

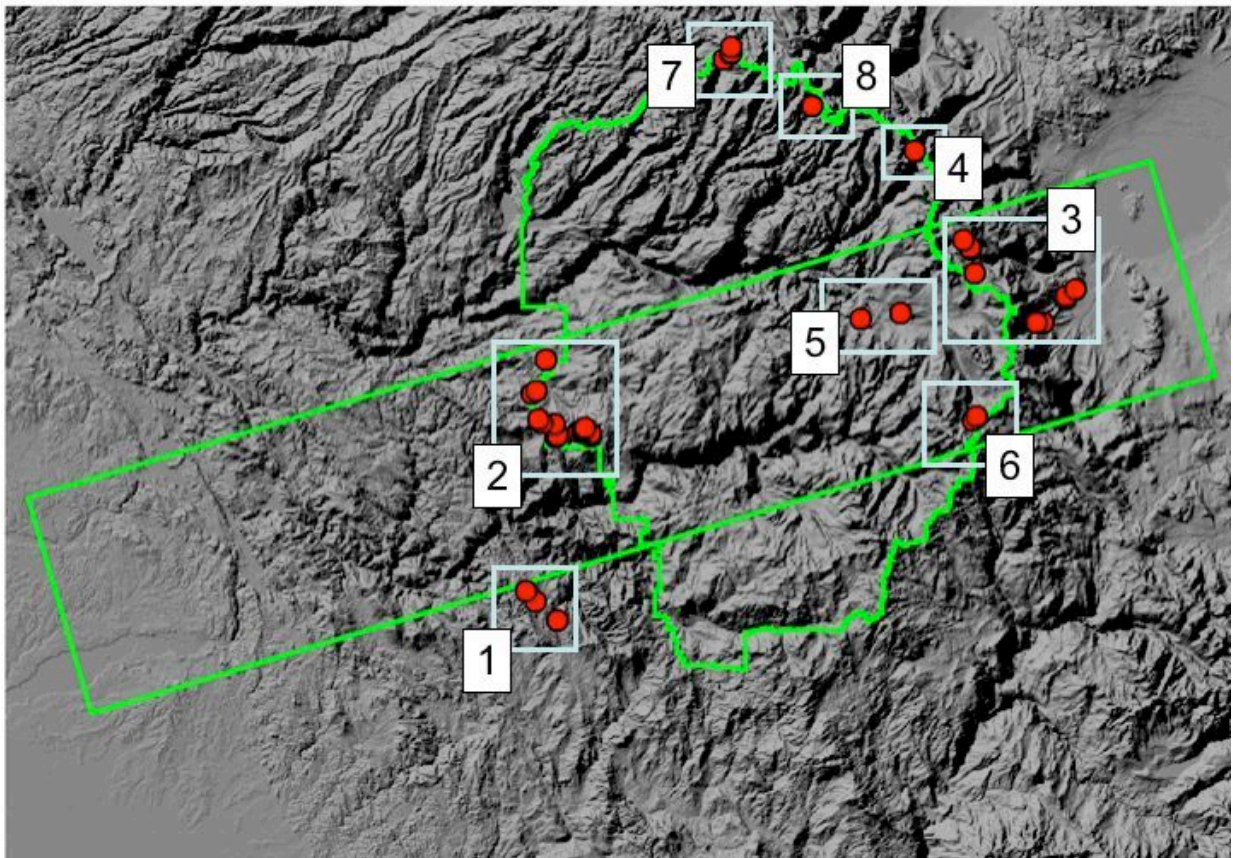


Grinnell Resurvey Project 2005 - Mammalian Surveys

Survey sites and records. This year like last, we expanded our sampling to include “Grinnell” sites outside of the park, including Sweetwater Mine to the west and Walker Lake, Bohler Canyon and Williams Butte to the east. We visited 5 of the 22 original “Grinnell” transect sites within the Yosemite transect (Sweetwater Creek; Crane Flat, Hazel Green, Merced Grove; Lyell Canyon; Walker Lake, Williams Butte; Fairview Dome, Tuolumne Meadows) with 3 of them being within the park, plus an additional three areas within the park but outside the original transect (Dorothy Lake; Kerrick Meadow; and Virginia Canyon). Between April and September, our teams of 2-5 individuals visited sites for approximately 10 days each. A total of 163 person-days were spent in the field on small mammal surveys during 2005. Sets of 40 Sherman live traps were set and run within each habitat at each locality for four consecutive day-night periods (the standard mammal “trap-night”) to provide data both on species presence and relative abundance. Within each meadow system, 25-50 32oz plastic cups were sunk in the soil, primarily within vole runways, to assess the presence and absence of shrews (genus *Sorex*). Finally, 30 Tomahawk live traps were set at most localities of mixed conifer forest to survey for species of ground squirrels and chipmunks. We trapped pocket gophers (*Thomomys*) with the aid of Macabee gopher traps or assessed their presence at each locality by recording the presence of fresh mounds. Similarly, we determined the presence of moles (*Scapanus*) by noting fresh mounds and surface runways. Observations of the presence of gray squirrels (*Sciurus*), chickarees (*Tamiasciurus*), and other small mammals (pikas, marmots, and small carnivores such as pine marten, skunks and raccoons) were also recorded. A few specimens of some of these species were salvaged as the result of road kills. All specimens are deposited in the MVZ under Accession #14091, searchable online at <http://elib.cs.berkeley.edu/mvz/>.

We complied with our permit guidelines and generally collected fewer than ten representatives of each species per locality. Exceptions were made with shrews where field identifications are not possible. Numbers in the tables below reflect numbers captured, but not necessarily numbers retained. Animals not taken were released directly from traps back into the environment.

