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A Distributional Check-List of New Mexican Mammals

Arthur H. Harris

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HARRIS

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A DISTRIBUTIONAL CHECK-LIST OF NEW MEXICAN MAMMALS

By

Arthur H. Harris

A Thesis

Submitted in Partial Fulfillment of the

Requirements for the Degree of

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MASTER OF SCIENCE

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TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

Vernon Bailey's Mammals of New Mexico, as the only near-complete work on the mammals of the state, has long been used as a general reference for information on the geographic ranges of mammals within New Mexico. However, Bailey's work contains defects of presentation, such as the omission of easily located lists of record stations and the failure to record many of the localities to which dots on his distribution figures refer, which results in mediocre presentation of the geographic ranges of the animals as known some 30 years ago.

During the past 30 years a number of mammals previously unknown in New Mexico have been reported from the state. In addition, many mammals have been taken from localities from which they were unknown at the time of Bailey's writing.

Because of these factors, Bailey's work is not a satisfactory source of data for many studies which directly or indirectly involve distribution of mammals within New Mexico. Moreover, distributional data are widely scattered in the literature; no one source nor any small group of sources is available which brings together information on the distribution of all the mammals of the state except in a most general way.

The present work is an attempt to provide such a source--to bring together in usable form all published records of occurence within the state for each species of mammal that is known to occur in New Mexico and also to make available such unpublished records as are present in the University of New Mexico Collection of Vertebrates. Some additional information on names, life-zone preferences, and subspecies to be found within the state has been included as has a section briefly describing the size, topography, climate, and vegetation of New Mexico.

MATERIALS AND METHODS

A literature search, as complete as limitations of time, library facilities, and skill of the author have allowed, has been made, and all definite locality records that have been found in the literature have been included in this work. Also, the author personally examined the mammalian specimens in the University of New Mexico Collection of Vertebrates and, after satisfying himself as to identification, has added unpublished locality records represented in the collection to those gathered from the literature.

In this thesis, every Recent mammal known to occur in a wild state in New Mexico, as well as several species for which evidence as to residence is not conclusive, is treated individually in species accounts. The overall

order of presentation follows that to be found in Vernacular names for North American mammals north of Mexico (Hall, et al., 1957).

Each individual account is headed by the presently accepted scientific name of the species. The common name, as given in the work cited above, follows. A brief synonomy is given, consisting of those names that Bailey used in refering to members of the species in his Mammals of New Mexico.

The section on general remarks is designed to give an idea of the life zones inhabited by the species within the state and to add points of clarification about localities, sight records, and so forth.

Subspecies which are presently ascribed to New Mexico are listed. The lists are based on information in Hall and Kelson (1959).

Localities are listed by county, the counties being arranged so that those of the most northern tier, from west to east, are given first, followed by the second most northern tier, and so on. Within a county, no particular order has been attempted.

Localities that are followed by the letters UNMCV represent records from the University of New Mexico Collection of Vertebrates which are not duplicated by literature records. Other localities are followed by a literature citation. No attempt has been made to cite the earliest author who gave a particular locality record.

In general, an author who has given the more precise locality has been given preference over the author who has been more general. Localities for those mammals whose original distributions have been drastically altered, as have those of most game animals, have not been listed since reference to earlier workers will provide such records.

A number before a locality or localities refers to a similarly numbered circle on the distribution map for that species. The circle covers the approximate position of the locality or, where undue crowding would result if all were plotted, localities.

Distribution maps have been provided for most species. Exceptions are artiodactyls, wide-spread species of little importance to zoogeographic or systematic studies, and species known from only one or two record stations in the state and which do not fit without confusion on maps of related species. Open circles represent record stations reported in the literature only; solid circles, stations which are represented by specimens in the University of New Mexico Collection of Vertebrates. It should be recognized that where only a general locality, such as Guadalupe Mountains, is given in the records of occurence, the plotting of the locality on the distribution map has been done arbitrarily within the area and may be some distance from the true position--and even within the wrong county.

TOPOGRAPHY, CLIMATE, AND LIFE ZONES OF NEW MEXICO

New Mexico's large size and varied relief results in a variety of climatic types which, in turn, has resulted in a highly diversified biota.

On its longest north-south axis, New Mexico spans well over 5 degrees of latitude (about 390 miles). At its widest point, over 6 degrees of longitude (approximately 350 miles) separate the eastern and western borders. This factor of distance would, in itself, result in a fair degree of diversification of the biota. When the factor of relief is added, the result is an extensive and varied fauna and flora matched by few areas of the temperate zone.

