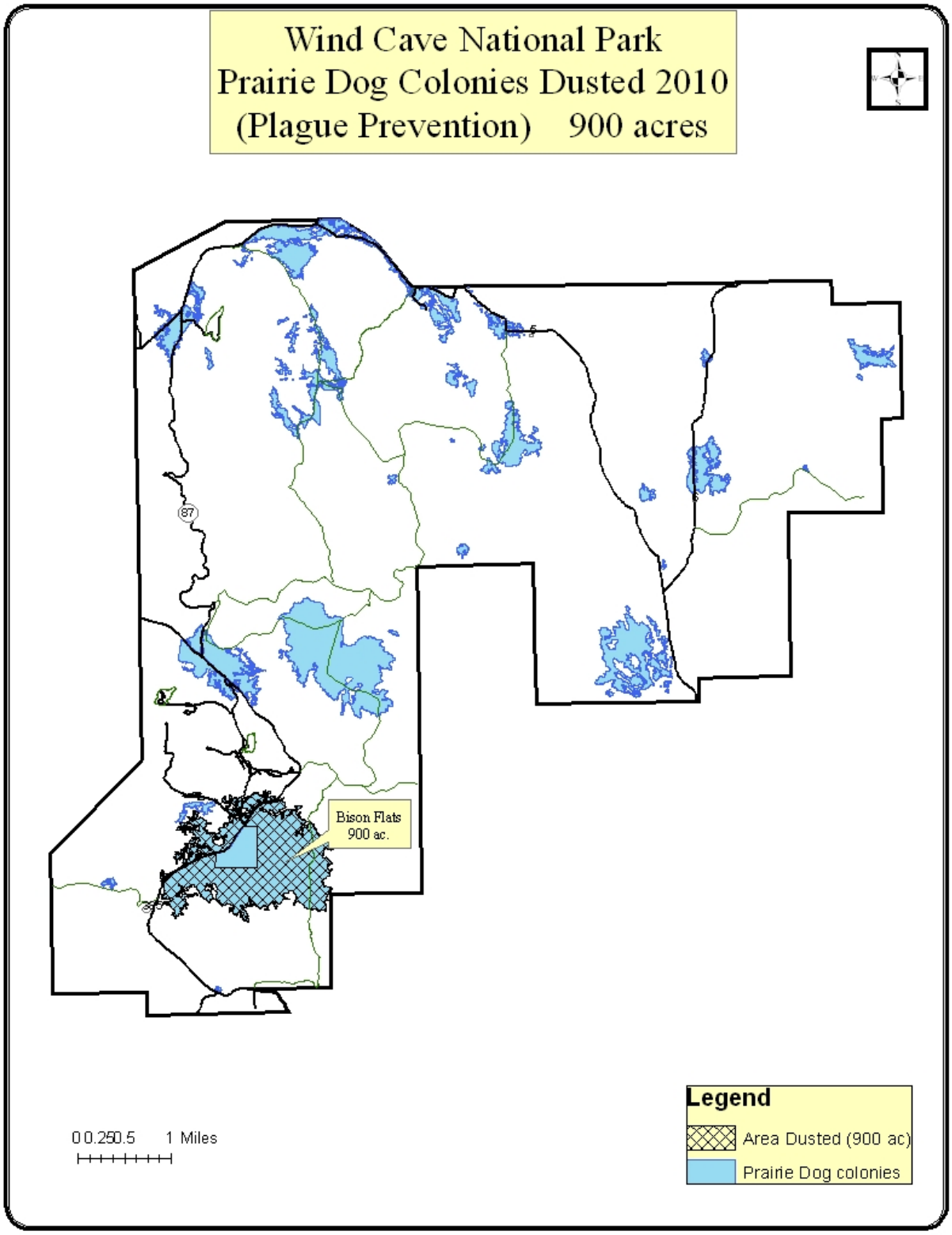

Figure 3. Map of prairie dog town dusting in 2010.

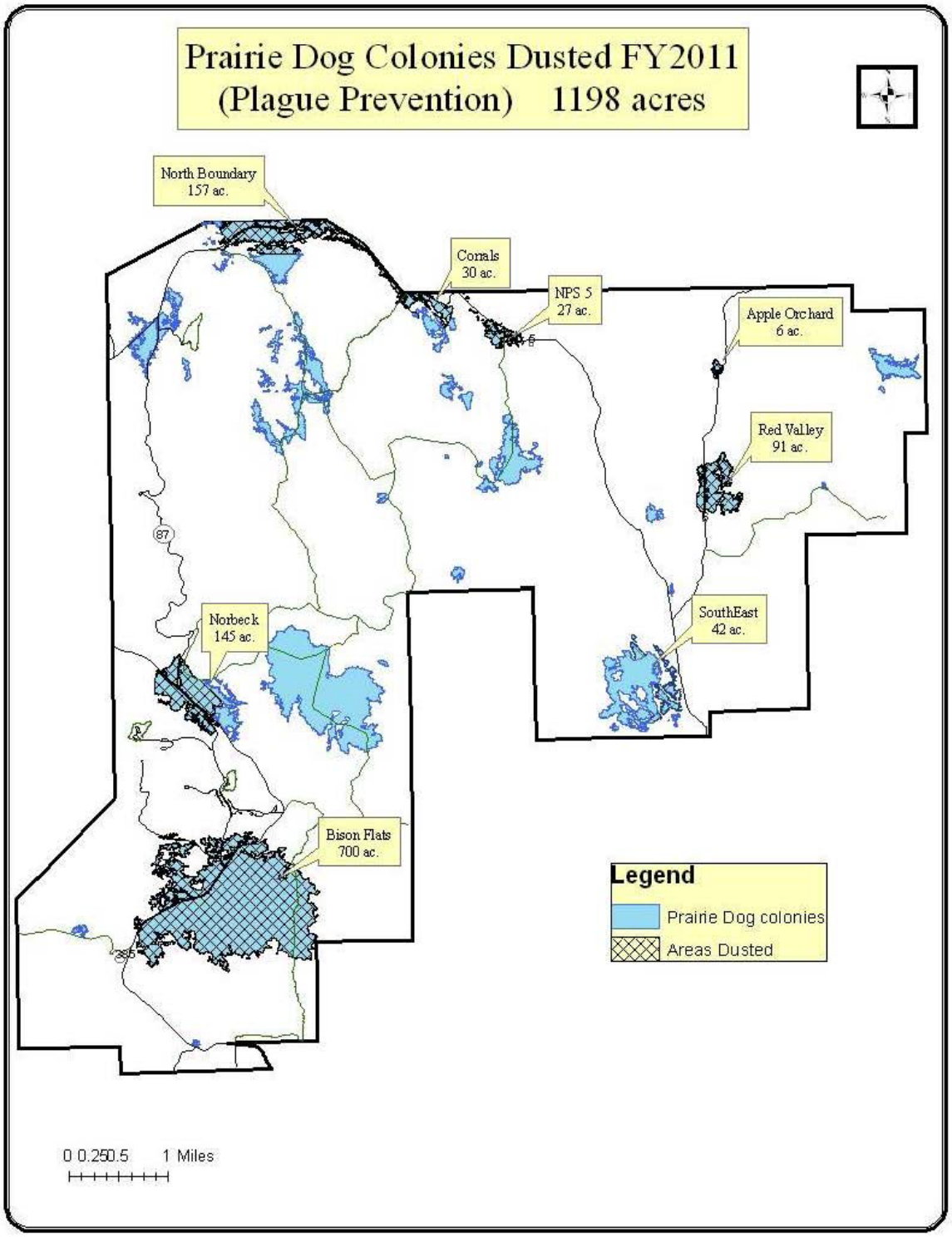

Figure 4. Map of prairie dog town dusting in 2011.

Methods

The study reported here consisted of 2 distinct projects: 1) a study of the impacts of dusting prairie dog towns with deltamethrin on non-target small mammal populations and 2) an inventory of small mammal presence on newly acquired lands with an emphasis on looking for the northern grasshopper mouse. Trapping was conducted at 3 sites (Figure 5).

Two prairie dog towns; the Southeast Prairie Dog Town and the North Boundary Prairie Dog Town, were considered for the dusting project; however, it quickly became apparent that the Southeast Prairie Dog Town was not conducive to the study because the treatment and control sites were dissimilar in terms of prairie dog abundance, vegetation, bare ground, and other characteristics. Therefore, only the North Boundary Prairie Dog Town was used for the analysis of the impacts of dusting on small mammal abundance.