This year's survey was unique in that snow level was quite high until very late, forcing us to cancel one back country trip. One effect of the snow was the apparent poor survival of deer mice, *Peromyscus maniculatus*, and perhaps also the piñon mouse, *P. truei* at higher elevations. *P. maniculatus* is often one of the more abundant species caught in our surveys but this year they were somewhat rare. Most obligate hibernators showed little effect of the unique winter. This year we again caught *Peromyscus truei* within the park, but this time on the west side, near Hazel Green. This habitat also contained *Chaetodipus californicus*, a new record for Yosemite National Park. The habitat was an area, originally sugar pine and yellow pine, recovering from a burn in 1988. *P. truei* was not found at Lyell Canyon where it was caught in 2003. Another new record for the park is *Sorex tenellus*, a rare species of shrew in the western Great Basin and Sierra Nevada. Two specimens were caught: one at Virginia canyon, a site not visited in the original survey, and one at upper Lyell Canyon. These taxa, plus *Reithrodontomys megalotis* detected in 2003, bring to four the number of new mammalian taxa detected in Yosemite National Park as part of our recent surveys. A serendipitous finding for 2005 was presence of alpine chipmunk, *Tamias alpinus*, at Kerrick Meadow. Our herpetologists trapped near their campsites and detected this apparently now rare species. This constitutes the northernmost record of this species.



Map of sampling localities for our 2005 mammal survey effort. Each numbered

box refers to trapping periods described below. Green rectangle overlaps Grinnell and Storer's Yosemite Transect. The outline of Yosemite National Park is included. Some trapping periods fell completely outside the park.

1. Sweetwater Creek east of Feliciano Mountain (9 May – 13 May)

Chris Conroy and Jim Patton trapped at two localities on the eastern slopes of Feliciano Mountain, north of Mariposa, in the Sierra National Forest. Feliciano Mtn., including Sweetwater Mine and Sweetwater Creek, was visited by Tracey Storer and Walter Taylor, members of the "Grinnell" team, in 1915.

We began work here by camping in the Sierra National Forest at the Jerseydale campground and drove daily to the abandoned Sweetwater Mine. We trapped along Sweetwater Creek and within 200 meters of the mine and associated buildings. The habitat consisted of dense, but second growth pines and oaks. Around the mine buildings was some grassy habitat and we secured voles and harvest mice around the edges of the grassy yard. We observed yellow pine, cedar, white fir, black oaks and dogwood, with some sweet pea around the mine buildings. We also established traplines between the mine and the campground in a mixed habitat of pines, mountain misery, and manzanita.