High plateaus, mountain ranges, and intermontane basins are topographical features of the western two-thirds of the state. The Gila, the San Juan, and the Rio Grande drain this area. The higher altitudes, in general, are found in the north, where the southern end of the Rocky Mountains enters the state. Here is the highest altitude within New Mexico--13,160 feet above sea level at the top of Wheeler Peak. On the southern border, where the Pecos River leaves New Mexico, is the lowest elevation--slightly over 2800 feet above sea level.

The eastern third of the state, drained by the Canadian and Pecos Rivers, is essentially part of the Great Plains and consists of level to rolling country

with local areas of rugged topography, particularly as the mountain ranges to the west are approached.

Precipitation is as varied as is the land. Rain shadows and the great distances from sources of moisture result in average annual precipitation figures of less than 8 inches in some areas. In other areas, precipitation, primarily orographic in origin, may surpass an average of 40 inches annually.

In the low altitudes of the south, long growing seasons, moderate winters, and hot summers are the general rule. In contrast, the higher mountains of the north may be subjected to freezing night temperatures at any time during the year.

In such an area as New Mexico, where a relatively few miles may separate an alpine type of vegetation from hot, arid grasslands, some system of describing the biota of a given area is essential.

A somewhat altered version of the life zone system of Merriam is used in this work. Although this method of biotic classification is somewhat more general than some other available systems, use of a more exact descriptive method would imply a greater knowledge of the ecological destributions and tolerances of New Mexican mammals than is held at the present time.

As an aid to the reader, brief characterizations of the life zones found in New Mexico are given here. The

characterizations are necessarily incomplete and it is quite possible that the plants mentioned are not, in all cases, the most appropriate choices with which to give a general picture of a zone. It should be kept in mind that the limits of any one life zone seldom are sharply demarcated and that in many cases localities could be assigned to either of two zones with equal justification.

In this work, Merriam's Lower Sonoran Life Zone has been equated somewhat arbitrarily with the desert grassland association as used by Castetter (1956) and the Upper Sonoran Life Zone with the mixed grassland association and woodland biome of Castetter. The other life zones are as used by Bailey (1913).

The presence or former presence of black grama grass (Bouteloua eriopoda) and tobosa grass (Hilaria mutica) as dominants is characteristic of the Lower Sonoran Life Zone. In many disturbed areas, these grasses have largely been replaced by creosote bush (Larrea tridentata), common mesquite (Proscpis juliflora), tarbush (Flourensia cernua), or other shrubs.

Blue grama grass (Bouteloua gracilis) is the dominant plant of the grassland portion of the Upper Sonoran Life Zone and is often associated with such other grasses as galleta grass (Hilaria jamesii), hairy grama (Bouteloua hirsuta), and side-oats grama (B. curtipendula). Such shrubs as rabbit brush (Chrysothamnus spp.) and soapweed

Yucca glauca) may be present. Big sagebrush (Artemisia ridentata) is common in the northwestern and north central ortions of the state in this zone. Junipers (Juniperus pp.) and pinyon pines (Pinus edulis or P. cembroides) are haracteristic components of the woodland portion of the one and are often associated with any of a number of oaks Quercus spp.).

The ponderosa, or yellow, pine (Pinus ponderosa) is he characteristic tree of the Transition Zone. Also ound in this zone are Gambel oak (Quercus gambelii), spen (Populus tremuloides), and Douglas fir (Pseudotsuga axifolia), although the latter two commonly extend well nto the Canadian Zone.

The Canadian Life Zone is one of spruce and fir. lue spruce (Picea pungens), Engelmann spruce (P. ngelmanni), and white fir (Abies concolor) are common pecies. Douglas fir and aspen also appear.

The trees of the Hudsonian Zone are normally somehat stunted in form and include such species as Engelmann pruce, foxtail pine (Pinus aristata), and alpine and ork-barked fir (Abies lasiocarpa and A. arizonica).

Trees are absent from the Arctic-alpine Zone and the egetation typically consists of low, matted alpine plants hich are adapted to cold winters and brief growing seaons. The vegetation includes such plants as sedges Carex spp.), cresses (Draba spp.), saxifrages of several enera, and rushes (Juncus spp.).

