

Schmidt, Cheryl

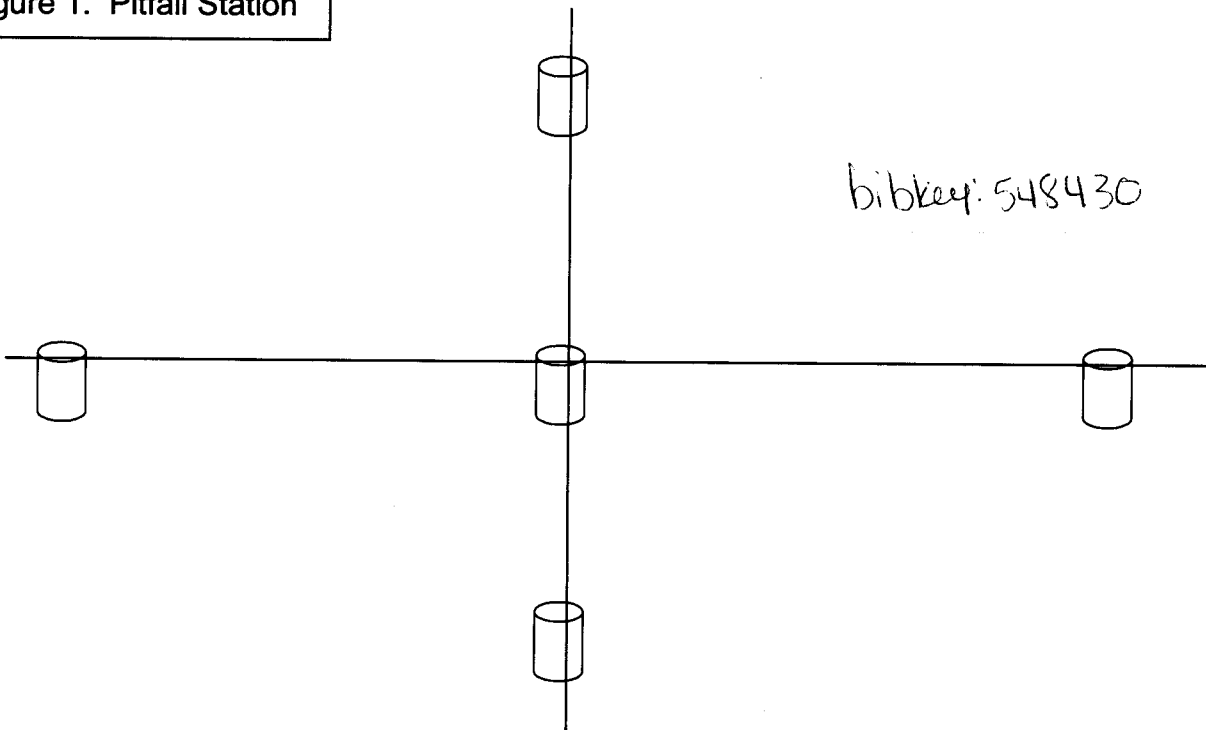
Post-Visit Report for SCOTTS BLUFF NATIONAL MONUMENT Mammal Inventory
Small Terrestrial Mammal Inventory – Summer 2002

Scotts Bluff National Monument was surveyed for small, terrestrial mammals during the period from Wednesday, 11 September to Sunday, 15 September 2002. Three pitfall stations were set in riparian forest and grassland habitats as described in the inventory protocol, for a total of 6 pitfall stations. Sherman live trap transects were established in each of the primary habitats (badlands topography, riparian forest, and grassland) to provide a minimum of 500 trap nights per habitat (details below).

Trapping Effort

Three pitfall stations (Figure 1), each consisting of five 4-gallon buckets and 20m of 10" fencing, were run in each habitat for 4 consecutive nights, providing a total of 60 trap nights per habitat for pitfalls.

Figure 1. Pitfall Station



Pitfall stations were associated with Sherman transects (described below), or located independently, as follows:

<u>Pitfall Station</u>	<u>Sherman Transect</u>
PF-1 (grassland)	GRA-1 (south of prairie dog town)
PF-2 (grassland)	BL-1 (grassy area on slope of badlands topography; inside 1 st bow on Gering Canal Rd., east of Dobie Brick Rd)
PF-3 (riparian forest)	RIP-3 (outside of SE corner of 1 st bow in Gering Canal Rd that is E of Dobie Brick Rd)
PF-4 (riparian forest)	RIP-1 (transect started north of railroad tracks across from Dobie Brick Rd and proceeds ESE)
PF-5 (riparian forest)	RIP-2 (transect started about 100m west of culvert passage beneath railroad tracks at end of Dobie Brick Rd and proceeds NNW)

PF-6 (grassland)

GRA-3 (across highway and southeast of Visitor's Center, on top of slope)

Nine Sherman transects, three in each major habitat type (RIP=riparian forest, GRA=grassland, BL=badlands topography) were established as follows:

- RIP-1 (80 traps) started at Pitfall Station #4, north of tracks across from Dobie Brick Rd and proceeded ESE (106°) in riparian woods between canal and railroad tracks.
- RIP-2 (80 traps) started at Pitfall Station #5, about 100m west of culvert passage beneath railroad tracks at end of Dobie Brick Rd and proceeds NNW (along base of railroad track "bluff").
- RIP-3 (40 traps) started at Pitfall Station #3, outside of SE corner of 1st bow in Gering Canal Rd that is E of Dobie Brick Rd, and proceeded SSE (145°) from pitfall.
- GRA-1 (80 traps) started at Pitfall Station #1, south of prairie dog town off of Gering Canal Rd., and proceeded due south (180°).
- GRA-2 (40 traps) along old 2-tracker past dump and going to old Boy Scout picnic grounds, W of Hwy 92 close to west edge of park.
- GRA-3 (80 traps) started at Pitfall Station #6, across highway from and slightly SE of the Visitor's Center, and proceeded SE at 140°.
- BL-1 (80 traps) started at dead juniper about 50m up the rise from Pitfall Station #2, proceeded down into badlands proper, north across small stream, and through willows along same stream.
- BL-2 (40 traps) inside West edge of 1st bow in Gering Canal Rd, east of Dobie Brick Rd. Smack dab in middle of a rattlesnake's home range (we saw him/her every day).
- BL-3 (80 traps) In Pine/Juniper badlands area at base of South Bluff near old Boy Scout Picnic ground, west of Hwy 92 close to west edge of park.

Total Sherman live trap nights for the monument was 2280.

Trapping Results

A Habitat / Trap Type Summary is provided below. Table 1 (a separate Excel attachment) provides detailed information about species and capture locations.

Riparian Forest Shermans

Microtus ochrogaster – 5

Microtus pennsylvanicus -- 3

Peromyscus maniculatus—24

Reithrodontomys megalotis -- 3

Coluber constrictor flaviventris (Eastern Yellow-bellied Racer) – 1

Grassland Shermans

Peromyscus maniculatus—12

Reithrodontomys megalotis -- 1

Microtus ochrogaster—2

Badlands Topography Shermans

Sorex cinereus/haydeni – 1

Peromyscus maniculatus—33

Microtus ochrogaster—7

Microtus pennsylvanicus—6
Mus musculus -- 1

Riparian Forest Pitfalls

Sorex cinereus / haydeni—2

Microtus spp. -- 1 (too wet to ID; voucher -- species to be determined after preparation).

Pseudacris triseriata triseriata (Western Chorus Frog) -- 1

Grassland Pitfalls

Sorex cinereus / haydeni—1

Scaphiopus bombifrons (Plains spadefoot toad) —1

Other Observations / Collections

Of course, prairie dogs (*Cynomys ludovicianus*) were observed in the prairie dog town off of Gering Canal Road. A large mule deer (*Odocoileus hemionus*) buck was observed several mornings in the buckbrush north of the railroad tracks as we came through the culvert underpass. Cottontail rabbits (*Sylvilagus* spp) were observed around the Visitor's Center and heard in brushy areas along the Gering Canal Road. A coyote was observed south of the prairie dog town. Three pronghorn (*Antilocapra americana*) were observed late on the evening of 11 September, right at dusk, just beyond the last draw SE of the visitors center before the large flat area between South Bluff and Dome Rock. Although we were setting a pitfall and it got dark before we were able to return to the vehicle for binoculars to verify this sighting, we did hike to the area the next day and obtain pronghorn scat as verification.

Prairie rattlesnakes (*Crotalus viridis viridis*) were observed/photographed in riparian and badland areas south of the Gering Canal Road. A young bullsnake (*Pituophis melanoleucus sayi*) was observed/photographed in the prairie dog town.

Alphabetical List of Mammals Captured/Observed

Antilocapra americana -- Pronghorn ◊
Cynomys ludovicianus -- Black-tailed Prairie Dog ✓
Microtus ochrogaster -- Prairie Vole ✓
Microtus pennsylvanicus -- Meadow Vole ✓
Mus musculus -- Domestic mouse ✓
Odocoileus hemionus -- Mule Deer ✓
Peromyscus maniculatus -- Deer Mouse ✓
Reithrodontomys megalotis -- Western Harvest Mouse ✓
Sorex cinereus / haydeni **-- shrew ◊
Sylvilagus spp-- Cottontail Rabbits ◊

** Identity to be confirmed by after skull is cleaned.

Amphibians Captured/Observed

Crotalus viridis viridis -- Prairie rattlesnakes
Pituophis melanoleucus sayi -- Bullsnae
Scaphiopus bombifrons --Plains spadefoot toad
Pseudacris triseriata triseriata -- Western Chorus Frog
Coluber constrictor flaviventris -- Eastern Yellow-bellied Racer

COORDINATES

<u>Trapping Location</u>	<u>UTM Zone</u>	<u>Easting</u>	<u>Northing</u>
PF-1	13 T	0606609	4633767
PF-2	13 T	0608236	4633615
PF-3	13 T	0608216	4633290
PF-4	13 T	0607989	4634313
PF-5	13 T	0607824	4634287
PF-6	13 T	0607662	4631172
BL - 1	13 T	0608236	4633615
BL - 2	13 T	0608117	4633316
BL - 3	13 T	0606451	4631094
GRA - 1	13 T	0606609	4633767
GRA - 2	13 T	0606332	4631875
GRA - 3	13 T	0607662	4631172
RIP - 1	13 T	0607989	4634313
RIP - 2	13 T	0607824	4634287
RIP - 3	13 T	0608216	4633290