We extended a total of 352 total trap nights at Sweetwater Mine and 210 trap nights 1.2 mi SE Sweetwater Mine; a total of 47 animals caught at former (13.35% trap success) and 15 (7.14%) at latter (listed below). Along the creek 120 trap nights netted only four specimens (0.33%). Patton also set 3 sets (pairs) of Macabee gopher traps one night at the Jerseydale Campground to catch three gophers (100%).

Specific Locality	Latitude	Longitude	Habitat
Sweetwater Mine, 3669 feet	37.57775	-119.88244	riparian, black oak, mixed conifer
Jerseydale Campground, Sierra National Forest, 3665 feet	37.54498	-119.83822	Yellow Pine, Sugar Pine, Mountain Misery
Sweetwater Creek	37.58148	-119.88191	mixed conifer, Dogwood
1.2 mi SE Sweetwater Mine, 4173 feet	37.56642	-119.86851	manzanita scrub, black oak, mixed conifer

Mammal species present, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
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Soricidae	<i>Sorex trowbridgi</i>	stream edge in mixed conifer	uncommon	2	5
Sciuridae	<i>Tamias merriami</i>	oak, mixed conifer	uncommon	2	2
Geomyidae	<i>Thomomys bottae</i>	mixed conifer	common	1	3
Cricetidae	<i>Neotoma macrotis</i>	oak, mixed conifer	common	2	8
	<i>Peromyscus boylii</i>	oak, mixed conifer	common	3	34
	<i>Peromyscus truei</i>	manzanita, oak	uncommon	1	4
	<i>Reithrodontomys megalotis</i>	oak, mixed conifer	common	2	7
	<i>Microtus californicus</i>	oak, mixed conifer	uncommon	1	4

2. Crane Flat, Merced Grove, Hazel Green – western margins of Yosemite National Park (26 May to 2 June, 2005)

Chris Conroy, Jim Patton, and Kim Tsao revisited trap sites in the vicinity of Crane Flat and Merced Grove, sites that we had trapped in the early summer of 2003. In addition, Jim Patton visited the area around Hazel Green, which is just beyond the boundary of the Park, and trapped on Park property adjacent to Hazel Green. Hazel Green is one of the original “Grinnell sites”, but earlier work there involved only bird observations; no mammals were taken.

We also ran a line of traps at the head of the trail to Merced Grove, at Hwy. 120, at the edge of the Yellow Pine/Sugar Pine/Incense Cedar Forest, as far into the Mountain Whitethorn as we could enter. The habitat at the trailhead to Merced Grove and near Hazel Green was burned circa 1988. Both are primarily Mountain Whitethorn and several species of manzanita.

Patton used 90 total trap nights at Crane Flat, 120 at Crane Flat lookout road, 120 trap nights and 75 pitfall cup nights at Hazel Green, and 250 trap nights at 0.5 mi SE Hazel Green (YNP). Conroy and Tsao together used 493 trap nights at Crane Flat (8.52%), 117 along Crane Creek (21.36%), 220 at Merced Grove (15.45%), and 80 at Merced Grove trailhead (12.50%).

Specific Locality	Latitude	Longitude	Habitat
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Crane Flat, YNP, 6311 ft	37.75139	-119.79149	mixed conifer (same site as trapped in 2003)
Crane Flat Ranger Station road, YNP, 6400 ft	37.75331	-119.80890	manzanita scrub, mixed conifer
Crane Flat	37.75817	-119.80033	Yellow Pine, oak
Crane Flat	37.7547	-119.8042	Yellow Pine, oak
Crane Flat	37.75629	-119.80145	Yellow Pine, oak
Crane Flat, along Crane Creek	37.74865	-119.79209	mixed conifer, riparian
Hazel Green, 5540 ft [outside YNP boundary]	37.767375	-119.864834	black oak, mixed conifer
0.5 mi SE Hazel Green, YNP, 5619 ft	37.76312	-119.85983	<i>Ceanothus</i> scrub, old burn
Merced Grove Trailhead	37.76208	119.84264	mixed forest, Mountain Whitethorn
Merced Grove	37.74782	119.84052	mixed forest
Merced Grove	37.74899	119.83862	mixed forest, Riparian