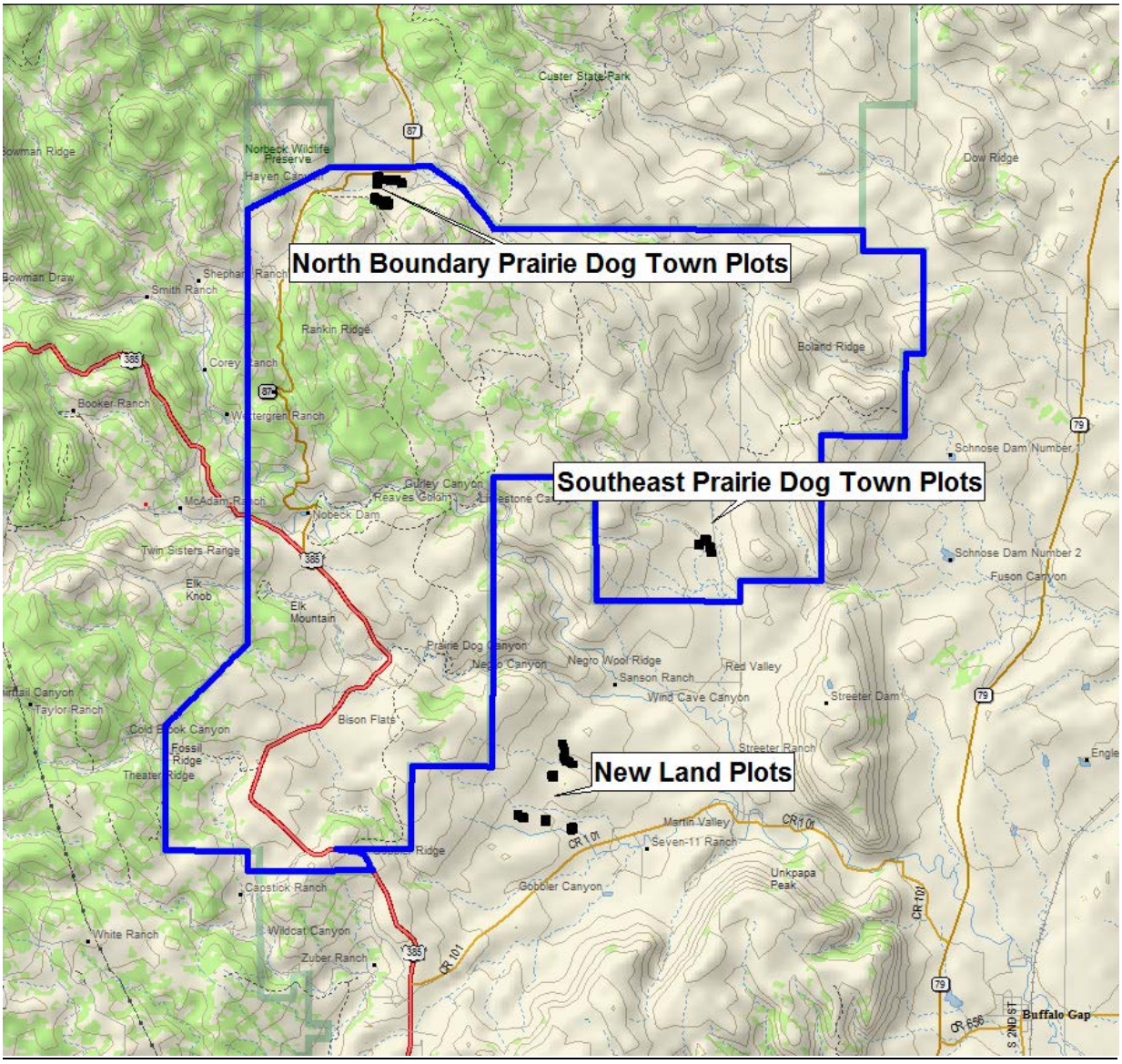

Figure 5. Wind Cave National Park and the 3 locations trapped in 2012.

Dusting Impacts Component

For purposes of detecting the effect of dusting prairie dog towns with deltamethrin on small mammal abundance the study design called for placing trapping plots in the dusted portion of a town (i.e, the treatment) and placing paired plots in an undusted portion of a town (i.e., the control). However, pairing the plots was determined in the field to be unworkable due to the layout of the towns and differences in micro-habitat between portions of the towns. Therefore, a non-paired design was used.

Trapping was initiated on July 2, 2012 as three trapping grids were placed in the Southeast Prairie Dog Town in the southeast portion of the park (Figure 5). A fourth grid was established on July 3. However, it was soon determined that the undusted portion of the town had different habitat and prairie dog density than the dusted portion based on visual observations. Therefore, the site was deemed unsuitable for the study and the traps were pulled from the town on July 8. Hence, data from the trapping in that town was not used for comparing small mammal abundance between dusted and undusted areas; however, the data was used for other analyses such as plotting capture, recapture, and mortality rates over time.

On July 10, 2012 a series of 3 trapping grids were established in the dusted portion (i.e., treatment) of the North Boundary Prairie Dog Town and 3 grids in the undusted portion (i.e., control) of the town (Figure 6). On July 17, 2012, all of the grids were moved to new locations within the respective strata (Figure 6). Each grid consisted of 25 traps in a 5x5 arrangement with approximately 15 meters between traps. No vegetation or other habitat data was collected at the sites; however, the researcher attempted to choose a similar micro-habitat for all of the grids.

Sherman[1] live-traps were baited with an oat and peanut butter mixture. A small amount of polyester material was placed in the traps for bedding. The traps were then covered with a drab-colored cloth that was affixed to the ground by plastic-capped roofing nails; it was hoped that the arrangement would reduce the likelihood of trap displacement by bison, prairie dogs, or wind. It was also hoped that the shading value of the cloth might reduce the temperature in the traps, but no data was taken. Traps were checked daily in the early morning, typically around sunrise.

Captured deer mice were marked on the rostrum and belly with a colored Sharpie[1]; colors were not repeated within a grid. No morphological measurements were systematically taken nor were data recorded on sex, age, or other parameters. Although 13-lined ground squirrels have been captured in prairie dog towns within the park (Duckwitz 2001), it was anticipated that the sample sizes would be small so no effort was made at first to provide them unique marks. After several animals were captured an effort was made to mark the animals on the belly/rostrum area as well. All captured animals were released at the capture location.

[1] Use of trade names does not imply endorsement.

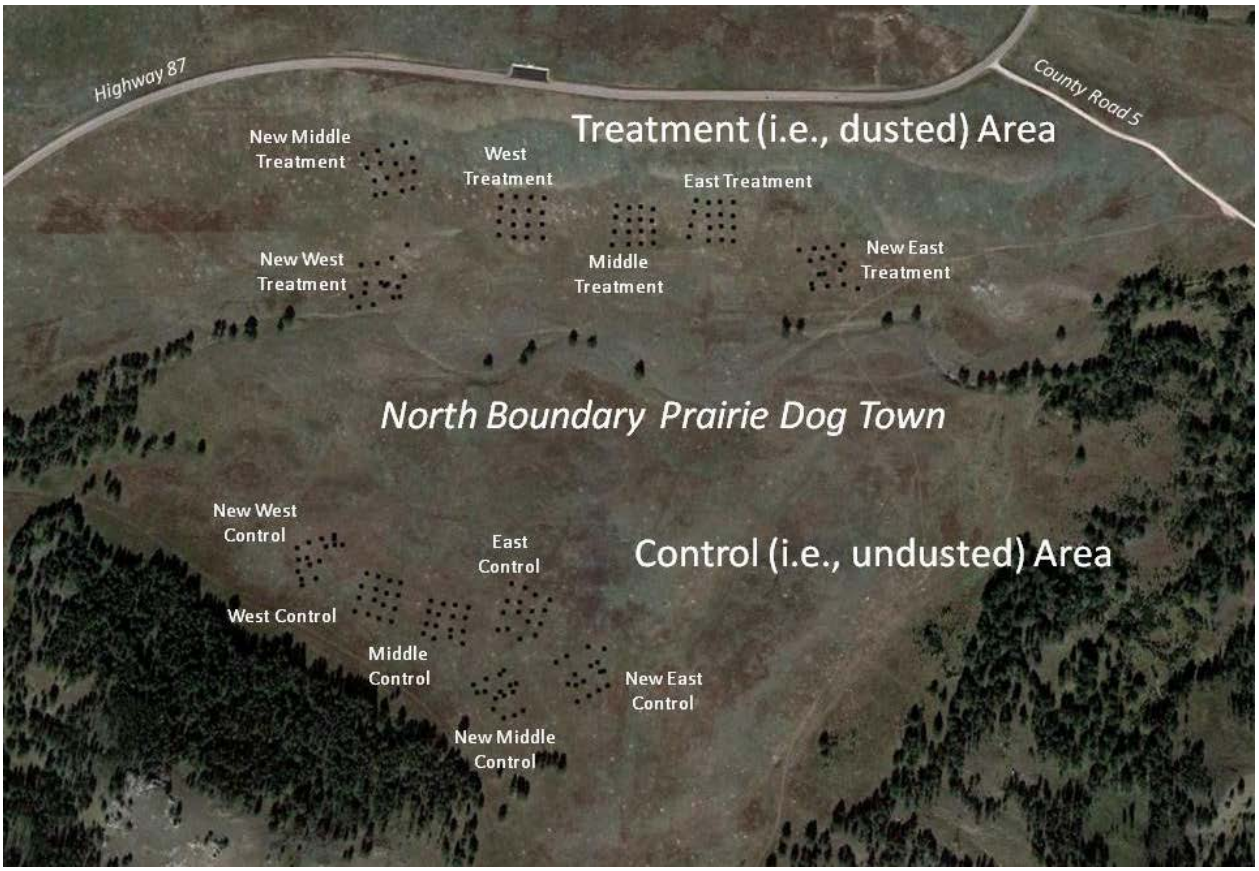

Figure 6. Location of traps in the North Boundary Prairie Dog Town

New Land Inventory Component

On September 24, 2012, traps were placed in the newly acquired land at the south end of Wind Cave National Park for purposes of determining what small mammal species were present in the area. The South Central, Southeast, North Hill, and Waterline locations (Figure 7) focused on areas with bare ground as such habitats are favored by northern grasshopper mice. The Mahogany and Cedar Draw sites were selected for purposes of documenting mammal species that might be using other habitats on the newly acquired land.

The methods were similar to those described for the plague component of the study (e.g., use of Sherman traps baited with peanut butter and oats). However, one difference is that some of the trapping plots used a linear layout of the traps versus a square grid. The traps were also typically set for only 3-4 days whereas the North Boundary Prairie Dog Town traps were set for 5-7 days (see appendix for more details).

Figure 7. Trap locations in the newly acquired land

Results

Trapping occurred from July 2 to October 4, 2012. A total of 2,755 trap-nights were conducted; 475 in the Southeast Prairie Dog Colony, 1,800 in the North Boundary Prairie Dog Colony split equally between the treatment and control plots, and 480 in the New Land. Trapping periods at a plot ranged from 2 to 7 nights (see appendix).

Across all sites captures consisted of 110 deer mice, 29 13-lined ground squirrels, 2 hispid pocket mice, 2 bushy-tailed woodrats, and 1 unidentified sparrow. Only deer mice were marked; of the captures for that species 58 were new un-marked animals.

