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SHREW AND HETEROMYID RECORDS FROM THE GREAT BASIN OF OREGON AND UTAH

Harold J. Egoscue

ABSTRACT—Oregon records from Harney County establish a minimum altitudinal occurrence for the water shrew (Sorex palustris), identify an isolated population of the montane shrew (Sorex monticolus obscurus), and provide an additional specimen of Merriam's shrew (Sorex merriami). Utah records extending the ranges in the southeastern part of the Bonneville Basin for the little pocket mouse (Perognathus longimembris), long-tailed pocket mouse (Perognathus formosus), and dark kangaroo mouse (Microdipodops nigacephalus) are also given.

Studies in progress designed to determine the ecology of Peromyscus fleas in the Great Basin have resulted in the capture of many kinds of small mammals in addition to mice. Among them were three species of shrews from parts of southeastern Oregon, where few soricids have been reported, and three heteromyids, whose capture extends their ranges in western Utah.

Specimens mentioned, including examples of the associated small mammals identified to subspecies, were deposited in collections at the University of Utah, Salt Lake City.

Sorex monticolus obscurus Merriam.—Two montane shrews of this subspecies were collected in the Trout Creek Mountains, an isolated range, most of which lies just north of the Nevada boundary in southeastern Harney County, Oregon.

An adult female (lactating, no embryos) was trapped 20 June 1970 on a dry, densely vegetated hillside at the head of a small tributary canyon of Big Trout Creek (elev. 2,022 m). The principal plants in order of abundance were big sagebrush (Artemisia tridentata), bitterbrush (Purshia tridentata), and snowberry (Symphoricarpus sp.), with a heavy understorey of herbaceous plants.

The second specimen, an adult male, was caught 10 September 1982 near the headwaters of Big Trout Creek about 2.4 km north of the Nevada line (elev. 2,135 m). The traps were set streamside, where the dominant vegetation included willow, river birch, and other riparian plants. Besides deer mice, other small mammals caught here were the long-tailed vole (Microtus longicaudus) and least chipmunk (Eutamias minimus).

These records identify a previously unknown, apparently isolated population of S. m. obscurus located between Steen Mountains, Harney County, Oregon, and the Santa Rosa Mountains, Humboldt County, Nevada (see map by Hennings and Hoffman 1977).

Sorex palustris navigator (Baird).—An adult female (no embryos) was collected 10 October 1983 at the mouth of Cottonwood Creek, a tiny stream flowing out of the east side of the Pueblo Mountains 11.3 km south of Fields, Harney County, Oregon (elev. 1,281 m). Almost the entire trarpline was set streamside, but the only other mammals captured were Peromyscus maniculatus. Altitudinally, this is the lowest place on record where S. palustris has been taken in the Great Basin. The conditions here resemble those described by Hall (1946) for a place in Esmeralda County, Nevada, where water shrews were found at a much lower than normal elevation.

Sorex merriami merriami Dobson.—An adult female (no embryos, molts to winter pelage in progress) was collected 25 October 1984 about 16 km south of Crane (elev. 1,318 m). My trarpline was set on a steep, dry, talus and boulder-strewn hillside with numerous small ledges and several prominent basalt outcrops. The dominant plant was spiny hopsage (Grayia spinosa), with scattered horsebrush (Tetradymia sp.) and big sagebrush. Other small mammals trapped here were deer mice (Peromyscus maniculatus ssp.), canyon mice (P. crinitus crinitus), western harvest mice

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Lindsay, S. L., and A. E. Perry 1977. An additional Merriam’s shrew (Sorex m. merriami) from Oregon. The Murrelet 58: 17.

(Reithrodontomys megalotis megalotis),
desert woodrats (Neotoma lepida necadensis),
bushy-tailed woodrats (N. cinerea alticola),
sagebrush voles (Lagurus curtius pauper-

rimus), and Great Basin pocket mice (Per-

ognathus parvus parvus), all caught within 75

m of where the Merriam’s shrew was trapped.

With the possible exception of the bushy-
tailed woodrat, the biota was typically Upper

Sonoran. Lindsay and Perry (1977) reviewed

what little was known about this shrew in

Oregon when they reported the fourth record

for the state.

Perognathus longinembrisi gulosus Hall.—An

adult male provisionally referred to this

subspecies was obtained 29 March 1986 in

Escañante Valley, 24 km west-southwest of

Minersville, Beaver County, Utah, and about

100 m north of the Iron County line. This

extends the range about 72 km southeast from

localities in extreme southwestern Millard

County as mapped by Hall (1981). See ac-

count of Microdipodops megalcephalus paul-

ulus for other details about the area.

Perognathus formosus incolatus Hall.—An

adult male referable to P. f. incolatus was

collected 28 March 1986 about .2 km north of

Black Rock, Millard County, Utah (elev.

1,418 m), a range extension well into the east-

er part of the southern Bonneville Basin

from the nearest localities in southwestern

Millard County reported by Hall (1981).

Traps were set among the boulders and exten-

sive basalt ledges of an ancient lava flow.

Dominant plants were horsebrush and rabbit-

brush (Chrysothanumus sp.). Associated small

mammals were the desert woodrat and deer

mouse.

Microdipodops megalcephalus paululus

Hall & Durrant.—Two adult males fitting the

description of this subspecies (Hall and Dur-

rant 1941) were caught 29 March 1986 in the

northern end of Escañante Valley, 24 km west-
southwest of Minersville, Beaver County,

Utah, and about 100 m north of the Iron

County line (elev. 1,550 m). This is a range

extension southeastward of about 75 km from

places in southwestern Millard County

mapped by Hall (1981).

The mice were caught in low, semistabi-

lized, vegetated dunes of fine, light-colored

sand, where the dominant plants were rabbit-

brush and four-winged saltbush (Atriplex can-

nescens). Other small mammals caught here

were the little pocket mouse, Ord kangaroo

rat (Dipodomys ordii cinderensis), and deer

mouse.

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