Mammal species present, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
Soricidae	<i>Sorex trowbridgii</i>	wet meadow (pitfall cups) and <i>Ceanothus</i> chaparral	common	5	9
Sciuridae	<i>Tamias quadrifasciatus</i>	mixed conifer	common	6	14
	<i>Tamias speciosus</i>	mixed conifer	very common	5	32
	<i>Spermophilus beecheyi</i>	mixed conifer	common	4	11
Heteromyidae	<i>Chaetodipus californicus</i>	<i>Ceanothus</i> chaparral	uncommon	2	3
Cricetidae	<i>Neotoma macrotis</i>	<i>Ceanothus</i> chaparral	uncommon	1	1
	<i>Peromyscus boylii</i>	oak, mixed conifer,	very common	2	11

	chaparral			
<i>Peromyscus truei</i>	<i>Ceonothus</i> chaparral	very common	2	13
<i>Peromyscus maniculatus</i>	oak, mixed conifer, chaparral	abundant	7	126

Noteworthy records: The occurrence of the California pocket mouse, Piñon mouse, and Large-eared woodrat on the *Ceonothus cordulatus* clothed slope just inside the YNP boundary at 0.5 mi SE Hazel Green represent the first records of the first two species for the Park and the highest elevational record of the latter species in the Park. Previous records of both California pocket mice and Piñon mice were from the vicinity of El Portal, some 3000 feet lower in elevation; the previous localities of the Large-eared woodrat are from Yosemite Valley, some 1500 feet lower in elevation. All three species have probably responded, at least in part, to the relatively recent fire conversion of the slope where trapped from mixed conifer forest to *Ceonothus cordulatus* chaparral, as the latter dense shrub on steep slopes is typical habitat for each of these species.

3. Mono Basin and eastern slope of the Sierra Nevada: Walker Lake, Walker Creek, Bohler Canyon, William's Butte, Gardisky Lake Trail, South End Saddlebag Lake (9-16 July 2005)

Chris Conroy, Jim Patton, Kim Tsao, and Emily Rubidge revisited "Grinnell" sites south of Williams Butte, in Mono Basin. Rubidge and Patton trapped at our campsite on Bohler Creek, which had been visited by Patton the previous August-September (2004) and trapped both on the Gardisky Lake trail and at Saddlebag Lake in the Sierra National Forest just east of Tioga Pass. The area around Williams Butte is a "Grinnell" site; our efforts in the vicinity of Saddlebag Lake were directed specifically to looking for alpine chipmunks (*Tamias alpinus*) along the ridge from which the species was recorded by Grinnell et al.

Conroy and Tsao trapped at Walker Lake, also a historical site, as well as in the dry surrounding Jeffrey Pine habitat and downstream along Walker Creek. The Walker Lake habitat was moist forest with flooded willow habitat along the lake edge with significant historical encroachment of Lodgepole pine into the historically dense stands of Aspen (we compared historical to modern photos). Up the steep slopes the habitat quickly became more xeric with loss of Lodgepole pine and presence of White Fir, Mountain Juniper and Jeffrey Pine.

JLP and ER used 300 total trap nights in the sagebrush and aspen riparian communities at Bohler Creek, plus 138 "trap nights" of pitfall cups placed along the creek. JLP and ER also had 360 trap nights at two close-by sites on the Gardisky Lake trail and 240 trap nights at Saddlebag Lake, Inyo National Forest.

CJC and KT used 450 trap nights (400 trap nights Sherman traps plus about 50 trap nights from pitfalls) at Walker Lake for 28 captures (6.22%); 236 trap nights (160 Shermans, 76 tomahawks) in the dry, Jeffrey Pine habitat starting over the small ridge

south of the Walker Lake trailhead parking lot and heading roughly south at that elevation; 120 trap nights (all Shermans) along Walker Creek east of the lake for 11 animals (9.17%); 16 trap nights from one short trapline of 8 tomahawks along the southfacing hillside north of Walker Creek for 2 captures (12.5%).