There were 250 occasions of a sprung trap that did not have an animal inside, or 9.1% of the trap-nights. Small mammal studies often treat sprung-but-empty traps as contributing 0.5 trap nights to total trap effort (Beauvais and Buskirk 1999, Licht et al. 2012). There was a difference in sprung-but-empty rates between the North Boundary Prairie Dog Town treatment plots (9.7) and control plots (8.3) so effective trap nights was used in presenting data that contrasted the difference between the strata.

Capture attributes of deer mice changed over time with the number of recaptures and dead animals increasing and the new number of new captures declining (Figure 8). A total of 6 deer mice and 5 13-lined ground squirrels were found dead in traps. Of the 13-lined ground squirrels found dead, 4 occurred on July 20, 2012, a day of 100 degrees F with the preceding day (probably the day of capture) having a high of 104 degrees F. All of the dead deer mice were animals that had been previously captured; in some cases the animals had been captured several times.

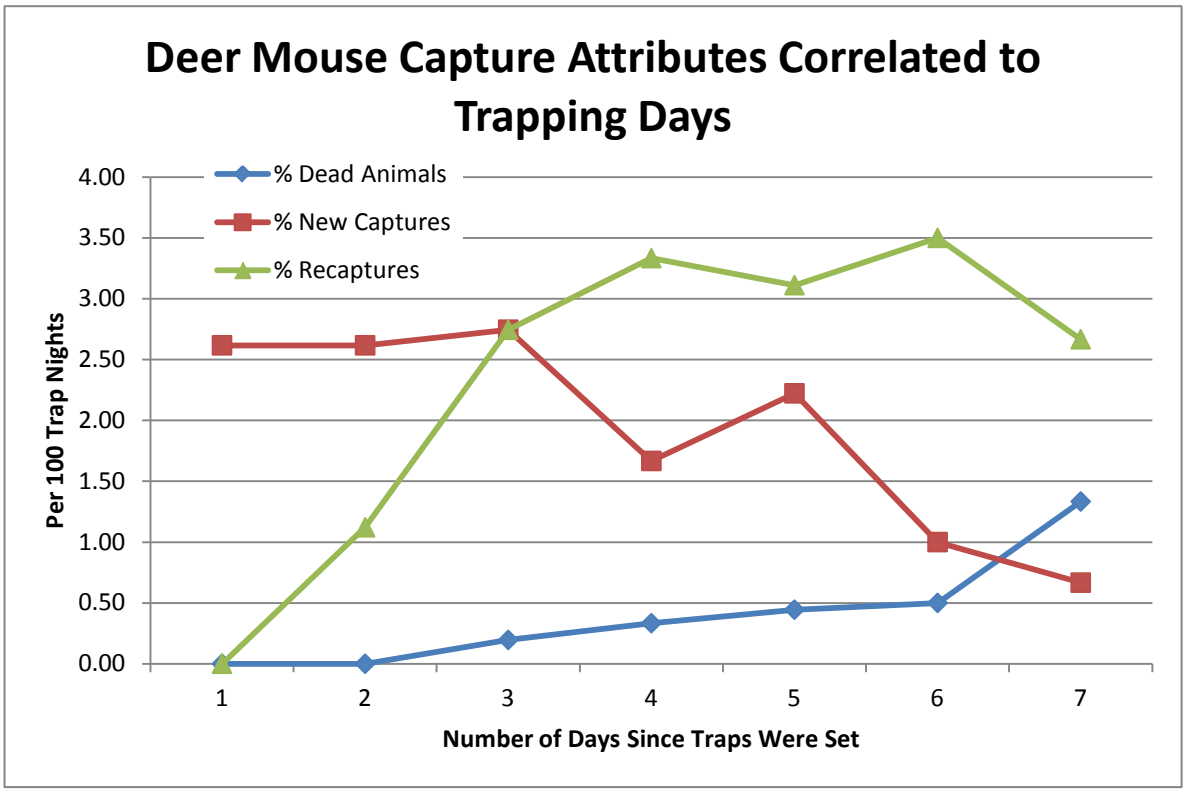

Figure 8. Deer mouse capture attributes correlated to trapping days

There were more sprung traps and more animal captures in the treatment versus the control plots (Table 1). In the North Boundary Prairie Dog Town there was a total of 63 deer mouse captures; 27 in the control plots and 36 in the treatment plots. Of the captures, 30 were new un-marked animals; 13 in the control plots and 17 in the treatment plots. There were 28 13-lined ground squirrel captures; 2 of which occurred in control plots and 26 in treatment plots. Ground squirrels were caught in all 6 of the treatment control plots versus two of the control plots.

Table 1. Capture rates in the North Boundary Prairie Dog Town

	Effective Trap-nights	All Deer Mice Captures per 100 Effective Trap Nights	New Deer Mice Captures Only per 100 Effective Trap Nights	All 13-lined Ground Squirrel Captures per 100 Effective Trap Nights
Control Plots	825	3.3	1.6	0.2
Treatment Plots	813	4.4	2.1	3.2

On the new land there were 33 deer mouse captures, of which 18 were new, 2 captures of hispid pocket mouse, 2 captures of bushy-tailed woodrat, and 1 unidentified sparrow. The hispid pocket mouse captures occurred in the same plot on different nights so that may have been the same individual. Likewise, the bushy-tailed woodrat captures occurred in the same plot on different nights so that also may have been a single animal. The only other animal capture was an unidentified sparrow caught on the Mahogany line.

Discussion

The small mammal trapping project reported here was designed as 1) a pilot study of the impacts of dusting on small mammal abundance in prairie dog towns, and 2) an initial inventory of small mammal presence on newly acquired lands at Wind Cave National Park.

Prior to conducting the pilot study of the impacts of dusting the author's concern, and that of park staff, was that dusting could indirectly reduce deer mouse populations by decreasing the amount of insect prey available to deer mice as arthropods make up a significant portion of the diet of deer mice in prairie dog towns (Agnew et al. 1987). However, the results of this study, although tenuous, suggest that dusting may actually result in higher abundance of deer mice on dusted vs. undusted areas, possibly due to dusting protecting deer mice from plague. Holmes (2003) found higher deer mouse abundance on sites that did not have plague. This study also found that 13-lined ground squirrels, the only other small mammal strongly affiliated with prairie dog towns in the park (Duckwitz 2001, this study), may also benefit from dusting for purposes of preventing plague epizootics in prairie dog towns.

This study found that the capture rate of previously un-captured deer mice remained steady until about day 4 when it declined. This trend was comparable to what was found by Duckwitz (2001) with a much larger sample size and across 20 vegetation alliances at the park. He recommended a minimum of 6 nights for documenting presence-absence of small mammal species. However, optimizing effort within and among sites for assessing species occurrence or abundance should explicitly consider how detection probability varies with differing levels and patterns of trap effort and other factors (Skalski and Robson 1992). This study did document at least one case of a deer mouse apparently moving between grids. As the data presented here indicate, the probability of mortality also must be considered and balanced with other design factors.

Duckwitz (2001) reported a capture rate of new (i.e., unmarked) deer mice in prairie dog towns at 1.8 animals per 100 trap nights. He did not appear to adjust his calculation for sprung traps (see Beauvais and Buskirk 1999). That rate is comparable to the 1.6 unadjusted rate reported in this study. He also reported a capture rate of 1.9 for new 13-lined ground squirrels in prairie dog towns; this study had a capture rate of 1.3 for prairie dog towns; however, some of the captures may have been recaptures. In this study the capture rate of 13-lined ground squirrels varied greatly; for example the rate in the treated portion of the North Boundary Prairie Dog Town was 2.9 whereas in the control portion it was 0.2. This disparity may have been due to dusting, but it may have also been due to habitat or other factors.

This study used, but did not experimentally test, covering the traps with a cloth affixed to the ground with roofing nails. In the opinion of the author that step was beneficial and worthwhile because it: 1) may minimize trap disturbance and malfunction from prairie dogs, bison, the wind, and other factors, 2) made the traps less visible thereby reducing vandalism, theft, and other human impacts, and 3) may have provided some thermal protection from daytime highs and nighttime lows. Although these benefits could be quantified with further testing, the use of some sort of thermal protection is generally assumed essential when live-trapping with metal traps in hot, exposed sites.

A second objective of this study was to document the presence of the northern grasshopper mouse in newly acquired land to the south of the park. No northern grasshopper mice were captured; however, the sample size consisted of only 480 trap-nights and only a small portion of the new land was sampled and only for a short period. The absence of northern grasshopper mouse captures does not prove a negative, i.e., that the species is not in the park. Additional trapping is warranted before a more definitive statement can be made regarding the presence or absence of the species within the park. Grasshopper mice are generally reported to occur in low density: Agnew et al. (1986) reported a capture rate of 0.3 unique grasshopper mice per 100 trap-nights in mixed grass prairie in western South Dakota. However, they reported a capture rate of 1.2 per 100 trap-nights in prairie dog towns. Neither this study nor Duckwitz (2001) captured the species despite extensive trapping in prairie dog towns within the park.

Wind Cave National Park provides an excellent study area for researching and testing the impacts of dusting on non-target small mammals and other species associated with prairie dog towns (e.g., tiger salamanders). Its recognized that dusting is an important management action and that conserving healthy prairie dog colonies and associated species such as the endangered black-footed ferret is a high priority for the park, but dusting can and should be done in a way that also provides opportunities for this critical research. Such an approach is consistent with the principles of adaptive management and National Park Service (2006) policies. The methods and data reported here provide a foundation for a more intensive study of the impacts of dusting on small mammal abundance.

Management and Research Recommendations

- Future dusting actions should leave some areas undusted as a refugia and for research purposes.

- Adaptive management principles should be used in dusting operations.

- Research on the impacts of dusting on small mammal populations should be designed using a hypothesis of no effect and 2-tailed statistical tests as dusting with deltamethrin may have no effect, may decrease small mammal abundance, or may increase small mammal abundance.

