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ARMY DUGWAY PROVING GROUND UTAH

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FIELD KEY TO ADULT RABBITS AND RODENTS OF THE BONNEVILLE BASIN --ETC(U)

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TECHNICAL REPORT

FIELD KEY TO ADULT RABBITS AND RODENTS
OF THE
BONNEVILLE BASIN OF WEST CENTRAL UTAH

BY

ROBERT E. ELBEL

HAROLD E. STARK

APRIL 1978

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Dugway, Utah 84022

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FIELD KEY TO ADULT RABBITS AND RODENTS OF THE BONNEVILLE BASIN OF WEST CENTRAL UTAH

Robert E. Elbel¹ and Harold E. Stark¹

FOREWORD

This simple key provides a quick and reliable means of identification of rabbits and rodents obtained during ecology studies in the Bonneville Basin of west central Utah. The key, first developed in 1964, has been simplified by years of field use. Differentiating characters are not illustrated in this key because adequate illustrations are available in such commercially published field guides as Burt and Grossenheider.² Carnivores, occasionally obtained during studies, are easily identified using that guide. Egoscue in his "Checklist of Mammals of Tooele County, Utah"³ listed 5 lagomorphs and 32 rodents, but only 4 lagomorphs and 25 rodents are identified in this field key. Additional species either do not occur in the area under consideration or could not be trapped using the methods employed.

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¹Robert E. Elbel is a retired Dugway Proving Ground ecologist who now resides at 1518 Evergreen Lane, Salt Lake City, Utah. Dr. Harold E. Stark is a member of the Environmental and Ecology Branch, Environmental and Life Sciences Division, Dugway Proving Ground.

²Burt, W.H. and R.P. Grossenheider, Field Guide to the Mammals, Houghton, Mifflin Co., Boston, MA, 1964, 284 p.

³Egoscue, H.J. "Checklist of the Mammals of Tooele County, Utah", p. 233-237, Study of the Ecology and Epizology of the Native Fauna of the Great Salt Lake Desert - 1969, University of Utah, 1970, 246 p.

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6. Sciuridae:		
Side of head not striped . . .	Squirrels	7
Side of head striped	Chipmunks	10
7. Squirrels:		
Body without dorsal white stripes		8
Body with dorsal white stripes		9
8. Body gray mottled with cinnamon or brown; tail over 6 inches (153mm)	<i>Spermophilus variegatus</i> (Rock Squirrel)	p. 101
Body uniformly dark; tail under 3 inches (76mm)	<i>Spermophilus townsendii</i> (Townsend Ground Squirrel)	p. 103
9. Tail red below	<i>Spermophilus lateralis</i> (Golden-mantled Ground Squirrel)	p. 116
Tail white below	<i>AMMOSPERMOPHILUS LEUCURUS</i> (WHITE-TAILED ANTELOPE SQUIRREL)	p. 116
10. Chipmunks:		
Body with stripes indistinct except for dark stripe down middle of back	<i>Eutamias dorsalis</i> (Cliff Chipmunk)	p. 116
Body with dorsal stripes distinct		11
11. Body with dorsal white stripes bordered each side by black or brown stripe; head and body under 4 3/4 inches (121mm) . .	<i>EUTAMIAS MINIMUS</i> (Least Chipmunk)	p. 116
Body with dorsal white stripes not bordered below by dark stripe; head and body over 4 3/4 inches (121mm); above 7,000 feet (2134m)	<i>Eutamias umbrinus</i> (Uinta Chipmunk)	p. 121