Specific Locality	Latitude	Longitude	Habitat
Bohler Creek, 7265 feet	37.90028	-119.12977	aspen riparian and sagebrush desert scrub
Gardisky Lake trail, 9900-10,100 ft	37.95477	-119.26213	lodgepole and whitebark pine
Saddlebag Lake, 10,150 ft	37.96321	-119.27189	lodgepole and whitebark pine
Walker Lake; elevation 2440 m	37.87123	-119.1706	lodgepole pine, aspen riparian
Walker Lake trailhead; elevation 2465 m	37.870780;	-	Jeffrey pine, mountain mahogany, sagebrush
Walker Creek; elevation 2234 m	37.89646;	-119.13046	aspen riparian
Walker Creek (S-facing slope); elevation 2238 m	37.89688;	-119.12980	sagebrush desert scrub

Mammal species present at Williams Butte area, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
Soricidae	<i>Sorex lyelli</i>	stream edge	uncommon	2	5
	<i>Sorex vagrans</i>	stream edge	common	1	7
	<i>Sorex monticolus</i>	stream edge	common	1	2
Sciuridae	<i>Spermophilus lateralis</i>	aspen	common	2	14
	<i>Spermophilus beecheyi</i>	dry meadow, sagebrush	uncommon	2	2
	<i>Tamias amoenus</i>	aspen	very common	4	21
	<i>Tamias minimus</i>	sagebrush	common	1	7
	<i>Tamias speciosus</i>	aspen, Jeffrey pine	common	2	22
Heteromyidae	<i>Perognathus parvus</i>	sagebrush	common	1	4
	<i>Dipodomys panamintinus</i>	sagebrush	uncommon	1	1
Geomyidae	<i>Thomomys talpoides</i>	dry meadow	common	1	1
Cricetidae	<i>Peromyscus maniculatus</i>	sagebrush, aspen	common	2	16

	<i>Neotoma cinerea</i>	Jeffrey pine	uncommon	1	1
	<i>Onychomys leucogaster</i>	sagebrush	uncommon	1	1
	<i>Lemmys curtatus</i>	sagebrush	uncommon	1	1
	<i>Microtus longicaudus</i>	stream edge, aspen	common	3	16
Dipodidae	<i>Zapus princeps</i>	stream edge	common	1	8

Mammal species present at Gardisky-Saddlebag Lake area, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
Soricidae	<i>Sorex monticolus</i>	conifer forest	uncommon	1	2
Sciuridae	<i>Spermophilus lateralis</i>	conifer forest	Very common	2	17
	<i>Spermophilus beldingi</i>	conifer forest	uncommon	1	1
	<i>Tamias speciosus</i>	conifer forest	uncommon	2	5
	<i>Marmota flaviventris</i>	conifer forest	uncommon	1	1
Cricetidae	<i>Peromyscus maniculatus</i>	conifer forest	uncommon	2	4
	<i>Microtus longicaudus</i>	conifer forest	common	2	7
Ochotonidae	<i>Ochotona princeps</i>	open talus	uncommon	1	1

Notes: In general, populations of all species at the high elevations were in low numbers; trap success was poor at both the Gardisky Lake (26 animals in 360 trap nights, or 7.2% success) and Saddlebag Lake (10 animals in 240 trapnights, or 4.16% success), with the exception of the obligate hibernators such as the ground squirrels, *Spermophilus beldingi* and *Spermophilus lateralis*. C. Moritz also observed a pika north of Saddlebag Lake.

4. Upper Return Creek, Virginia Canyon, Yosemite National Park, Tuolumne Co., California (22 – 31 July 2005)

Jim Patton, Carol Patton, Kim Tsao, and Les Chow (USGS-Yosemite) hiked in to Upper Return Creek in Virginia Canyon with stock support from the Virginia Lakes Pack Outfitters. The area is not one of the original “Grinnell” sites, but one of three in the

northern part of the Park chosen in consultation with Park and USGS biologists for initial benchmark surveys. The northern third of the Park (basically that part of the Park north of the Tuolumne River) has never been surveyed for terrestrial vertebrates.