- As a general rule stop trapping at a site after 4 days as the number of new captures declines at that point and the frequency of mortalities increases due to the stress place on individuals repeatedly captured (however, specific objectives may supersede this rule).

- Avoid trapping when temperatures approach 100 degrees F or check traps several times a day including in the evening to avoid mortality to ground squirrels.

- Cover the traps with a cloth affixed to the ground or use other means to minimize trap malfunction due to disturbance by prairie dogs, bison, the wind, and other factors.

- Thirteen-lined ground squirrel abundance was greater than anticipated in prairie dog towns. In future studies the animals should be marked; however, a mechanical mark such as an ear tag may work better than a Sharpie as the animals were often wet and the pen marks did not appear to take well.

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Appendix

Trap Locations. Trap locations were recorded using a Garmin eTrek GPS unit (the use of trade names does not constitute an endorsement). Data was recorded in NAD 83 system. Coordinate accuracy reading was generally plus/minus 10 meters according to GPS display. Nomenclature for site names is *Site_Acronym of Plot Name_Trap Number*.

North Boundary Prairie Dog Town

East Control Plot		East Treatment Plot	
NB_EC_01	13 T 623641 4832442	NB_ET_01	13 T 623825 4832861
NB_EC_02	13 T 623626 4832447	NB_ET_02	13 T 623811 4832861
NB_EC_03	13 T 623615 4832454	NB_ET_03	13 T 623799 4832860
NB_EC_04	13 T 623601 4832458	NB_ET_04	13 T 623786 4832862
NB_EC_05	13 T 623597 4832440	NB_ET_05	13 T 623784 4832850
NB_EC_06	13 T 623610 4832439	NB_ET_06	13 T 623799 4832847
NB_EC_07	13 T 623623 4832430	NB_ET_07	13 T 623812 4832848
NB_EC_08	13 T 623636 4832431	NB_ET_08	13 T 623825 4832847
NB_EC_09	13 T 623632 4832417	NB_ET_09	13 T 623826 4832835
NB_EC_10	13 T 623619 4832419	NB_ET_10	13 T 623813 4832836
NB_EC_11	13 T 623609 4832429	NB_ET_11	13 T 623801 4832834
NB_EC_12	13 T 623593 4832428	NB_ET_12	13 T 623781 4832836
NB_EC_13	13 T 623588 4832410	NB_ET_13	13 T 623779 4832824
NB_EC_14	13 T 623598 4832411	NB_ET_14	13 T 623800 4832821
NB_EC_15	13 T 623611 4832401	NB_ET_15	13 T 623814 4832822
NB_EC_16	13 T 623627 4832405	NB_ET_16	13 T 623826 4832821

Middle Control Plot		Middle Treatment Plot	
NB_MC_01	13 T 623557 4832433	NB_MT_01	13 T 623741 4832852
NB_MC_02	13 T 623543 4832435	NB_MT_02	13 T 623728 4832854
NB_MC_03	13 T 623531 4832436	NB_MT_03	13 T 623716 4832853
NB_MC_04	13 T 623518 4832439	NB_MT_04	13 T 623703 4832855
NB_MC_05	13 T 623516 4832428	NB_MT_05	13 T 623702 4832843
NB_MC_06	13 T 623526 4832425	NB_MT_06	13 T 623716 4832840
NB_MC_07	13 T 623541 4832423	NB_MT_07	13 T 623728 4832841
NB_MC_08	13 T 623554 4832422	NB_MT_08	13 T 623740 4832840
NB_MC_09	13 T 623552 4832408	NB_MT_09	13 T 623742 4832829
NB_MC_10	13 T 623539 4832409	NB_MT_10	13 T 623729 4832829
NB_MC_11	13 T 623524 4832413	NB_MT_11	13 T 623716 4832828
NB_MC_12	13 T 623514 4832415	NB_MT_12	13 T 623701 4832828
NB_MC_13	13 T 623511 4832405	NB_MT_13	13 T 623699 4832814
NB_MC_14	13 T 623522 4832400	NB_MT_14	13 T 623716 4832815

NB_MC_15	13 T 623539 4832402	NB_MT_15	13 T 623729 4832816
NB_MC_16	13 T 623552 4832395	NB_MT_16	13 T 623742 4832817

West Control Plot		West Treatment Plot	
NB_WC_01	13 T 623486 4832457	NB_WT_01	13 T 623627 4832861
NB_WC_02	13 T 623475 4832459	NB_WT_02	13 T 623613 4832862
NB_WC_03	13 T 623463 4832463	NB_WT_03	13 T 623597 4832862
NB_WC_04	13 T 623451 4832466	NB_WT_04	13 T 623582 4832863
NB_WC_05	13 T 623446 4832453	NB_WT_05	13 T 623581 4832850
NB_WC_06	13 T 623461 4832450	NB_WT_06	13 T 623595 4832847
NB_WC_07	13 T 623472 4832446	NB_WT_07	13 T 623611 4832848
NB_WC_08	13 T 623484 4832444	NB_WT_08	13 T 623625 4832846
NB_WC_09	13 T 623481 4832430	NB_WT_09	13 T 623625 4832834
NB_WC_10	13 T 623469 4832434	NB_WT_10	13 T 623610 4832833
NB_WC_11	13 T 623460 4832439	NB_WT_11	13 T 623595 4832833
NB_WC_12	13 T 623444 4832441	NB_WT_12	13 T 623580 4832836
NB_WC_13	13 T 623440 4832427	NB_WT_13	13 T 623580 4832822
NB_WC_14	13 T 623454 4832424	NB_WT_14	13 T 623596 4832820
NB_WC_15	13 T 623465 4832420	NB_WT_15	13 T 623609 4832820
NB_WC_16	13 T 623478 4832417	NB_WT_16	13 T 623626 4832820

New East Control Plot		New East Treatment Plot	
NB_NEC_01	13 T 623699 4832392	NB_NET_01	13 T 623942 4832820
NB_NEC_02	13 T 623682 4832394	NB_NET_02	13 T 623926 4832817
NB_NEC_03	13 T 623660 4832384	NB_NET_03	13 T 623912 4832816
NB_NEC_04	13 T 623649 4832377	NB_NET_04	13 T 623896 4832814
NB_NEC_05	13 T 623662 4832355	NB_NET_05	13 T 623908 4832803
NB_NEC_06	13 T 623669 4832365	NB_NET_06	13 T 623921 4832806
NB_NEC_07	13 T 623685 4832374	NB_NET_07	13 T 623933 4832809
NB_NEC_08	13 T 623692 4832378	NB_NET_08	13 T 623944 4832801
NB_NEC_09	13 T 623699 4832369	NB_NET_09	13 T 623940 4832794
NB_NEC_10	13 T 623695 4832368	NB_NET_10	13 T 623923 4832790
NB_NEC_11	13 T 623678 4832358	NB_NET_11	13 T 623918 4832789
NB_NEC_12	13 T 623670 4832354	NB_NET_12	13 T 623910 4832779
NB_NEC_13	13 T 623672 4832337	NB_NET_13	13 T 623911 4832774
NB_NEC_14	13 T 623684 4832343	NB_NET_14	13 T 623927 4832777
NB_NEC_15	13 T 623694 4832349	NB_NET_15	13 T 623944 4832779
NB_NEC_16	13 T 623703 4832354	NB_NET_16	13 T 623959 4832775

New Middle Control Plot		New Middle Treatment Plot	
NB_NMC_01	13 T 623595 4832368	NB_NMT_01	13 T 623481 4832916
NB_NMC_02	13 T 623591 4832364	NB_NMT_02	13 T 623467 4832913
NB_NMC_03	13 T 623577 4832359	NB_NMT_03	13 T 623452 4832907

NB_NMC_04	13 T 623564 4832353	NB_NMT_04	13 T 623436 4832903
NB_NMC_05	13 T 623568 4832345	NB_NMT_05	13 T 623441 4832889
NB_NMC_06	13 T 623576 4832346	NB_NMT_06	13 T 623455 4832894
NB_NMC_07	13 T 623592 4832346	NB_NMT_07	13 T 623471 4832894
NB_NMC_08	13 T 623602 4832353	NB_NMT_08	13 T 623488 4832900
NB_NMC_09	13 T 623608 4832355	NB_NMT_09	13 T 623490 4832886
NB_NMC_10	13 T 623605 4832346	NB_NMT_10	13 T 623477 4832883
NB_NMC_11	13 T 623596 4832342	NB_NMT_11	13 T 623462 4832879
NB_NMC_12	13 T 623587 4832339	NB_NMT_12	13 T 623449 4832876
NB_NMC_13	13 T 623585 4832328	NB_NMT_13	13 T 623450 4832861
NB_NMC_14	13 T 623596 4832319	NB_NMT_14	13 T 623460 4832863
NB_NMC_15	13 T 623607 4832322	NB_NMT_15	13 T 623478 4832866
NB_NMC_16	13 T 623616 4832327	NB_NMT_16	13 T 623489 4832869

New West Control Plot

NB_NWC_01	13 T 623416 4832505
NB_NWC_02	13 T 623403 4832501
NB_NWC_03	13 T 623390 4832497
NB_NWC_04	13 T 623378 4832491
NB_NWC_05	13 T 623380 4832479
NB_NWC_06	13 T 623389 4832481
NB_NWC_07	13 T 623408 4832493
NB_NWC_08	13 T 623416 4832501
NB_NWC_09	13 T 623425 4832495
NB_NWC_10	13 T 623402 4832478
NB_NWC_11	13 T 623392 4832474
NB_NWC_12	13 T 623380 4832467
NB_NWC_13	13 T 623384 4832459
NB_NWC_14	13 T 623385 4832453
NB_NWC_15	13 T 623399 4832460
NB_NWC_16	13 T 623417 4832495

