

Marcel L.
Campbell
2016

Mammalogy ^{Fall} 2016 - 2nd trip
Conservation Area
El Malpais National Monument / BLM

30 Sept

UNM 2016 Mammalogy Class Trip #2
to El Malpais Conservation Area left
UNM ~ 2 pm + stragglers. Large group
of ~ 30 people. This trip is also part of
a survey of ^{mammals of} El Malpais BLM lands under
contract with USB Mammals starting this
year.

Participants

JAC
Joseph Cook / Nella Cook Dale Fastle
Schuyler Liphardt (SLB) Iman Chudnoff
Jon L. Dunnum (JLD) Tiffany Kenworthy
Marcel Campbell (MLC) Kaylen Marie Jones (KMJ)
Dianna Krejsa (DMK) Liota (Ola) Weinbaum (OLW)
Bryan McLean (BSM) James Brunt
Taylor VanDenBerg J. Will Brunt
Casey R. Myers Nathaniel Brunt
Shannon Archuleta Benjamin Brunt
Shanna Lopez
Lorena T. Chavira
Mark T. Kastel
Ellen K. Becenti
Kaitlyn E. Olson
A Keylah Corbett
Nick A. Freymueller
Rachel J. Swanteson-Franz
Katrina^M Derieg
Danielle Parsons
Claire
Clara Hittle

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National
El Malpais Conservation Area

30 Sep

Directions to site from Albuquerque:
I-40 west to Hwy 117 ^{exit 89} South near Grants;

Follow Hwy 117 ~ 26 miles past narrows
& Arch; take left on dirt road into
BLM Conservation Area into Sand Canyon/
Lobo Canyon / Cebolla Canyon access.

Camped along road pull out across
from mouth of Lobo Canyon, at trailhead
leading north towards Lobo Canyon.

This trail leads to some amazing petroglyphs
in the columnar sandstone at the
base of the s-facing / north canyon wall.

Also graves: "...Poela, Ano 1900" and +.

Camp coordinates: 34° 43.665N, 107° 53.895'W
± 3m, 2226m elevation (at Campbell/Bruntsite).

Habitat is Pinus edulis on slopes
pinyon/juniper (J. monosperma)
(more Pinyon - lots of seed); a few ponderosa
on north slopes, + grassland in valley -
blue Bouteloua gracilis + side oats grama, Atriplex, sand sage,
rabbit brush, = Colorado plateau. Heavy
rains night before we got here - road is
passable now but could get nasty during
rain. Road continues down into Cebolla
Spring area - much rougher, but 4x4.
This wetland area has been fenced
off for wildlife + wetland preservation.
I only saw it at night - going in to

El Malpais

30 Sept

check on the bat net Jon et al set. No bats in net - although I heard some flying near camp. Plenty of water so hard to catch them near pools. Also bugling elk (3) Schuyler heard, and owls. We caught a Peromyscus truei ^{juvenile/1st} by hand running across road on way back.

other wildlife observations:

Cervus elaphus - picked up skull/leg bones ^{for MSB}

Canis latrans - large pack singing, 2 ind. spotted

Cynomys gunnisoni - large colonies in other squirrels - sign of eating pinyon "lower" grassland area

Northern Harrier

short-horned lizard

Phrynosoma douglasi

many woolly bear caterpillars grasshoppers still active

Traps are set in 2 main areas:

"Lower" grassland by prairie dog colonies at various intervals & heading off of road, and "Upper" = ~~also~~ east/SE of camp towards Cebolla Springs, at intervals, along/off of road, with bat net across the spring pond.

☁ Some clouds but no rain, heavy dew. Temps in low 40's; highs ~ 70's.

A winter storm (1st) is expected

Monday - but we are still in fall weather.

30 Sept - 1 Oct

20 Sept 1 October	(GPS)	Sherman	MS	Bat	Captures
Grass / Lower	Taylor / Kayce / Shannon (ORANGE)	50	50	8	2
PS / Lower	Shannon / Loren / Mark (PURPLE)	50	48	10	9
Grass / Upper	Ellen / Kaitlyn / Akeem (GREEN)	50	50	10	1
Upper	Jon / Schuyler / Nick (RED)	50	49	9	2 P. truei 2 Peromyscus 2 Peromyscus
Lower	Rachel / Katrina / Danielle (BLUE)	50	52	10	2
Grass / Upper	Clare / Dale / Imman (YELLOW)	29	23	8	0
PS / Lower	Tiffany / Kaylen / Hiata (WHITE)	38	40	3	4
Lower	Diana (BLUE)	20	20	10	2
Lower	Bryan (PURPLE)	30	-	-	1 R. m. 2 P. Per
Lower	Joe (BLUE) (BU or BL?)	28	26	-	1 Neotoma 1 P. truei
		~ 788			26
+ 1 Bat net open dusk to ~ 9 pm		traps			captures

OROMETER
 33.2 camp
 34.1 corral
 34.5 sand canyon turning
 35.1 arid traps
 36.4 windmill
 37.6 Hwy 117 junction

Upper: Cebolla Spring - bat net + traps along road at windmill
 Lower: Road between Sand Canyon turnoff + mouth of Lobo Canyon / windmill
 Camp: at mouth of Lobo canyon, south side of road by trail head to petroglyphs / graves + Lobo Canyon mouth; heavy use by hunters / hordes - lots of horse manure + truei + nasutus? mammie

Captures are Peromyscus, Reithrodontomys megalotis, Onychomys leucogaster # many Neotoma cf. albigula (check) Most Peros are juveniles
 ~ 5 spp

Also Sylvilagus auduboni shot by Will at lower area. No Cynomys shot despite attempts.