A total of 944 ‘trap nights’ based on Sherman live traps, 150 pitfall cup ‘trap nights’, and 60 Macabee gopher ‘trap days’ were expended at this locality.

Specific Locality	Latitude	Longitude	Habitat
Upper Return Creek, Virginia Canyon, Yosemite National Park, Tuolumne Co., 9900 ft	38.06129	-119.33899	lodgepole and whitebark pine, willows along creek

Mammal species present at Upper Return Creek, Virginia Canyon, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
Soricidae	<i>Sorex lyelli</i>	stream edge	rare	1	3
	<i>Sorex monticolus</i>	stream edge	common	1	20
	<i>Sorex palustris</i>	stream edge	rare	1	1
	<i>Sorex tenellus</i>	stream edge	rare	1	1
Sciuridae	<i>Spermophilus beldingi</i>	open meadows	abundant	1	38
	<i>Spermophilus lateralis</i>	open conifer forest	uncommon	1	1
	<i>Tamias alpinus</i>	open conifer forest	uncommon	1	2
	<i>Tamias speciosus</i>	open conifer forest	uncommon	1	2
Geomyidae	<i>Thomomys monticola</i>	open meadow	common	1	14
Cricetidae	<i>Peromyscus maniculatus</i>	open conifer forest	uncommon	1	1
	<i>Microtus longicaudus</i>	open forest, stream edge	uncommon	1	3
	<i>Phenacomys intermedius</i>	open conifer forest	uncommon	1	3
Dipodidae	<i>Zapus princeps</i>	stream edge	common	1	15
Mustelidae	<i>Mustela frenata</i>	gopher burrow	uncommon	1	1
Talpidae	<i>Scapanus latimanus</i>			1	*
Ochotonidae	<i>Ochotona princeps</i>			1	**

* sight record of fresh mole runway systems

** sight records of animals, fecal piles, hay piles, and vocalizations on two talus slopes, one adjacent to Virginia Pass and the second at the eastern base of Virginia Peak, both in the upper part of the Return Creek basin

Notable findings: Note the occurrence of four species of shrews in this area. Most importantly the single specimen of the Inyo shrew (*Sorex tenellus*) is the first record of this species for Yosemite National Park. Note also the three specimens of the rare arvicoline rodent, the Heather vole *Phenacomys intermedius*, previously known from only about a dozen specimens in California and just a few localities within YNP. Again, rodent densities are very low in general, except for the obligate hibernators, such as the Belding ground squirrel, *Spermophilus beldingi*, and, very interestingly, shrews and pocket gophers, which are active under the snow throughout the winter.

5. Vicinity of Tuolumne Meadows, Yosemite National Park, Tuolumne Co., California (1-4 August 2005)

Jim and Carol Patton trapped at two sites in Tuolumne Meadows where members of the “Grinnell” team had obtained series of Alpine chipmunks in 1915. One of the “Grinnell” camps was at Soda Springs, and we trapped the open granite outcrops and lodgepole pine forest to the immediate north of Soda Springs along the lower reaches of Juniper Ridge. The “Grinnell” team also trapped at the base of Fairview Dome, the exact locality and position relative to the top of the Dome is unclear; we trapped on the western base where there are large exposures of granite in otherwise Canadian zone conifer forest (lodgepole pine, western white pine, red fir, and a few mountain hemlock).

A total of 320 ‘trap nights’ using Sherman live traps was expended at Juniper Ridge and 240 ‘trap nights’ at Fairview Dome.

