

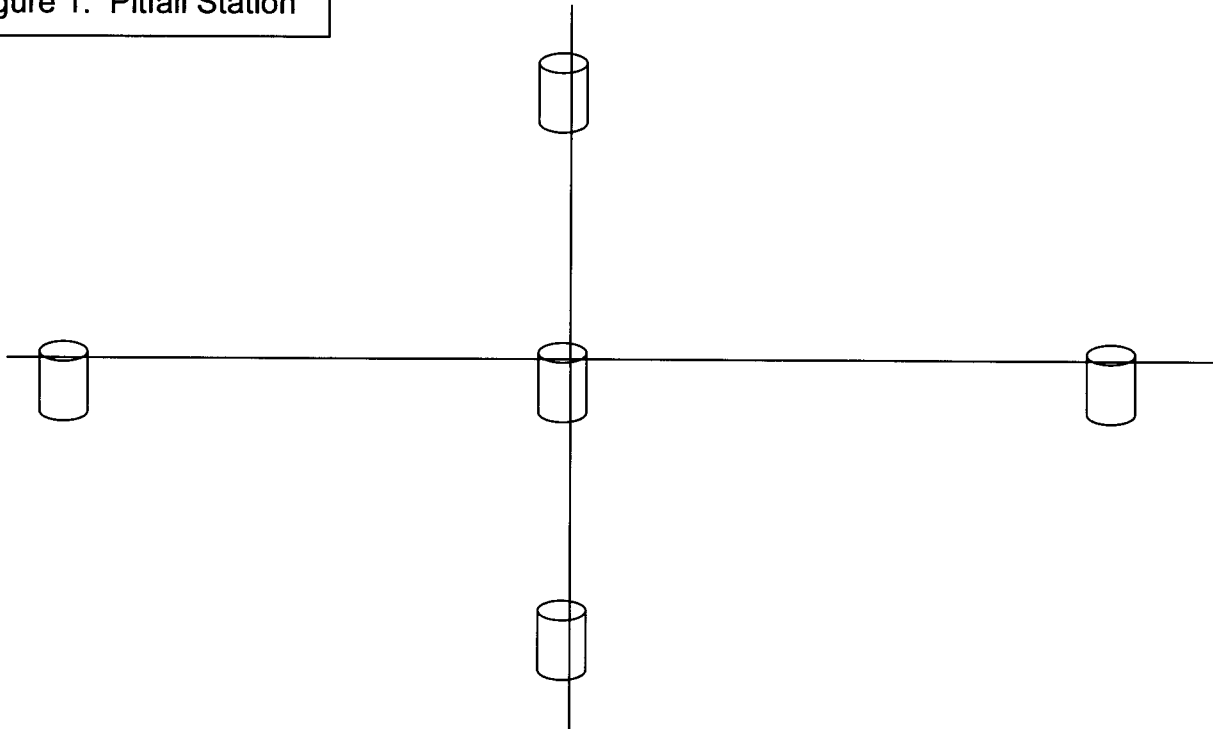
Post-Visit Report for FORT LARAMIE NATIONAL HISTORIC SITE Mammal Inventory
Small Terrestrial Mammal Inventory – July 2003

Fort Laramie NHS was surveyed for small, terrestrial mammals and bats during the period from 15-19 July 2003. Three habitat types were recognized at this Park: riparian forest, grassland, and wetland/riverine. Pitfall stations were set in each of the riparian forest and grassland habitat types, while Sherman live traps were placed in all three habitat types. A total of 1620 Sherman live trap nights and 120 pitfall trap nights were conducted at this Park.

Trapping Effort

Three pitfall stations (Figure 1), each consisting of five 4-gallon buckets and 20m of 10" fencing, were run in each habitat (grassland and riparian forest) for 4 consecutive nights (15-18 July), providing a total of 60 trap nights per habitat for pitfalls.

Figure 1. Pitfall Station



Eight Sherman live trap transects were established, with 200 traps in riparian forest (RIP), 180 traps in grasslands (GRA), and 160 traps in wetlands (WET). Transect locations and descriptions follow:

- RIP-1 (80 traps) – In floodplain west of road, SW of the Fort area (roughly across road from “bat house”). Transect began at Riparian Pitfall Station 1 (UTM Coordinates 13T 0536233 4672109) and proceeded at 210°.
- RIP-2 (40 traps) – In strip of woods running N/S along a small drainage that is south of the south loop road. UTM Coordinates Start: 13T 0536985 4671847 and proceeded at 140°.
- RIP-3 (80 traps) – In woods along N side of road paralleling the southern boundary fence (south pasture road). UTM Coordinates Start: 13T 0537250 4671892 and proceeded at 30°.