New West Treatment Plot

NB_NWT_01	13 T 623484 4832810
NB_NWT_02	13 T 623468 4832796
NB_NWT_03	13 T 623453 4832790
NB_NWT_04	13 T 623436 4832788
NB_NWT_05	13 T 623441 4832769
NB_NWT_06	13 T 623457 4832770
NB_NWT_07	13 T 623464 4832769
NB_NWT_08	13 T 623481 4832777
NB_NWT_09	13 T 623475 4832766
NB_NWT_10	13 T 623461 4832767
NB_NWT_11	13 T 623440 4832759
NB_NWT_12	13 T 623426 4832755
NB_NWT_13	13 T 623434 4832744
NB_NWT_14	13 T 623449 4832747
NB_NWT_15	13 T 623470 4832755
NB_NWT_16	13 T 623477 4832756

Southeast Prairie Dog Town

Middle Control Plot

SE_MC_01	13 T 629919 4825889
SE_MC_02	13 T 629916 4825872
SE_MC_03	13 T 629910 4825861
SE_MC_04	13 T 629904 4825848
SE_MC_05	13 T 629891 4825854
SE_MC_06	13 T 629896 4825866
SE_MC_07	13 T 629899 4825878
SE_MC_08	13 T 629902 4825892

Middle Treatment Plot

SE_MT_01	13 T 630138 4825839
SE_MT_02	13 T 630134 4825818
SE_MT_03	13 T 630132 4825809
SE_MT_04	13 T 630127 4825793
SE_MT_05	13 T 630116 4825793
SE_MT_06	13 T 630119 4825809
SE_MT_07	13 T 630121 4825825
SE_MT_08	13 T 630124 4825841

SE_MC_09	13 T 629888 4825896
SE_MC_10	13 T 629884 4825880
SE_MC_11	13 T 629881 4825868
SE_MC_12	13 T 629877 4825854
SE_MC_13	13 T 629862 4825861
SE_MC_14	13 T 629867 4825875
SE_MC_15	13 T 629872 4825889
SE_MC_16	13 T 629875 4825903

SE_MT_09	13 T 630111 4825843
SE_MT_10	13 T 630108 4825829
SE_MT_11	13 T 630105 4825812
SE_MT_12	13 T 630102 4825797
SE_MT_13	13 T 630086 4825800
SE_MT_14	13 T 630090 4825814
SE_MT_15	13 T 630094 4825831
SE_MT_16	13 T 630096 4825846

South Treatment Plot

SE_ST_01	13 T 630136 4825766
SE_ST_02	13 T 630138 4825748
SE_ST_03	13 T 630140 4825731
SE_ST_04	13 T 630142 4825716
SE_ST_05	13 T 630128 4825716
SE_ST_06	13 T 630128 4825731
SE_ST_07	13 T 630125 4825743
SE_ST_08	13 T 630124 4825757
SE_ST_09	13 T 630111 4825756
SE_ST_10	13 T 630111 4825743
SE_ST_11	13 T 630111 4825728
SE_ST_12	13 T 630112 4825713
SE_ST_13	13 T 630099 4825715
SE_ST_14	13 T 630097 4825727
SE_ST_15	13 T 630096 4825742
SE_ST_16	13 T 630094 4825757

North Treatment Plot

SE_NT_01	13 T 630044 4825976
SE_NT_02	13 T 630036 4825962
SE_NT_03	13 T 630030 4825949
SE_NT_04	13 T 630024 4825935
SE_NT_05	13 T 630007 4825947
SE_NT_06	13 T 630013 4825960
SE_NT_07	13 T 630021 4825974
SE_NT_08	13 T 630029 4825986
SE_NT_09	13 T 630012 4825992
SE_NT_10	13 T 630004 4825978
SE_NT_11	13 T 629999 4825965
SE_NT_12	13 T 629994 4825952
SE_NT_13	13 T 629974 4825962
SE_NT_14	13 T 629981 4825978
SE_NT_15	13 T 629990 4825989
SE_NT_16	13 T 629998 4826001

Plots in Newly Acquired Land

Cedar Draw Plot

NL_CD_01	13 T 627514 4821560
NL_CD_02	13 T 627494 4821562
NL_CD_03	13 T 627476 4821569
NL_CD_04	13 T 627445 4821585
NL_CD_05	13 T 627450 4821596
NL_CD_06	13 T 627440 4821601
NL_CD_07	13 T 627431 4821615
NL_CD_08	13 T 627426 4821628
NL_CD_09	13 T 627409 4821636
NL_CD_10	13 T 627396 4821634
NL_CD_11	13 T 627378 4821617

Mahogany Plot

NL_MM_01	13 T 626581 4820520
NL_MM_02	13 T 626570 4820519
NL_MM_03	13 T 626551 4820520
NL_MM_04	13 T 626537 4820526
NL_MM_05	13 T 626511 4820534
NL_MM_06	13 T 626494 4820540
NL_MM_07	13 T 626460 4820557
NL_MM_08	13 T 626449 4820570
NL_MM_09	13 T 626433 4820581
NL_MM_10	13 T 626412 4820571
NL_MM_11	13 T 626413 4820551

NL_CD_12	13 T 627352 4821605
NL_CD_13	13 T 627343 4821612
NL_CD_14	13 T 627342 4821623
NL_CD_15	13 T 627335 4821633
NL_CD_16	13 T 627330 4821650
NL_CD_17	13 T 627314 4821675
NL_CD_18	13 T 627311 4821685
NL_CD_19	13 T 627303 4821701
NL_CD_20	13 T 627305 4821724

NL_MM_12	13 T 626422 4820539
NL_MM_13	13 T 626438 4820538
NL_MM_14	13 T 626453 4820531
NL_MM_15	13 T 626475 4820522
NL_MM_16	13 T 626489 4820514
NL_MM_17	13 T 626497 4820506
NL_MM_18	13 T 626523 4820493
NL_MM_19	13 T 626545 4820482
NL_MM_20	13 T 626560 4820477

North Hill Plot

NL_NH_01	13 T 627143 4821293
NL_NH_02	13 T 627127 4821292
NL_NH_03	13 T 627110 4821291
NL_NH_04	13 T 627101 4821289
NL_NH_05	13 T 627090 4821284
NL_NH_06	13 T 627088 4821295
NL_NH_07	13 T 627093 4821300
NL_NH_08	13 T 627108 4821302
NL_NH_09	13 T 627125 4821310
NL_NH_10	13 T 627135 4821311
NL_NH_11	13 T 627131 4821318
NL_NH_12	13 T 627118 4821319
NL_NH_13	13 T 627098 4821315
NL_NH_14	13 T 627086 4821313
NL_NH_15	13 T 627080 4821304
NL_NH_16	13 T 627072 4821318
NL_NH_17	13 T 627084 4821318
NL_NH_18	13 T 627106 4821327
NL_NH_19	13 T 627116 4821339
NL_NH_20	13 T 627127 4821342
NL_NH_21	13 T 627138 4821359
NL_NH_22	13 T 627121 4821366
NL_NH_23	13 T 627100 4821357
NL_NH_24	13 T 627089 4821351
NL_NH_25	13 T 627068 4821345

South Central Plot

NL_SC_01	13 T 627012 4820430
NL_SC_02	13 T 626990 4820431
NL_SC_03	13 T 626971 4820429
NL_SC_04	13 T 626958 4820431
NL_SC_05	13 T 626946 4820435
NL_SC_06	13 T 626952 4820449
NL_SC_07	13 T 626970 4820449
NL_SC_08	13 T 626981 4820451
NL_SC_09	13 T 626997 4820449
NL_SC_10	13 T 627015 4820445
NL_SC_11	13 T 627011 4820460
NL_SC_12	13 T 626997 4820459
NL_SC_13	13 T 626981 4820464
NL_SC_14	13 T 626964 4820465
NL_SC_15	13 T 626954 4820468
NL_SC_16	13 T 626956 4820482
NL_SC_17	13 T 626970 4820482
NL_SC_18	13 T 626985 4820480
NL_SC_19	13 T 627000 4820475
NL_SC_20	13 T 627015 4820473
NL_SC_21	13 T 627014 4820485
NL_SC_22	13 T 626997 4820490
NL_SC_23	13 T 626984 4820492
NL_SC_24	13 T 626971 4820497
NL_SC_25	13 T 626960 4820497

Southeast Plot

NL_SE_01	13 T 627544 4820290
NL_SE_02	13 T 627528 4820288
NL_SE_03	13 T 627518 4820288

Waterline Plot

NL_WL_01	13 T 627356 4821657
NL_WL_02	13 T 627350 4821675
NL_WL_03	13 T 627344 4821691

NL_SE_04	13 T 627504 4820280
NL_SE_05	13 T 627489 4820274
NL_SE_06	13 T 627483 4820285
NL_SE_07	13 T 627495 4820292
NL_SE_08	13 T 627506 4820297
NL_SE_09	13 T 627525 4820304
NL_SE_10	13 T 627540 4820309
NL_SE_11	13 T 627532 4820329
NL_SE_12	13 T 627520 4820318
NL_SE_13	13 T 627502 4820307
NL_SE_14	13 T 627490 4820304
NL_SE_15	13 T 627472 4820299
NL_SE_16	13 T 627469 4820316
NL_SE_17	13 T 627488 4820327
NL_SE_18	13 T 627504 4820334
NL_SE_19	13 T 627518 4820338
NL_SE_20	13 T 627530 4820343
NL_SE_21	13 T 627520 4820360
NL_SE_22	13 T 627504 4820357
NL_SE_23	13 T 627487 4820347
NL_SE_24	13 T 627471 4820337
NL_SE_25	13 T 627458 4820329

NL_WL_04	13 T 627341 4821706
NL_WL_05	13 T 627343 4821722
NL_WL_06	13 T 627342 4821735
NL_WL_07	13 T 627346 4821749
NL_WL_08	13 T 627346 4821767
NL_WL_09	13 T 627337 4821788
NL_WL_10	13 T 627335 4821802
NL_WL_11	13 T 627328 4821819
NL_WL_12	13 T 627321 4821838
NL_WL_13	13 T 627315 4821856
NL_WL_14	13 T 627309 4821869
NL_WL_15	13 T 627303 4821884
NL_WL_16	13 T 627295 4821904
NL_WL_17	13 T 627290 4821918
NL_WL_18	13 T 627282 4821931
NL_WL_19	13 T 627279 4821954
NL_WL_20	13 T 627275 4821965

Trapping Results. Captures were recorded in the field with either a clipboard or a digital audio recorder and later transcribed to an Excel file. PEMA=*Peromyscus maniculatus*, ICTR= *Ictidomys tridecemlineatus*, CHHI= *Chaetodipus hispidus*, NECI= *Neotoma cinerea*.