Specific Locality	Latitude	Longitude	Habitat
Juniper Ridge, Tuolumne Meadows, Yosemite National Park, 8665 feet	37.88358	-119.36340	lodgepole pine forest
west base Fairview Dome, Yosemite National Park, 8385 feet	37.87649	-119.41609	lodgepole pine, western white pine, red fir, mountain hemlock forest

Mammal species present at two localities in Tuolumne Meadows, Yosemite National Park, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
Soricidae	<i>Sorex monticolus</i>	talus edge	uncommon	1	1
Sciuridae	<i>Spermophilus</i>	open	common	1	1

	<i>beldingi</i>	meadows			
	<i>Spermophilus lateralis</i>	open conifer forest	common	2	5
	<i>Tamias speciosus</i>	conifer forest	very common	2	14
Cricetidae	<i>Peromyscus maniculatus</i>	open conifer forest	uncommon	1	4

Note: sign (active burrows) of both moles (*Scapanus latimanus*) and pocket gophers (*Thomomys monticola*) were observed at both the Juniper Ridge and Fairview Dome trap sites.

6. Upper Lyell Canyon, Yosemite National Park, Tuolumne Co., California (10-16 August 2005)

Jim Patton, Carol Patton, and Les Chow worked in upper Lyell Canyon, between elevations of 10,240 and 10,565 feet, at sites we had previously visited in July of 2003 and where Charles Camp and other “Grinnell” team members had visited in July of 1915. The area is near the upper edge of treeline, dominated by whitebark pine, a few lodgepole pine and mountain hemlock, and open meadows with willow thickets along both banks of Lyell Fork.

A total of 720 ‘trap nights’ using Sherman live traps was expended at the combined localities, with 100 pitfall cup ‘nights’ along Lyell Fork.

Specific Locality	Latitude	Longitude	Habitat
upper Lyell Canyon, 10,240 ft	37.76807	-119.25506	whitebark pine, open meadow, talus, stream edge
upper Lyell Canyon, 10,565 ft	37.76358	-119.25996	whitebark pine, open meadow, talus, stream edge

Mammal species present at two localities in upper Lyell Canyon, Yosemite National Park, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
Soricidae	<i>Sorex monticolus</i>	open meadow, talus, stream edge	very common	1	19
	<i>Sorex palustris</i>	stream edge	uncommon	1	2
	<i>Sorex tenellus</i>	stream edge	uncommon	1	1
Sciuridae	<i>Spermophilus</i>	open	common	2	13

	<i>beldingi</i>	meadow			
	<i>Spermophilus lateralis</i>	open conifer forest	common	1	5
	<i>Tamias alpinus</i>	open conifer forest	uncommon	1	1
	<i>Tamias speciosus</i>	open conifer forest	uncommon	2	2
Cricetidae	<i>Peromyscus maniculatus</i>	open conifer forest	uncommon	1	1
	<i>Microtus longicaudus</i>	open conifer forest	common	2	6
	<i>Microtus montanus</i>	stream edge	uncommon	1	1
	<i>Phenacomys intermedius</i>	open conifer forest	uncommon	1	2
Ochotonidae	<i>Ochotona princeps</i>	talus	uncommon	1	1
Mustelidae	<i>Mustela erminea</i>	talus edge	uncommon	1	1

Note: marmots were common here; the specimen of the Inyo shrew, *Sorex tenellus*, is the second record of this rare shrew for Yosemite National Park.

7. Dorothy Lake, northeast end Grace Meadows, Yosemite National Park, Tuolumne Co., California (14-23 August 2005)

Chris Conroy, Kim Tsao, Sean Rovito, along with several USGS botanists (Peggy Moore, Holly Wanamaker, Alison Colwell, Dena Grossenbacher) hiked to Dorothy Lake and set up camp on the west shore. This area was not visited by Grinnell or others from MVZ and was intended for baseline data for future surveys in the park. Dorothy Lake is surrounded by rocky ridges, but flanked by moist lodgepole pine forest. Downstream (SW) from the lake is Grace Meadows where the habitat in places is fairly open, but ideal habitat for most animals is probably restricted to near Falls Creek.

A total of 1022 trap nights using Sherman live traps, tomahawks and Victor rat traps was expended at the combined localities to capture 52 specimens (5.1%).