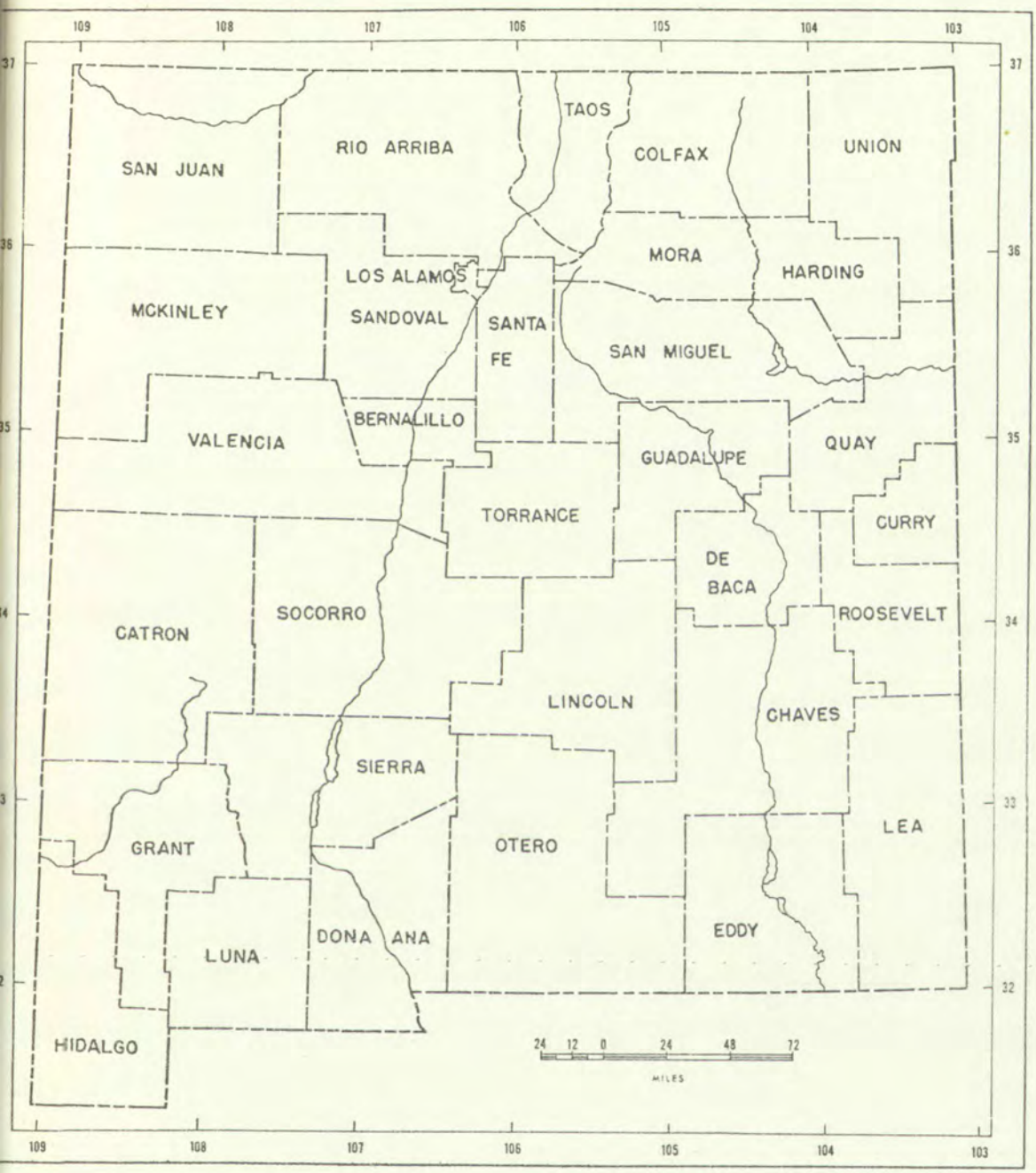

Fig. 1. Counties of New Mexico.

ACCOUNTS OF SPECIES

ORDER MARSUPIALIA

FAMILY DIDELPHIIDAE

DIDELPHIS MARSUPIALIS Linnaeus

Opossum

Didelphis marsupialis texensis Allen.