North Boundary Prairie Dog Town – East Control Plot

Trap ID#	7/10/2012	7/11/2012	7/12/2012	7/13/2012	7/14/2012	7/15/2012	7/16/2012	7/17/2012
NB-EC-01	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-02	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-03	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-04	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-05	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-06	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-07	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-08	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-09	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-10	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-11	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-12	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-13	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-14	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-15	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-16	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-17	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-18	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-19	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-20	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-21	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-22	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-23	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-24	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB-EC-25	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
		1 sprung	1 sprung	3 sprung	4 sprung		1 sprung	

North Boundary Prairie Dog Town – Middle Control Plot

Trap ID#	7/10/2012	7/11/2012	7/12/2012	7/13/2012	7/14/2012	7/15/2012	7/16/2012	7/17/2012
NB_MC_01	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_02	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_03	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_04	Set	Empty	Empty	Empty	Empty	Empty	Empty	PEMA - New
NB_MC_05	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_06	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_07	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_08	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_09	Set	Empty	Empty	Empty	Empty	Empty	PEMA - Recap Blue	PEMA - Recap Blue
NB_MC_10	Set	Empty	Empty	Empty	Empty	PEMA - New Blue	Empty	Close
NB_MC_11	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_12	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_13	Set	Empty	Empty	Empty	Empty	Empty	PEMA - Recap Red	Close
NB_MC_14	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_15	Set	Empty	Empty	Empty	Empty	Empty	PEMA - New	Close
NB_MC_16	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_17	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_18	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_19	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_20	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_21	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_22	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_23	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_24	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MC_25	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
		3 sprung	3 sprung	3 sprung	6 sprung	1 sprung	2 sprung	3 sprung

North Boundary Prairie Dog Town – West Control Plot

Trap ID#	7/10/2012	7/11/2012	7/12/2012	7/13/2012	7/14/2012	7/15/2012	7/16/2012	7/17/2012
NB_WC_01	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_02	Set	Empty	Empty	Empty	Empty	ICTR	Empty	Close
NB_WC_03	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_04	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_05	Set	PEMA - New Green	Empty	PEMA - Recap Green	PEMA - New Red	Empty	Empty	Close
NB_WC_06	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_07	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_08	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_09	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_10	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_11	Set	Empty	Empty	Empty	Empty	PEMA - Recap Green	Empty	Close
NB_WC_12	Set	Empty	Empty	Empty	PEMA - Recap Green	Empty	Empty	Close
NB_WC_13	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_14	Set	Empty	Empty	PEMA - New Blue	Empty	PEMA - Recap Red	Empty	Close
NB_WC_15	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_16	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_17	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_18	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_19	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_20	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_21	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_22	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_23	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_24	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WC_25	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
		1 sprung	8 sprung	5 sprung		1 sprung	3 sprung	2 sprung

North Boundary Prairie Dog Town – East Treatment Plot

Trap ID#	7/10/2012	7/11/2012	7/12/2012	7/13/2012	7/14/2012	7/15/2012	7/16/2012	7/17/2012
NB_ET_01	Set	Empty	PEMA - New Black	PEMA - New Green	Empty	Empty	Empty	Close
NB_ET_02	Set	Empty	Empty	Empty	Empty	PEMA - Recap Red	Empty	Close
NB_ET_03	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_04	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_05	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_06	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_07	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_08	Set	Empty	Empty	Empty	Empty	Empty	ICTR	Close
NB_ET_09	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_10	Set	Empty	Empty	Empty	Empty	PEMA - Recap Green	Empty	Close
NB_ET_11	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_12	Set	Empty	Empty	Empty	Empty	Empty	PEMA - Recap Red	Close
NB_ET_13	Set	Empty	Empty	Empty	Empty	Empty	Empty	ICTR
NB_ET_14	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_15	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_16	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_17	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_18	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_19	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_20	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_21	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_22	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_23	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_24	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_ET_25	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
			1 sprung	7 sprung	1 sprung		1 sprung	4 sprung

North Boundary Prairie Dog Town – Middle Treatment Plot

Trap ID#	7/10/2012	7/11/2012	7/12/2012	7/13/2012	7/14/2012	7/15/2012	7/16/2012	7/17/2012
NB_MT_01	Set	ICTR	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_02	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_03	Set	Empty	ICTR	Empty	Empty	Empty	Empty	Close
NB_MT_04	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_05	Set	PEMA - New Red	Empty	Empty	ICTR	Empty	Empty	ICTR
NB_MT_06	Set	Empty	Empty	Empty	Empty	Empty	Empty	PEMA - Recap Green
NB_MT_07	Set	Empty	Empty	Empty	Empty	ICTR	Empty	Close
NB_MT_08	Set	Empty	Empty	PEMA - Recap Red	Empty	Empty	PEMA - Recap Purple	Close
NB_MT_09	Set	Empty	Empty	Empty	Empty	ICTR	Empty	Close
NB_MT_10	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_11	Set	PEMA - New Blue	PEMA - Recap Red	Empty	Empty	Empty	Empty	Close
NB_MT_12	Set	Empty	Empty	Empty	PEMA - Recap Purple	Empty	Empty	Close
NB_MT_13	Set	Empty	PEMA - New Green	Empty	Empty	Empty	Empty	Close
NB_MT_14	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_15	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_16	Set	Empty	Empty	ICTR	Empty	Empty	Empty	Close
NB_MT_17	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_18	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_19	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_20	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_21	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_22	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_23	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_24	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_MT_25	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
			2 sprung	5 sprung	6 sprung	4 sprung	4 sprung	3 sprung

North Boundary Prairie Dog Town – West Treatment Plot

Trap ID#	7/10/2012	7/11/2012	7/12/2012	7/13/2012	7/14/2012	7/15/2012	7/16/2012	7/17/2012
NB_WT_01	Set	Empty	PEMA - New Purple	PEMA - Recap Green	PEMA - Recap Green	PEMA - Recap Green	PEMA - Recap Green	Close
NB_WT_02	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_03	Set	Empty	Empty	Empty	Empty	Empty	Empty	ICTR
NB_WT_04	Set	Empty	Empty	PEMA - New Orange	PEMA - Recap Orange	Empty	Empty	Close
NB_WT_05	Set	Empty	Empty	Empty	Empty	PEMA - New Red	Empty	Close
NB_WT_06	Set	Empty	Empty	Empty	PEMA - New Black	Empty	Empty	Close
NB_WT_07	Set	Empty	Empty	Empty	Empty	Empty	Empty	PEMA - Recap Red
NB_WT_08	Set	Empty	Empty	Empty	Empty	PEMA - Recap Purple	PEMA - Recap Red	PEMA - Recap Red
NB_WT_09	Set	Empty	Empty	Empty	Empty	ICTR	Empty	Close
NB_WT_10	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_11	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_12	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_13	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_14	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_15	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_16	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_17	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_18	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_19	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_20	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_21	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_22	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_23	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_24	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
NB_WT_25	Set	Empty	Empty	Empty	Empty	Empty	Empty	Close
		1 sprung	3 sprung	4 sprung	1 sprung	3 sprung	3 sprung	4 sprung

North Boundary Prairie Dog Town – New East Control Plot

Trap ID#	7/17/2012	7/18/2012	7/19/2012	7/20/2012	7/23/2012	7/24/2012	7/25/2012
NB_NEC_01	Set	Empty	Empty	PEMA - New Blue	Set	Empty	Close
NB_NEC_02	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_03	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_04	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_05	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_06	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_07	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_08	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_09	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_10	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_11	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_12	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_13	Set	Empty	Empty	PEMA - New Red	Set	Empty	Close
NB_NEC_14	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_15	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_16	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_17	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_18	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_19	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_20	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_21	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_22	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_23	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_24	Set	Empty	Empty	Close	Set	Empty	Close
NB_NEC_25	Set	Empty	Empty	Close	Set	Empty	Close
		4 sprung	1 sprung	2 sprung		4 sprung	

North Boundary Prairie Dog Town – New Middle Control Plot

Trap ID#	7/17/2012	7/18/2012	7/19/2012	7/20/2012	7/23/2012	7/24/2012	7/25/2012
NB_NMC_01	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_02	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_03	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_04	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_05	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_06	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_07	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_08	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_09	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_10	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_11	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_12	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_13	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_14	Set	Empty	Empty	PEMA - New Blue	Set	Empty	Close
NB_NMC_15	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_16	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_17	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_18	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_19	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_20	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_21	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_22	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_23	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_24	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMC_25	Set	Empty	Empty	Close	Set	Empty	Close
		2 sprung	1 sprung			3 sprung	1 sprung

