

Schmidt, Cheryl

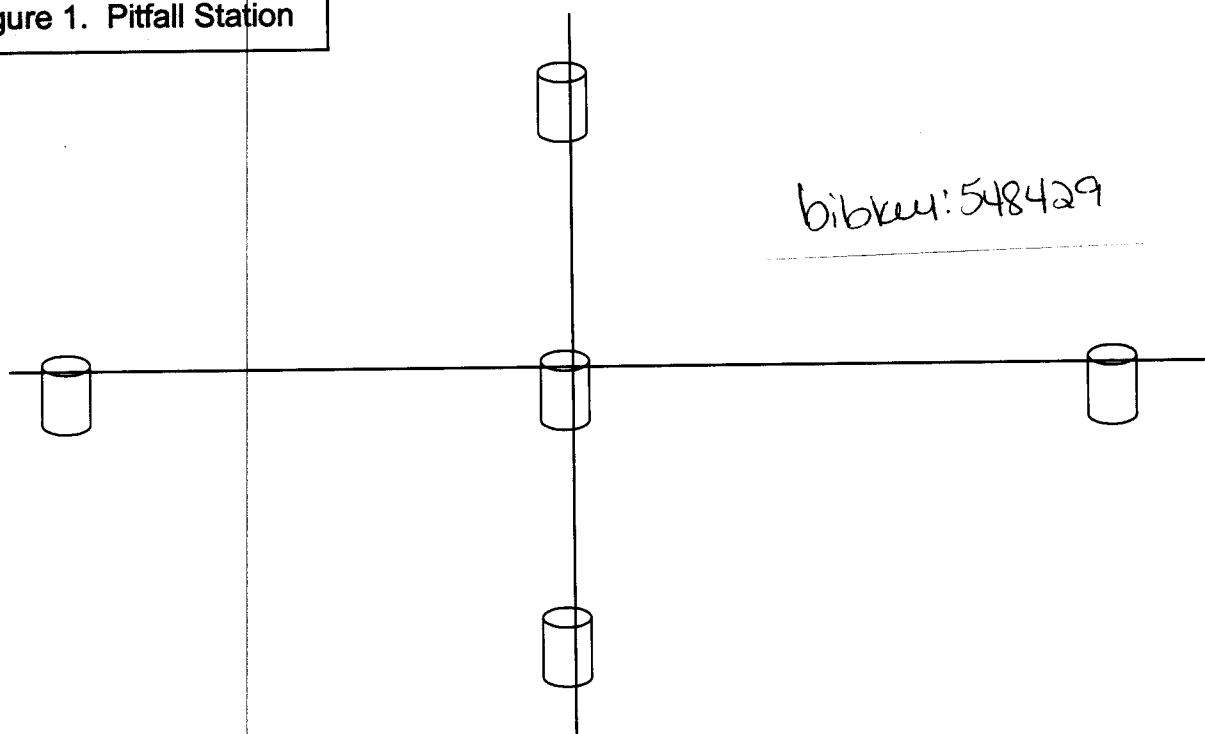
Post-Visit Report for MOUNT RUSHMORE NM Mammal Inventory
Small Terrestrial Mammal Inventory – Summer 2002

Mount Rushmore National Monument was surveyed for small, terrestrial mammals during the period from Monday, 29 July 2002 to Friday, 2 August 2002. Three pitfall stations were set in the park, two in mesic areas close to drainages and one in a more upland ponderosa pine habitat. These stations were run for four consecutive nights, from 29 July through the night of 1 August. Sherman live trap transects were established in five areas of the monument and run for 1 to 3 nights to provide a minimum of 1000 trap nights across the site.

Trapping Effort

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

Figure 1. Pitfall Station



Sherman transects were established in five areas of the park and run for a variable number of nights. Transect #1 (80 traps) began at the shooting/stress range, and proceeded north, then east, and finally south to loop around and over a low rise in primarily ponderosa pine habitat. Transect #2 (80 traps) started just east of the road leading to the well pen, and proceeded downstream (roughly to the east). Transect #3 (80 traps) began next to the spring in the drainage below the burn pit and proceeded upslope in a northwesterly direction. These three transects were run for 3 nights, producing 720 trap nights.

Two more trap lines with single trap stations (20 traps per line) were run for one night in the upper reaches of Starling Gulch. These lines were reached by hiking down the horse trail from the construction area south of the Visitor's center to the stream running through the bottom of the Gulch. One line (Starling Gulch Lower) started at the beaver pond and proceeded downstream. The second line (Starling Gulch Upper) started approximately 50m upstream of the beaver pond and proceeded upstream. These lines provided 40 more trap nights.

Finally, two 20-trap lines were run for one night in the area north of the main visitor area. North Lower Draw was set in a lush drainage area (no running water, but quite mesic) approximately 200m up a very light trail leading from one of the pullouts. North Upper Draw was set in a higher elevation dry drainage just below the "No trespass beyond this tree" signs below and behind the fenced area at the top of the monument. These lines provided an additional 40 trap nights.

Total Sherman live trap nights for the entire site was 800.

Pitfall stations were proximal to transects as follows:

<u>Pitfall Station</u>	<u>Sherman Transect</u>
PF-1 upland pine	#1
PF-2 mesic/riparian	#2
PF-3 mesic/riparian	#3

Trapping Results

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

Mesic/Riparian Shermans¹

Tamias minimus -- 4
Peromyscus leucopus— 39
Peromyscus maniculatus—75
Clethrionomys gapperi – 9
Microtus pennsylvanicus – 4
Zapus hudsonius – 2

Upland Pine Shermans²

Sorex cinereus/haydeni – 2
Tamias minimus – 2
Peromyscus leucopus—6
Peromyscus maniculatus—6
Reithrodontomys megalotis -- 2

Mesic/Riparian Pitfalls

Sorex cinereus / haydeni—4
Reithrodontomys megalotis - 1
Clethrionomys gapperi – 2
Microtus pennsylvanicus -- 2

Upland Pine Pitfalls

Sorex cinereus/haydeni – 1
Clethrionomys gapperi -- 2

¹Includes Transects #2 and #3, as well as Starling Gulch Upper and Lower, and North Low Draw.

²Includes Transect #1 and North High Draw

Other Observations / Collections

White-tailed deer (*Odocoileus virginianus*) were observed north of the well pen.

Alphabetical List of Mammals Captured/Observed at Mount Rushmore

Clethrionomys gapperi – Red-backed vole ✓
Microtus pennsylvanicus – Meadow Vole ✓
Odocoileus virginianus – White-tailed Deer ✓
Peromyscus leucopus – White-footed Mouse ✓
Peromyscus maniculatus -- Deer Mouse ✓
Reithrodontomys megalotis -- Western Harvest Mouse ✓
Sorex cinereus / haydeni * – shrew ✓
Tamias minimus – Least Chipmunk ✓
Zapus hudsonius – Meadow Jumping Mouse ✓

* Identity to be confirmed after skull is cleaned.

COORDINATES

Trapping Location*	Zone	UTM Easting	UTM Northing
PF1	13T	0625360	4860638
PF-2	13T	0624647	4860065
PF-3	13T	0624765	4859188
#1	13T	0625360	4860638
#2	13T	0624647	4860065
#3	13T	0624765	4859188

*PF refers to PitFalls; #1-3 are the Sherman transects.