General remarks.--Although sight records of the opossum are reported occasionally to members of the biology department of the University of New Mexico, there are only two actual specimens known from the state (other than specimens known to have escaped from captivity). Both of these specimens are from the Rio Grande Valley near Belen and were found dead on the road. The species is not limited to river valleys in New Mexico, however, judging from a sight record by Don Findley, a student at the University of New Mexico who is familiar with the opossum. An opossum was seen by him on N. M. Rt. 10, near San Antonio, Bernalillo Co. This locality is in the foothill region of the Sandia Mountains.

The appearence of the opossum well into north central New Mexico may indicate, since the animal is apparently absent from more peripheral areas in the state, either accidental or purposeful introduction into the area.

Subspecific determination of the specimens at hand has not been made.

Records of occurence (Not mapped).--

Valencia Co.:

Belen (UNMCV).

ORDER INSECTIVORA

FAMILY SORICIDAE

SOREX CINEREUS Kerr

Masked Shrew

Sorex cinereus cinereus Kerr.

General remarks.--Sorex cinereus is rare in New Mexico, apparently being restricted to the Canadian Life Zone of the Sangre de Cristo Mountains.

Subspecies ascribed to New Mexico.--Sorex cinereus cinereus Kerr.

Records of occurence (Fig. 4).--

Taos Co.:

1. Twining (Jackson, 1928: 48); Headwaters of the Hondo River, near Twining (Bailey, 1931: 370).

2. A few mi. N town of Red River (Bailey, 1931: 370).

3. 4 mi. N Tres Ritos (UNMCV).

Mora Co.:

4. Pecos Baldy (Jackson, 1928: 48).

SOREX VAGRANS Baird

Vagrant Shrew

Sorex obscurus obscurus Merriam.

Sorex obscurus neomexicanus Bailey.

Sorex vagrans monticola Merriam.

General remarks.--The vagrant shrew in New Mexico is rimarily an animal of the Canadian and Hudsonian Life ones, only occasionally being taken in the Transition Zone.

Bailey (1931: 373) reports a sight record of a small hrew on Mount Taylor and assumes it to be of this species, ut verifying specimens apparently have never been taken.

Subspecies ascribed to New Mexico.--Sorex vagrans bscurus Merriam; Sorex vagrans neomexicanus Bailey; Sorex agrans monticola Merriam.

Records of occurence (Fig. 2).--

an Juan Co.:

1. Washington Pass, Chuska Mts., 6 mi. E Crystal UNMCV).

io Arriba Co.:

2. 10½ mi. E Chama, East Fork Rio Brazos, 10,000 ft. UNMCV).

aos Co.:

3. 3 mi. N Red River, 10,700 ft. (Jackson, 1928: 22).

4. 7 mi. S and 1 mi. W Red River, Goose Lake, 12,000 t. (UNMCV); Twining (Jackson, 1928: 122).

5. Taos Mts. (Bailey, 1931: 371).

6. 4 mi. N Tres Ritos (UNMCV); 2 mi. NE Tres Ritos, io la Junta (UNMCV).

olfax Co.:

7. 1 mi. S and 2 mi. E Eagle Nest, 8100 ft. Findley, 1955: 48).

8. SW Colfax Co. (Hill, 1942: 77).

andoval Co.:

9. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

10. Jemez Mts., Valle Santa Rosa (Jackson, 1928: 22).

11. Jemez Mts., Santa Clara Creek (Jackson, 1928: 22).

ora Co.:

12. Pecos Baldy (Jackson, 1928: 122); Pecos River ts. (Bailey, 1931: 371).

ernalillo Co.:

13. Sandia Mts., near Sandia Crest (Clothier, 1957b: 4).

anta Fe Co.:

14. Hyde Park, 5 mi. NE Santa Fe (Findley, 1955: 48); anta Fe Field Station (Findley, 1955: 48); Santa Fe Ski asin (Findley, 1955: 48).

an Miguel Co.:

15. Gallinas Creek, Sangre de Cristo Mts., T17N-R14E, ec. 13 (Koster and Clothier, 1952: 251).

atron Co.:

16. Willow Creek, Mogollon Mts. (Jackson, 1928: 112).

ocorro Co.:

17. Copper Canyon, Magdalena Mts. (Jackson, 1928: 112).

Torrance Co.:

18. Red Canyon, 4 mi. W and 1 mi. S Manzano (UNMCV).

19. Manzano Mts., E slope of S end (Jackson, 1928: 122).

Sierra Co.:

20. Near Kingston, on Percha Creek, Mimbres Mts. (Bailey, 1931: 373).

Lincoln Co.:

21. NW slope Capitan Mts. (Bailey, 1931: 372); Capitan Mts., SW slope (Jackson, 1928: 123).

22. Monjeau Peak, 10,000 ft. (UNMCV).

Otero Co.:

23. 10 mi. NE Cloudcroft (Jackson, 1928: 123).