North Boundary Prairie Dog Town – New West Control Plot

Trap ID#	7/17/2012	7/18/2012	7/19/2012	7/20/2012	7/23/2012	7/24/2012	7/25/2012
NB_NWC_01	Set	Empty	Empty	ICTR - New Dead	Set	Empty	Close
NB_NWC_02	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_03	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_04	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_05	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_06	Set	Empty	Empty	Close	Set	PEMA - New Purple	Close
NB_NWC_07	Set	Empty	PEMA - New Blue	PEMA - Recap Blue	Set	Empty	PEMA - Recap Purple
NB_NWC_08	Set	PEMA - New Red	Empty	PEMA - Recap Orange	Set	Empty	Close
NB_NWC_09	Set	PEMA - New Black	PEMA - New Orange	Close	Set	Empty	Close
NB_NWC_10	Set	Empty	PEMA - Recap Red	PEMA - Recap Red	Set	Empty	Close
NB_NWC_11	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_12	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_13	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_14	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_15	Set	Empty	Empty	Close	Set	Empty	PEMA - Recap Red
NB_NWC_16	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_17	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_18	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_19	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_20	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_21	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_22	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_23	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_24	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWC_25	Set	Empty	Empty	Close	Set	Empty	Close
		1 sprung	1 sprung			3 sprung	1 sprung

North Boundary Prairie Dog Town – New East Treatment Plot

Trap ID#	7/17/2012	7/18/2012	7/19/2012	7/20/2012	7/23/2012	7/24/2012	7/25/2012
NB_NET_01	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_02	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_03	Set	Empty	ICTR - New Purple	Close	Set	Empty	PEMA - New
NB_NET_04	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_05	Set	Empty	Empty	ICTR -New Dead	Set	Empty	ICTR - New
NB_NET_06	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_07	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_08	Set	Empty	ICTR - New Blue	Close	Set	Empty	Close
NB_NET_09	Set	Empty	Empty	Close	Set	Empty	ICTR - New
NB_NET_10	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_11	Set	Empty	PEMA - New Blue	Close	Set	Empty	Close
NB_NET_12	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_13	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_14	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_15	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_16	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_17	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_18	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_19	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_20	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_21	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_22	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_23	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_24	Set	Empty	Empty	Close	Set	Empty	Close
NB_NET_25	Set	Empty	Empty	Close	Set	Empty	Close
			1 sprung	1 sprung		3 sprung	2 sprung

North Boundary Prairie Dog Town – New Middle Treatment Plot

Trap ID#	7/17/2012	7/18/2012	7/19/2012	7/20/2012	7/23/2012	7/24/2012	7/25/2012
NB_NMT_01	Set	ICTR	PEMA - New Red	Close	Set	Empty	Close
NB_NMT_02	Set	Empty	Empty	Close	Set	ICTR - New Green	Close
NB_NMT_03	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_04	Set	Empty	ICTR - New Red	Close	Set	Empty	Close
NB_NMT_05	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_06	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_07	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_08	Set	Empty	Empty	ICTR - New Dead	Set	Empty	Close
NB_NMT_09	Set	Empty	ICTR - New Blue	Close	Set	Empty	ICTR - New
NB_NMT_10	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_11	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_12	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_13	Set	Empty	Empty	Close	Set	Empty	ICTR - New Red
NB_NMT_14	Set	ICTR	Empty	Close	Set	Empty	Close
NB_NMT_15	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_16	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_17	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_18	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_19	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_20	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_21	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_22	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_23	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_24	Set	Empty	Empty	Close	Set	Empty	Close
NB_NMT_25	Set	Empty	Empty	Close	Set	Empty	Close
		3 sprung		2 sprung		5 sprung	2 sprung

North Boundary Prairie Dog Town – New West Treatment Plot

Trap ID#	7/17/2012	7/18/2012	7/19/2012	7/20/2012	7/23/2012	7/24/2012	7/25/2012
NB_NWT_01	Set	Empty	ICTR - New Purple	Close	Set	Empty	Close
NB_NWT_02	Set	Empty	Empty	Close	Set	Empty	PEMA - New
NB_NWT_03	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_04	Set	Empty	Empty	Close	Set	PEMA - New Red	PEMA - Recap Purple
NB_NWT_05	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_06	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_07	Set	PEMA - New Black	PEMA - New Blue	PEMA - Recap Blue	Set	Empty	Close
NB_NWT_08	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_09	Set	Empty	Empty	ICTR - New Dead	Set	Empty	Close
NB_NWT_10	Set	Empty	Empty	Close	Set	Empty	PEMA - New
NB_NWT_11	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_12	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_13	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_14	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_15	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_16	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_17	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_18	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_19	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_20	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_21	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_22	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_23	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_24	Set	Empty	Empty	Close	Set	Empty	Close
NB_NWT_25	Set	Empty	Empty	Close	Set	Empty	Close
			2 sprung			6 sprung	3 sprung

Southeast Prairie Dog Town – North Treatment Plot

Trap ID#	7/2/2012	7/3/2012	7/4/2012	7/5/2012	7/6/2012	7/7/2012	7/8/2012
SE_NT_01	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_02	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_03	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_04	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_05	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_06	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_07	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_08	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_09	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_10	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_11	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_12	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_13	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_14	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_15	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_16	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_17	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_18	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_19	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_20	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_21	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_22	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_23	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_24	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_NT_25	Set	Empty	Empty	Empty	Empty	Empty	Close
		2 sprung	7 sprung	8 sprung	8 sprung	12 sprung	12 sprung

Southeast Prairie Dog Town – Middle Treatment Plot

Trap ID#	7/2/2012	7/3/2012	7/4/2012	7/5/2012	7/6/2012	7/7/2012	7/8/2012
SE_MT_01	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_02	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_03	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_04	Set	Empty	PEMA - New Orange	PEMA - Recap Orange	Empty	Empty	PEMA - New Orange
SE_MT_05	Set	Empty	PEMA - New Blue	Empty	Empty	PEMA - Recap Purple	PEMA - Recap Purple
SE_MT_06	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_07	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_08	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_09	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_10	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_11	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_12	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_13	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_14	Set	Empty	Empty	PEMA - New Purple	Empty	PEMA - New Green	Close
SE_MT_15	Set	Empty	Empty	Empty	PEMA - Recap Purple	Empty	Close
SE_MT_16	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_17	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_18	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_19	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_20	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_21	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_22	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_23	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_24	Set	Empty	Empty	Empty	Empty	Empty	Close
SE_MT_25	Set	Empty	Empty	Empty	Empty	Empty	Close
				2 sprung	4 sprung	2 sprung	6 sprung

Southeast Prairie Dog Town – South Treatment Plot

Date	7/3/2012	7/4/2012	7/5/2012	7/6/2012	7/7/2012	7/8/2012
SE_ST_01	Set	Empty	Empty	Empty	Empty	Close
SE_ST_02	Set	Empty	Empty	PEMA - New Blue	PEMA - New Green	Close
SE_ST_03	Set	Empty	Empty	Empty	Empty	Close
SE_ST_04	Set	Empty	Empty	Empty	Empty	Close
SE_ST_05	Set	Empty	Empty	Empty	Empty	PEMA - New
SE_ST_06	Set	Empty	Empty	Empty	PEMA - Recap Orange	Close
SE_ST_07	Set	Empty	Empty	Empty	Empty	Close
SE_ST_08	Set	Empty	Empty	Empty	Empty	Close
SE_ST_09	Set	Empty	Empty	Empty	Empty	Close
SE_ST_10	Set	Empty	Empty	Empty	Empty	Close
SE_ST_11	Set	Empty	Empty	Empty	Empty	Close
SE_ST_12	Set	Empty	Empty	Empty	Empty	Close
SE_ST_13	Set	Empty	Empty	PEMA - New Orange	Empty	Close
SE_ST_14	Set	Empty	Empty	Empty	Empty	PEMA - New
SE_ST_15	Set	Empty	Empty	Empty	Empty	Close
SE_ST_16	Set	Empty	Empty	Empty	Empty	Close
SE_ST_17	Set	Empty	Empty	Empty	Empty	Close
SE_ST_18	Set	Empty	Empty	Empty	Empty	Close
SE_ST_19	Set	Empty	Empty	Empty	Empty	Close
SE_ST_20	Set	Empty	Empty	Empty	Empty	Close
SE_ST_21	Set	Empty	Empty	Empty	Empty	Close
SE_ST_22	Set	Empty	Empty	Empty	Empty	Close
SE_ST_23	Set	Empty	Empty	Empty	Empty	Close
SE_ST_24	Set	Empty	Empty	Empty	Empty	Close
SE_ST_25	Set	Empty	Empty	Empty	Empty	Close
		1 sprung	2 sprung	5 sprung	8 sprung	5 sprung

Southeast Prairie Dog Town – Middle Control Plot

Trap ID#	7/2/2012	7/3/2012	7/4/2012
SE_MC_01	Set	Empty	Close
SE_MC_02	Set	Empty	Close
SE_MC_03	Set	Empty	Close
SE_MC_04	Set	Empty	ICTR - New
SE_MC_05	Set	Empty	Close
SE_MC_06	Set	Empty	Close
SE_MC_07	Set	Empty	Close
SE_MC_08	Set	Empty	Close
SE_MC_09	Set	Empty	Close
SE_MC_10	Set	Empty	Close
SE_MC_11	Set	Empty	Close
SE_MC_12	Set	Empty	Close
SE_MC_13	Set	Empty	Close
SE_MC_14	Set	Empty	Close
SE_MC_15	Set	Empty	Close
SE_MC_16	Set	Empty	Close
SE_MC_17	Set	Empty	Close
SE_MC_18	Set	Empty	Close
SE_MC_19	Set	Empty	Close
SE_MC_20	Set	Empty	Close
SE_MC_21	Set	Empty	Close
SE_MC_22	Set	Empty	Close
SE_MC_23	Set	Empty	Close
SE_MC_24	Set	Empty	Close
SE_MC_25	Set	Empty	Close
		4 sprung	2 sprung

New Land – Southeast Plot

Trapping Results of the "New Land - Southeast Plot." The plot straddled a 2-track trail from the main road south of the park to the shed and corral area.