Specific Locality	Latitude	Longitude	Habitat
Dorothy Lake, 9444 ft	38.17609	-119.59468	willow, lodgepole pine forest
Dorothy Lake, 9395 ft	38.170610	-119.594600	stream edge, lodgepole pine forest
Dorothy Lake, 9430 ft	38.16908	-119.59505	talus, willows
northeastern Grace Meadow, 9060 ft	38.16254	-119.60461	riparian

Mammal species present at four localities in near Dorothy Lake, Yosemite National Park, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
Soricidae	<i>Sorex monticolus</i>	open meadow, talus, stream edge	common	2	17
	<i>Sorex palustris</i>	stream edge	common	2	4****
Sciuridae	<i>Spermophilus beldingi</i>	open meadow	common	2	3*
	<i>Tamias speciosus</i>	open conifer forest	uncommon	2	6
Cricetidae	<i>Microtus longicaudus</i>	open conifer forest	common	3	11
Dipodidae	<i>Zapus princeps</i>	Riparian	common	2	9**
Ochotonidae	<i>Ochotona princeps</i>	talus	common	1	2
Geomyidae	<i>Thomomys monticola</i>	Meadow	Common	2	0****

*Many were seen but few captured. They burrowed in very open, rocky habitat near campsite.

**Due to low trap success, Conroy spent time looking for intestinal parasites. Eight of nine *Zapus* were highly impacted with cestodes. These will be sent to the Manter Laboratory at the University of Nebraska, Lincoln. This kind of parasite load has not been observed before during these surveys, though not much effort has been made.

***Capture of four water shrews, *Sorex palustris*, was somewhat unexpected as this brings our total for all three years of survey to only ten.

note: *Peromyscus maniculatus*, a typically highly abundant species was absent from this locality and was rare in other high elevation sites this year. Sign of pocket gophers, *Thomomys monticola*, was abundant. We also observed pine marten, marmots, black bear, and deer. Chickaree were observed in camp and elsewhere, but were not common.

****Sign of gophers was seen but no specimens were taken.

8. Kerrick Meadow, Yosemite National Park, Tuolumne Co., California (15-22 August 2005)

Adam Leaché and Der-shing Helmer visited this locality primarily to obtain reptiles and amphibians, but trapped for mammals near their campsite. They used 40 Sherman traps and oats as bait. Their trap line was set along a rock outcrop at the center of the northern end of Kerrick Meadow and extended along a small creek. After three nights and two full days of no trapping success, their traps were relocated 0.5 mi. S. of the trail junction between Kerrick Meadow and Buckeye Pass. Their traps were set far apart to cover a lot of area and different habitat types, beginning adjacent to Rancheria Creek, then crossing

the trail and moving further west along a rocky slope. They monitored the traps at site number two for three nights. Their mammal observations include *Microtus* spp., *Tamias* spp., *Spermophilus lateralis* and *S. beldingi*. They attempted to capture *S. beldingi* at their campsite by placing a trap from the second trap line at the entrance to some holes with a lot of activity, but they were unsuccessful. They did successfully secure specimens of *T. alpinus* and *S. lateralis*.

Trapline 1: begin: N: 38.11868 W: 119.48073 +/- 20 ft. ~9,400 ft.
end: N: 38.11715 W: 119.48083 +/- 18.5 ft. ~9355 ft.

Trapline 2: begin: N: 38.11087 W: 119.48128 +/- 21 ft. ~9415 ft.
end: N: 38.11387 W: 119.48196 +/- 22 ft. ~9415 ft.

Specific Locality	Latitude	Longitude	Habitat
Kerrick Meadow, 9476 ft	38.11129	-119.48180	lodgepole pine forest
Kerrick Meadow, 9368 ft	38.11107	-119.48164	lodgepole pine forest
Kerrick Meadow, 9509 ft	38.11332	-119.48162	lodgepole pine forest

Mammal species present at four localities in near Kerrick Meadow, Yosemite National Park, by habitat:

Family	Species	Habitat	Commonness	Number of localities	Numbers captured
Sciuridae	<i>Spermophilus lateralis</i>	lodgepole pine forest	common	2	2
	<i>Tamias alpinus</i>	lodgepole pine forest	uncommon	1	1

Note: This is the northernmost locality for alpine chipmunk, *Tamias alpinus*, known.