24. Cloudcroft (Jackson, 1928: 123); 1 mi. S Cloudcroft (UNMCV).

25. 10 mi. S Cloudcroft (UNMCV).

SOREX NANUS Merriam

Dwarf Shrew

General remarks.--Judging from the three known occurences of Sorex nanus in New Mexico, the animal is primarily or entirely a Canadian Life Zone inhabitant.

Subspecies ascribed to New Mexico.--This species is considered to be monotypic.

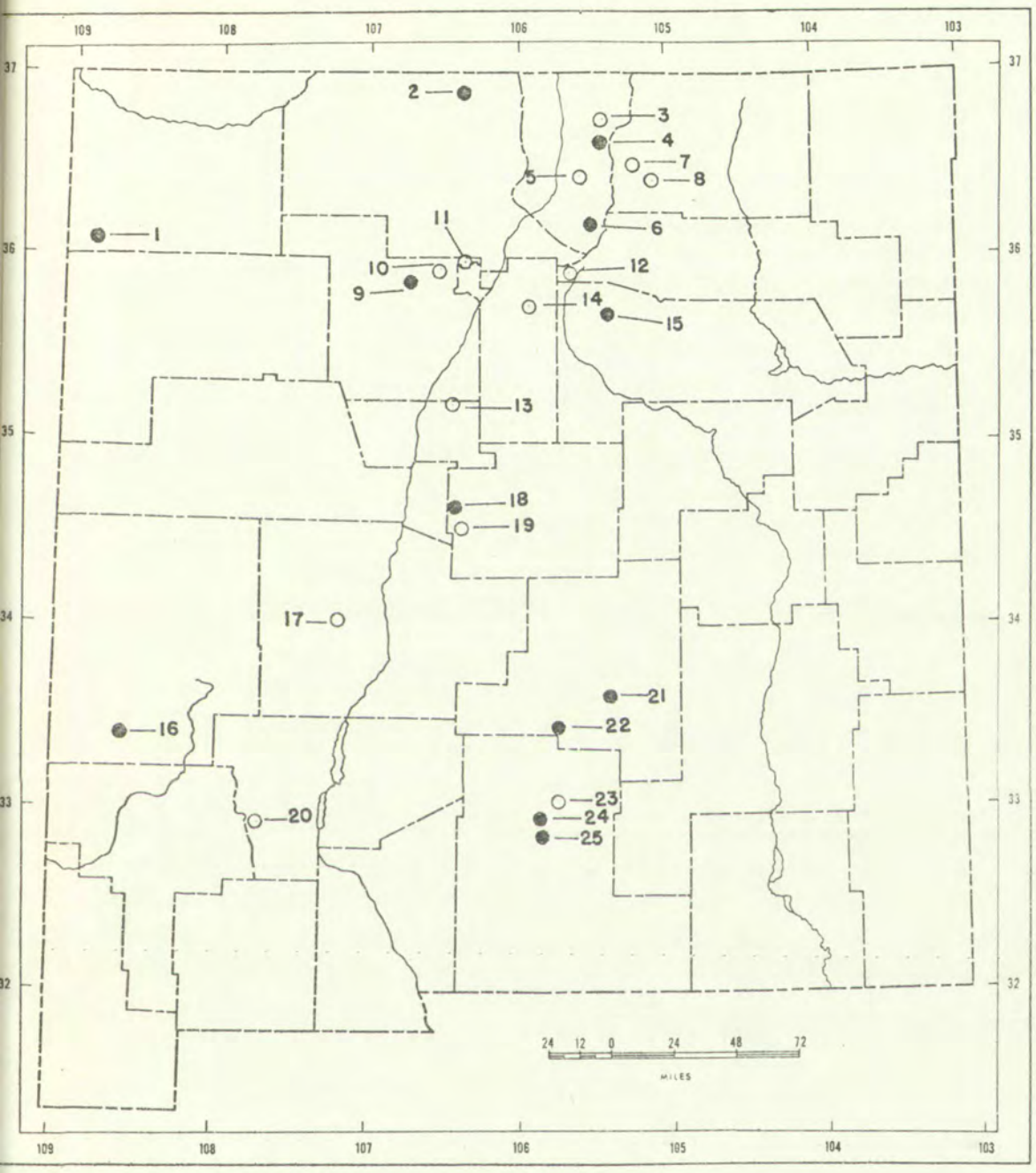

Fig. 2. Sorex vagrans

Records of occurence (Fig. 3).--

Sandoval Co.:

1. Capulin Ranger Station, Sandia Mts., T12N-R5E, Sec. 33 (Clothier, 1957a: 256).

San Miguel Co.:

2. Gallinas Creek, Sangre de Cristo Mts., T12N-R5E, Sec. 13 (Koster and Clothier, 1952: 250).

Lincoln Co.:

3. 2 mi. E Ruidoso (Findley and Poorbaugh, 1957: 513).

SOREX PALUSTRIS Richardson

Water Shrew

Sorex palustris navigator (Baird).

General remarks.--In New Mexico, the water shrew frequents the high mountain streams of the Canadian Life Zone.

The record for Costilla Pass does not indicate which of the two, or perhaps three, passes with this name is meant. For this reason, the circle representing this locality on the distribution map is a compromise and should be considered as marking a general area rather than the specific location.

Subspecies ascribed to New Mexico.--Sorex palustris navigator (Baird).

Records of occurence (Fig. 3).--

Rio Arriba Co.:

1. Hopewell (Jackson, 1928: 188).

2. Summit of San Juan Mts. (Bailey, 1931: 374).

Taos Co.:

3. Costilla Pass, 9000 ft. (Jackson, 1928: 188).

4. Twining, 10,700 ft. (Jackson, 1928: 188); Head of Rio Hondo (Bailey, 1931: 375).

5. E slope Taos Mts. (Jackson, 1928: 188).

6. 4 mi. N Tres Ritos (UNMCV); 2 mi. NE Tres Ritos, Rio la Junta (UNMCV).

Colfax Co.:

7. A few mi. W Elizabethtown, Taos Mts. (Bailey, 1931: 375).

Sandoval Co.:

8. Santa Clara Canyon (Jackson, 1928: 188).

9. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

Mora Co.:

10. Head of Coyote Creek (Bailey, 1931: 374).

11. Pecos Baldy (Jackson, 1928: 188).

San Miguel Co.:

12. Willis (Jackson, 1928: 188).

SOREX MERRIAMI Dobson

Merriam's Shrew

General remarks.--Sorex merriami is known from New Mexico by a single specimen only. This specimen "was taken on the edge of a grassy meadow adjacent to a forest