Trap ID#	9/24/2012	9/25/2012	9/26/2012	9/27/2012	9/28/2012
NL-SE-01	Set	PEMA - New Red	PEMA - Recap Red	Empty	Close
NL-SE-02	Set	CHHI - New Blue	Empty	Empty	Close
NL-SE-03	Set	Empty	Empty	Empty	Close
NL-SE-04	Set	Empty	Empty	Empty	Close
NL-SE-05	Set	Empty	Empty	Empty	Close
NL-SE-06	Set	Empty	Empty	Empty	Close
NL-SE-07	Set	Empty	Empty	Empty	Close
NL-SE-08	Set	Empty	Empty	Empty	Close
NL-SE-09	Set	Empty	Empty	Empty	Close
NL-SE-10	Set	Empty	Empty	Empty	Close
NL-SE-11	Set	Empty	Empty	Empty	Close
NL-SE-12	Set	Empty	Empty	Empty	Close
NL-SE-13	Set	Empty	Empty	Empty	Close
NL-SE-14	Set	Empty	Empty	Empty	Sprung
NL-SE-15	Set	PEMA - New Blue	PEMA - Recap Blue	PEMA - Recap Blue	PEMA - Recap Blue
NL-SE-16	Set	Empty	Empty	CHHI - Recap Blue	Close
NL-SE-17	Set	Empty	Empty	Empty	Close
NL-SE-18	Set	Empty	Empty	Empty	Close
NL-SE-19	Set	Empty	Empty	Empty	Close
NL-SE-20	Set	Empty	Empty	Empty	Close
NL-SE-21	Set	Empty	Empty	Empty	Close
NL-SE-22	Set	Empty	Empty	Empty	Close
NL-SE-23	Set	Empty	Empty	Empty	Close
NL-SE-24	Set	Empty	Empty	Empty	Close
NL-SE-25	Set	Empty	Empty	Empty	Close

New Land – South Central Plot

Trapping Results of the "New Land – South Central Plot." The plot was on a knoll southwest of the shed and corral area. The knoll had bison skulls near it.

Trap ID#	9/24/2012	9/25/2012	9/26/2012	9/27/2012	9/28/2012
NL_SC-01	Set	Empty	Empty	Empty	ICTR - New
NL_SC-02	Set	Empty	Empty	Empty	Close
NL_SC-03	Set	Empty	Empty	Empty	Close
NL_SC-04	Set	Empty	Empty	Empty	Sprung
NL_SC-05	Set	Empty	Empty	Empty	Close
NL_SC-06	Set	Empty	Empty	Empty	Close
NL_SC-07	Set	Empty	Empty	Empty	Close
NL_SC-08	Set	Empty	PEMA - New Red	PEMA - Recap Red	Sprung
NL_SC-09	Set	Empty	Empty	Empty	Close
NL_SC-10	Set	Empty	Empty	Empty	Close
NL_SC-11	Set	Empty	Empty	Empty	Close
NL_SC-12	Set	Empty	Empty	Empty	PEMA - Recap Red
NL_SC-13	Set	Empty	PEMA - New Green	PEMA - New Black	PEMA - Recap Green
NL_SC-14	Set	Empty	Empty	Empty	Close
NL_SC-15	Set	Empty	Empty	Empty	Close
NL_SC-16	Set	Empty	Empty	Empty	Close
NL_SC-17	Set	Empty	Empty	Empty	Close
NL_SC-18	Set	Empty	Empty	Empty	Close
NL_SC-19	Set	Empty	Empty	Empty	Close
NL_SC-20	Set	Empty	Empty	Empty	Close
NL_SC-21	Set	Empty	Empty	Empty	Close
NL_SC-22	Set	PEMA - New Red	PEMA - Recap Red	PEMA - Recap Red	Close
NL_SC-23	Set	Empty	Empty	PEMA - Recap Green	PEMA - New
NL_SC-24	Set	Empty	Empty	Empty	PEMA - Recap Red
NL_SC-25	Set	Empty	Empty	Empty	Close

New Land – Mahogany Plot

Trapping Results of the "New Land – Mahogany Plot." The plot was on a knoll south of a 2-track trail that went west from the shed/corral area.

Trap ID#	10/1/2012	10/2/2012	10/3/2012	10/4/2012
NL_MM_01	Set	Empty	Empty	Sprung
NL_MM_02	Set	Empty	Empty	Close
NL_MM_03	Set	Empty	Empty	Close
NL_MM_04	Set	Empty	Empty	Close
NL_MM_05	Set	Empty	Empty	Close
NL_MM_06	Set	Empty	Empty	Close
NL_MM_07	Set	Empty	Empty	Close
NL_MM_08	Set	Empty	Empty	Sprung
NL_MM_09	Set	Empty	Empty	Close
NL_MM_10	Set	Empty	Empty	Close
NL_MM_11	Set	NECI - Unmarked	Sprung	Sparrow
NL_MM_12	Set	Empty	Empty	Close
NL_MM_13	Set	Empty	NECI - Unmarked	Close
NL_MM_14	Set	PEMA - New Blue	Empty	Close
NL_MM_15	Set	Empty	Sprung	Close
NL_MM_16	Set	Empty	Sprung	PEMA - New
NL_MM_17	Set	Sprung	PEMA - New Red	PEMA - Recap Red
NL_MM_18	Set	Empty	Empty	Close
NL_MM_19	Set	PEMA - New Green	Sprung	PEMA - Recap Green
NL_MM_20	Set	Empty	Empty	Close

New Land – North Hill Plot

Trapping Results of the "New Land – North Hill Plot." The plot was on a knoll adjacent to a 2-track trail and near where a underground waterline passed.

Trap ID#	9/24/2012	9/25/2012	9/26/2012	9/27/2012	9/28/2012
NL_NH_01	Set	Empty	Empty	Empty	Close
NL_NH_02	Set	Empty	Empty	Empty	Close
NL_NH_03	Set	Empty	Empty	Empty	Close
NL_NH_04	Set	PEMA - New Red	PEMA - Recap Red	Empty	Close
NL_NH_05	Set	Sprung	Empty	Empty	Close
NL_NH_06	Set	Empty	Empty	Empty	PEMA - New
NL_NH_07	Set	Empty	Empty	Empty	Close
NL_NH_08	Set	Empty	Empty	Empty	Close
NL_NH_09	Set	Sprung	Empty	Empty	Close
NL_NH_10	Set	Empty	Empty	Empty	Sprung
NL_NH_11	Set	Empty	Empty	Empty	Close
NL_NH_12	Set	Empty	Empty	Empty	Close
NL_NH_13	Set	Empty	Empty	Empty	Close
NL_NH_14	Set	Empty	Empty	Empty	Close
NL_NH_15	Set	Empty	Sprung	Empty	Close
NL_NH_16	Set	Empty	Sprung	Empty	Close
NL_NH_17	Set	Empty	Empty	Empty	Close
NL_NH_18	Set	Empty	Empty	Empty	Close
NL_NH_19	Set	Empty	Empty	Empty	Close
NL_NH_20	Set	Empty	Empty	Empty	Close
NL_NH_21	Set	Empty	Empty	Empty	Close
NL_NH_22	Set	Empty	Empty	Empty	Close
NL_NH_23	Set	Empty	Empty	Empty	Close
NL_NH_24	Set	Empty	Empty	Empty	Close
NL_NH_25	Set	Empty	Empty	Empty	Close

New Land – Cedar Draw Plot

Trapping Results of the "New Land – Cedar Draw Plot." The plot was a linear set of traps within a long cedar draw that was bisected by a 2-track trail and near the underground waterline.

Trap ID#	10/1/2012	10/2/2012	10/3/2012	10/4/2012
NL_CD_01	Set	Empty	Empty	Close
NL_CD_02	Set	Empty	Empty	Close
NL_CD_03	Set	Empty	Empty	PEMA - New
NL_CD_04	Set	Empty	Empty	Close
NL_CD_05	Set	Empty	Empty	Close
NL_CD_06	Set	Empty	Empty	PEMA - New
NL_CD_07	Set	Empty	Empty	Close
NL_CD_08	Set	Empty	Empty	Close
NL_CD_09	Set	Empty	Empty	Close
NL_CD_10	Set	Empty	Empty	Close
NL_CD_11	Set	Empty	Empty	Close
NL_CD_12	Set	Empty	Empty	Close
NL_CD_13	Set	Sprung	Empty	Close
NL_CD_14	Set	Empty	Empty	Close
NL_CD_15	Set	Empty	Empty	PEMA - New
NL_CD_16	Set	Empty	Empty	Close
NL_CD_17	Set	Empty	Empty	Close
NL_CD_18	Set	Empty	Empty	Close
NL_CD_19	Set	Empty	Empty	Close
NL_CD_20	Set	Empty	Empty	Close

New Land – Waterline Plot

Trapping Results of the "New Land – Waterline Plot." The plot was a linear set of traps on disturbed ground over an underground waterline.

Trap ID#	10/1/2012	10/2/2012	10/3/2012	10/4/2012
NL_WL_01	Set	Empty	Empty	Close
NL_WL_02	Set	Empty	Empty	Sprung
NL_WL_03	Set	Empty	Empty	Sprung
NL_WL_04	Set	Empty	Sprung	Close
NL_WL_05	Set	Empty	Empty	Close
NL_WL_06	Set	Empty	Sprung	Close
NL_WL_07	Set	Empty	Empty	Close
NL_WL_08	Set	Empty	Empty	Close
NL_WL_09	Set	Empty	Empty	PEMA - New
NL_WL_10	Set	Empty	Empty	Close
NL_WL_11	Set	Empty	Empty	Close
NL_WL_12	Set	Empty	Empty	Close
NL_WL_13	Set	Empty	Empty	Close
NL_WL_14	Set	Empty	Empty	Close
NL_WL_15	Set	Empty	Empty	Close
NL_WL_16	Set	Empty	Empty	Close
NL_WL_17	Set	Empty	Empty	Close
NL_WL_18	Set	Empty	Empty	Close
NL_WL_19	Set	Empty	Sprung	Close
NL_WL_20	Set	Empty	PEMA - New Green	PEMA - New

The Department of the Interior protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.

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