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El Malpais

1 October

Because of low capture #s (26/788 traps = 3%), Joe + Nella drove back towards cell service + ABQ to pick up freezer specimens for students to do study skins. They brought back remaining Cowles specimens from Trip 1 to Pecos (except for the Peromyscus). These included ~14 Microtus longicaudus, of which we necropsied ~~some~~ 4, finding 1 with a cestode. That makes 6 Microtus with cestodes (2 genera) from that accession. Remaining 10 were put directly to ETOH as whole alcoholic specimens. Jon/Schuyler verified M. longicaudus ID. Also found Trichuris in a Thomomys talpoides in that group of specimens.

Joe also brought bag of Urocyon richardsoni that Bryan had obtained from Canadian researchers. Students made skins, but most were freezer burned/rotted so only went through 1 gut - negative.

Of El Malpais specimens, the lower grassland area produced Onychomys leucogaster which had stomach nematodes + SI cestodes. Peromyscus also with stomach nematodes. Other taxa negative for endoparasites. Ectos saved.

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El Malpais

1 Oct 2016

- Ectos were saved in the following manner:

- 1) Fleas frozen (no ethanol) in cryovials
- 2) Fleas + all other ectos (mites, ticks etc) in 70% ETOH, & cryovial

The plan is to evaluate ~~of~~ fleas for plague + other pathogens, so we are saving in different preservation methods

Prepping until late, with break for resetting traps. No captures at afternoon check (but will shot a rabbit, S. auduboni). Traps set out on next page.

I set a line along cliffs to north of camp, - see next page.

Clear, dropped to not quite freezing - mid-upper 30s?

2 Oct

See captures next page. Lovely coyote chorus this am. I should mention that we are in between deer hunts this weekend - but there are mountain lion hunters going up + down daily ^{w/ dogs}. Haven't seen that they've had success yet, but there seem to be several groups. Also, Joe picked up a roadkill odocoileus hemionus mule deer juvenile on way back yesterday (Hwy 117)? + we have prepared it for tissues + a skeleton for MSB.

El Malpais Conservation Area

Traps out 1-2 October 2016

<u>2 October</u>		GPS	Traps	Captures
N rocks Behind Slope CAMP	Ellen et al + Nick	Yellow	39 39	5
grass/PS Lower	Kaylen, Liota, Tiffany	WHITE	42	4 / 2 live, 2 dead 3 P. maniculatus, 1 P. truei
" Lower	Clara, Inan, Dale	PURPLE	71	7 / 3 live, 4 dead
" Lower	Joe Joe		45	
S. slope N of rocks CAMP	Marisol Campbell	metero. phone GPS status	29	4 3 P. truei 1 Neotoma
grass, lower	Shannen L., Lorena, Mark	blue	54	3 alive
grass/PS, lower	Danielle P., Rachel S-F, Katrina D.	Green	53	6 / 4 alive + 2 dead
lower / grass + Arroyo	Shannen A., Casey, Taylor	Orange	55	8 = 3 alive + 5 DOA
grassland, lower	Bryan M ^c	Red	30 traps + 8 Tomahawks	1 alive
Lower	Joe	Yellow	54 26 fmat 28 shermann	3 P. truei 3 sylvilagus P. truei
			474 traps	41 captures

Up early + packed up camp -
All captures to be returned + processed later at MSB.

Upper:

Peromyscus truei

Peromyscus maniculatus

Lower

Grassland

Onychomys leucogaster

Reithrodontomys megalotis

Cynomys

Peromyscus maniculatus

Peromyscus truei

Sylvilagus auduboni

Neotoma albigula

Camp area (20ct)

Neotoma mexicana

P. truei

P. nasutus?

+ Perognathus

+ _____

⁹
8 spp⁺

El Mapais Conservation Area
MLC Traps out: 1-2 Oct 2016

Set along bluffs (sandstone) * along ^{base of} s-facing canyon wall just to west of mouth of Lobo Canyon, along rocks * near petroglyphs + up into gully. PJ / Atriplex, gutierrezii, sand sege winterfat, rabbitbrush, blue grama sideoats.

Set 29 Shermans, PB/oats bait

Captures 2 October 2016

MLC 1: Peromyscus truei? 34° 43.665N 2237m
in large sandstone cliffs 107° 53.876W ±14m

MLC 2: Neotoma mexicana
in rocks base of cliff 34° 46.665N 2220m
107° 53.895'W ±12m

MLC 3 P. truei?
under rock ledge 34° 43.687N 2219m
107° 53.924W ±3m

MLC 4 P. truei?
under rock ledge 34° 43.665N 2224m
107° 53.885W ±10m

check P. truei IDs - may be P. nasutus

20 Oct 2014

El Malpais: Lobo/Sand Canyon

Typical arroyo downcutting caused by overgrazing last century - very steep downcut through mud alluvial - ~ 20+ feet?

- supposedly used to be wetland/grassland/marshy area with meandering - slowly absorbing streams + arable soils.
- Now erosion due to overgrazing has caused rapid runoff / downcut
- = irreversible loss of water from ecosystem

El Malpais National Conservation Area
Total Captures Sept 30 - Oct 2, 2016

	<u>Traps</u>	<u>Captures</u>
Sept 30 - Oct 1	788	26
Oct 1 - 2	474	41
	$\frac{1262}{\text{trap nights}}$	$\frac{67}{\text{captures}} = 5\%$

- + 1 P. truei caught by hand
- + 1 Sylvilagus shot