12.	Mouth with external fur-lined cheek pouches	Heteromyidae	13
	Mouth without external fur-lined cheek pouches . . . . .	. . . . .	18
13.	Heteromyidae:		
	Hind foot with sole nearly naked	Pocket Mice	14
	Hind foot with sole haired . .	Kangaroo Rats and Mice . .	16
14.	Pocket Mice:		
	Tail distinctly crested with bushy tuft at tip; pelage gray and coarse; ear pointed at tip	<i>PEROGNATHUS FORMOSUS</i> (LONG-TAILED POCKET MICE)	.p. 148
	Tail not distinctly crested; tip only slightly tufted; pelage buffy and soft; ear rounded at tip . . . . .	. . . . .	15
15.	Smells like popcorn; hind foot over 3/4 inch (20mm)	<i>PEROGNATHUS PARVUS</i> (GREAT BASIN POCKET MOUSE)	.p. 148
	Hind foot under 3/4 inch (20mm)	<i>Perognathus longimembris</i> (Little Pocket Mouse)	. . .p. 140
16.	Kangaroo Rats and Mice:		
	Tail not tufted, middle swollen; head and body less than 3 inches (7.6cm)	<i>Microdipodops megacephalus</i> (Dark Kangaroo Mouse)	. . p. 147
	Tail tufted at tip, middle not swollen; head and body more than 4 inches (10cm) . . . . .	. . . . .	17
17.	Lower teeth narrow, rounded across front; tail usually with dorsal dark stripe wider than ventral which tapers out before tip	<i>DIPODOMYS ORDII</i> (ORD KANGAROO RAT)	. . . p. 149

Lower teeth wide, flat across front, tail usually with dorsal dark stripe about same width as ventral which continues to tip; insides of cheek pouches often blackish	<i>DIPODOMYS MICROPS</i> (CHISEL-TOOTHED KANGAROO RAT)	p. 154
18. Tail naked and scaly; hind foot under 7/8 inch (22mm)	Muridae. <i>Mus musculus</i> (House Mouse)	p. 164
Tail covered with hair	Cricetidae	19
19. Cricetidae:		
Hind foot over 1 1/8 inches (28mm)	Wood Rats	20
Hind foot under 1 1/8 inches (28mm) . . . . .	. . . . .	21
20. Wood Rats:		
Tail bushy, squirrel-like; usually above 7,000 feet.(2134m)	<i>Neotoma cinerea</i> (Bushy-tailed Wood Rat)	p. 181
Tail not bushy; usually below 7,000 feet.(2134m)	<i>NEOTOMA LEPIDA</i> (DESERT WOOD RAT)	p. 181
21. Ears sparsely furred, conspicuous above hair	Cricetinae	22
Ears thickly furred, nearly hidden in hair	Microtinae	26
22. Cricetinae:		
Tail less than half the length of head and body	<i>Onychomys leucogaster</i> (Northern Grasshopper Mouse)	p. 164
Tail more than half the length of head and body . . . . .	. . . . .	23
23. Upper teeth grooved	<i>REITHRODONTOMYS MEGALOTIS</i> (WESTERN HARVEST MOUSE)	p. 164
Upper teeth not grooved . . . . .	. . . . .	p. 24

24. Tail tufted at tip, not sharply bicolored, more than 90 percent length of head and body; nose pointed like a fox; male with wedge-shaped penis *PEROMYSCUS CRINITUS*
(CANYON MOUSE) p. 165
- Tail not tufted, but sharply bicolored; male with pointed penis 25
25. Ear under 7/8 inch (22mm), shorter than hind foot; tail less than 90 percent length of head and body *PEROMYSCUS MANICULATUS*
(DEER MOUSE) p. 165
- Ear over 7/8 inch (22mm), longer than hind foot; tail more than 90 percent length of head and body *PEROMYSCUS TRUEI*
(PINYON MOUSE) p. 165
26. Microtinae:
- Tail about the same length as hind foot; body gray *Lagurus curtatus*
(Sagebrush Vole) p. 180
- Tail more than 1 1/2 times length of hind foot; body brownish gray to black above. 27
27. Second upper molar with four closed triangles and rounded posterior loop; Timpie Springs east to Lake Point *Microtus pennsylvanicus*
(Meadow Vole) p. 180
- Second upper molar with four closed triangles without posterior loop 28
28. Tail more than 40 percent length of head and body *Microtus longicaudus*
(Long-tailed Vole) p. 194
- Tail less than 40 percent length of head and body *Microtus montanus*
(Montane Vole) p. 192

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