- GRA-1 (80 traps) – In sagebrush grassland along N side of south pasture road, just east of Grassland Pitfall 1. UTM Coordinates Start: 13T 0537706 4671989 and paralleled road.
- GRA-2 (40 traps) were set along the northern segment of the pasture road, toward the east end of the loop, and just up (out of the drainage) from Riparian Pitfall 3. UTM Coordinates Start: 13T 0537926 4672063 and paralleled bank of drainage.
- GRA-3 (20 traps) – In old horse pasture just south of highway leading to Fort; on old road leading to cottonwood stand. Across old road from Grassland Pitfall 3. UTM Coordinates 13T 0538109 4672825.
- GRA-4 (40 traps) – In NW corner of Park (area referred to by staff as “restored prairie” N/NW of old hospital), just inside fence. UTM Coordinates Start: 13T 0536182 4673064 and proceeded toward hospital.
- WET-1 (80 traps) – In western end of south edge of Park, just south of the southern part of the south pasture loop road. These wetlands are reportedly of anthropogenic origin, resulting from seepage from the irrigation canal. UTM Coordinates 13T 0536701 4671826.
- WET-2 (80 traps) – In second (eastern) drainage seep, south of pasture road. UTM Coordinates 13T 0537103 4671852.

Pitfall stations were associated with Sherman trap transects, or located separately, as follows:

<u>Pitfall Station</u>	<u>UTM Coordinates</u>	<u>Sherman Transect or Description</u>
RIP-PF1	13T 0536233 4672109	RIP-1
RIP-PF2	13T 0537625 4671993	On N side of pasture road where it straightens out and heads east.
RIP-PF3	13T 0537884 4672064	In Laramie River drainage N of pasture loop road; GRA-2
GRA-PF1	13T 0537706 4671989	GRA-1
GRA-PF2	13T 0531865 4671948	S of pasture road in SE corner, just before gate
GRA-PF3	13T 0538109 4672825	GRA-3

Trapping Results

A Habitat / Trap Type Summary is provided below:

Riparian Forest Shermans

Microtus ochrogaster - 3

Reithrodontomys megalotis - 5

Grassland Shermans

Microtus ochrogaster— 9

Onychomys leucogaster - 3

Peromyscus maniculatus— 7

Reithrodontomys megalotis— 3

Wetland Shermans

Microtus ochrogaster— 8

Reithrodontomys megalotis— 1

Riparian Forest Pitfalls

Microtus ochrogaster— 4

**Sorex cinereus/haydeni* – 2

**Sorex merriami* - 3

Grassland Pitfalls

* *Shrew* - 1

*Shrews have been sent to the Sternberg Museum for identification; identifications provided here will change based on further examination of the specimens.

Mist Net & Acoustic Bat Surveys

Mist nets were set over a side pool of the Laramie River just down from the bat house. These nets were run for the nights of 16 and 17 July and captured 10 Little brown bats (*Myotis lucifugus*; 8 lactating females, 2 male). Bat detectors were run both nights at this site. The acoustic files recorded during the netting sessions await further funding for analysis and assignment to species where possible.

On the night of 18 July, in preparation for Wyoming Bat Night at the Fort, we set some nets around buildings of the Fort complex to determine good locations for demonstration nets on the night of the 19th. Needless to say, we caught plenty of Little brown bats; we were just trying frantically to get the bats out so we could close the nets! However, we did also catch a lactating *Eptesicus fuscus* (Big brown bat) in a net strung between trees along the parade ground.

On the night of 19 July, we set one net up behind a building where it was easy for people to gather around, and where we thought we would not catch too many bats. We caught several more Little brown bats during the Wyoming Bat Night demonstrations.

Other Observations / Collections

Cottontail rabbits (*Sylvilagus* sp.) were observed at a distance throughout the Park, but identification to species was not possible. A family of raccoons was observed near Riparian Pitfall #3, as was a screech owl. One of the seasonals who was walking his dog on the south pasture road said he had run into a couple of striped skunks (*Mephitis mephitis*). A black-tailed jackrabbit (*Lepus californicus*) was observed by Marquardt along Grassland Transect #4.