

Post-Visit Report for JEWEL CAVE NATIONAL MONUMENT Mammal Inventory
Small Terrestrial Mammal Inventory – May 2003.

Jewel Cave National Monument was surveyed for small, terrestrial mammals during the period from Tuesday, 20 May to Thursday, 22 May 2003. Sherman live trap transects were established in each of the two main habitats (burned and unburned ponderosa pine forest) to provide a total of 1280 trap nights across the site.

Trapping Effort

Six Sherman live trap transects were set at this site:

- West-1 (200 traps) unburned drainage inside south gate and along west side of USFS Road 278, and then crossing the road to run along pine forest ridges (southern Hell Canyon area). UTM Coordinates Start: 13T 0594237 4841469
End: 13T 0594061 4842124
- West-2 (200 traps) up and over ridge to east, just inside south gate and east of USFS Road 278. This line was in a mix of burned and unburned areas.
UTM Coordinates Start: 13T 0594315 4841452 End: 13T 0594919 4841664
- North-1 (80 traps) in burned area above (north of) Visitor Center.
UTM Coordinates Start: 13T 0594560 4843183 proceeded S/SW.
- North-2 (40 traps) in burned/unburned area above (north of) Visitor Center. Started at NW corner of tank area. UTM Coordinates Start: 13T 0594271 4843005 proceeded NW.
- North-3 (40 traps) in burned/unburned area above (north of) Visitor Center. Started near the highline above the Natural Resources house and roughly paralleled the highline to the NW. UTM Coordinate for the start of transect: 13T 0594230 4842908.
- East (120 traps) east-west transect close to eastern edge of Park, inside east gate off of USFS Road 278-1C. Transect started just inside gate and proceeded NW (285°) to 13T 0594957 4842108.

These transects were run for 2 nights, producing 1280 total live trap nights for the site.

Six medium-size, wire box traps (aka "Hav-A-Hearts" or "Tomahawks") were set near the East transect, and four were set along the West-1 transect. These were baited with sardines.

Trapping Results

The wire box traps did not produce any captures. All captures were in the Sherman live traps. Results are presented by habitat type (unburned, mixed, burned) below:

Ponderosa Pine – Unburned (West-1 and East Transects)

Prairie Vole (*Microtus ochrogaster*) – 20

Meadow Vole (*Microtus pennsylvanicus*) – 8

White-footed mouse (*Peromyscus leucopus*) — 29

Deer Mouse (*Peromyscus maniculatus*) — 53

Long-tailed Vole (*Microtus longicaudus*) – 1

Least chipmunk (*Tamias minimus*) - 1

Ponderosa Pine – Mixed (West-2, North-2, and North-3)

Red-backed Vole (*Clethrionomys gapperi*) - 1
Prairie Vole (*Microtus ochrogaster*) – 4
Meadow Vole (*Microtus pennsylvanicus*) – 1
White-footed mouse (*Peromyscus leucopus*) — 7
Deer Mouse (*Peromyscus maniculatus*) — 109
Unidentified *Peromyscus* (*Peromyscus* sp.) - 4
Long-tailed Vole (*Microtus longicaudus*) – 2
Unidentified *Microtus* (*Microtus* sp.) - 5
Nuttall's Cottontail Rabbit juvenile (*Sylvilagus nuttali*) - 1
Least chipmunk (*Tamias minimus*) - 6

Ponderosa Pine – Burned (North-1)

White-footed mouse (*Peromyscus leucopus*) — 4
Deer Mouse (*Peromyscus maniculatus*) — 33
Long-tailed Vole (*Microtus longicaudus*) – 2
Red Squirrel (*Tamiasciurus hudsonicus*) - 1

Other Observations / Collections

Both Nuttall's and Eastern cottontails were observed along the transects. Elk were observed just outside the Park fence off of USFS Road 278-C. Mule deer were also observed at the east end of the Park. Mountain lion tracks were observed in a mud puddle just inside the south gate on USFS Road 278. A black-backed woodpecker was observed on the East transect.