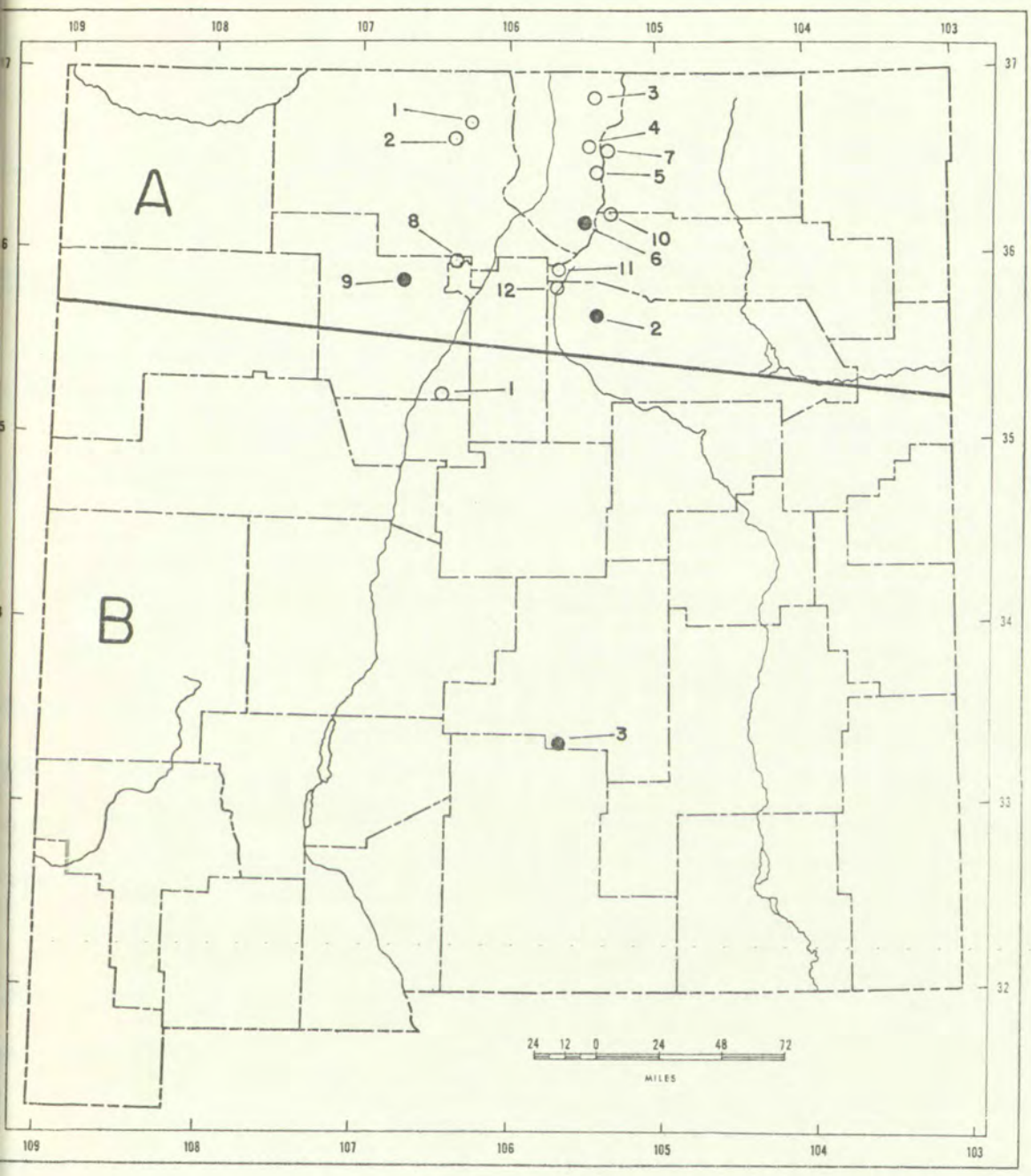

Fig. 3. A. Sorex palustris

B. Sorex nanus

f white fir (Abies concolor)" (Findley, 1956: 277).

Subspecies ascribed to New Mexico.--Sorex merriami eucogenys Osgood.

Records of occurence (Fig. 4).--

ernalillo Co.:

1. Tree Springs, approximately 8300 ft., E side andia Mts. (Findley, 1956: 277).

NOTIOSOREX CRAWFORDI (Coues)

Desert Shrew

Notiosorex crawfordi crawfordi Baird (Sic).

General remarks.--Although the records of the desert hrew would indicate a wide range within New Mexico, pecimens have been but seldom captured. An ecological ange in the Lower and Upper Sonoran Life Zones is indiated by the distribution of the localities.

The type of this species was labeled as from New Mexco. The correct locality is apparently Texas (see ailey, 1931: 368).

The specimen from Hidalgo Co. consists of bone remains aken from owl pellets.

Subspecies ascribed to New Mexico.--Notiosorex rawfordi crawfordi (Coues).

Records of occurence (Fig. 4).--

andoval Co.:

1. Near Juan Tafoya, E base Mt. Taylor Plateau,

near Puerco River (Bailey, 1931: 369).

Sierra Co.:

2. 1 mi. E Elephant Butte (UNMCV).

Lincoln Co.:

3. NW base Capitan Mts. (Bailey, 1931: 369).

Hidalgo Co.:

4. Guadalupe Mts., T33S-R21W, Sec. 25 (UNMCV).

Otero Co.:

5. About 3 mi. N Tularosa (Blair, 1941: 219).

ORDER CHIROPTERA

FAMILY PHYLLOSTOMIDAE

CHOERONYCTERIS MEXICANA Tschudi

Long-tongued Bat

General remarks.--The few records of the long-tongued bat in New Mexico would seem to indicate a range primarily in the Upper Sonoran Life Zone.

Although not represented by a specimen from the immediate area, the species is known to occur at the Johnson Ranch, Guadalupe Canyon, Guadalupe Mts., Hidalgo Co., N. M. One individual was seen at this locality at close range for several minutes by the author during the summer of 1957.

Subspecies ascribed to New Mexico.--The species is considered to be monotypic.

Records of occurence (Fig. 7).--

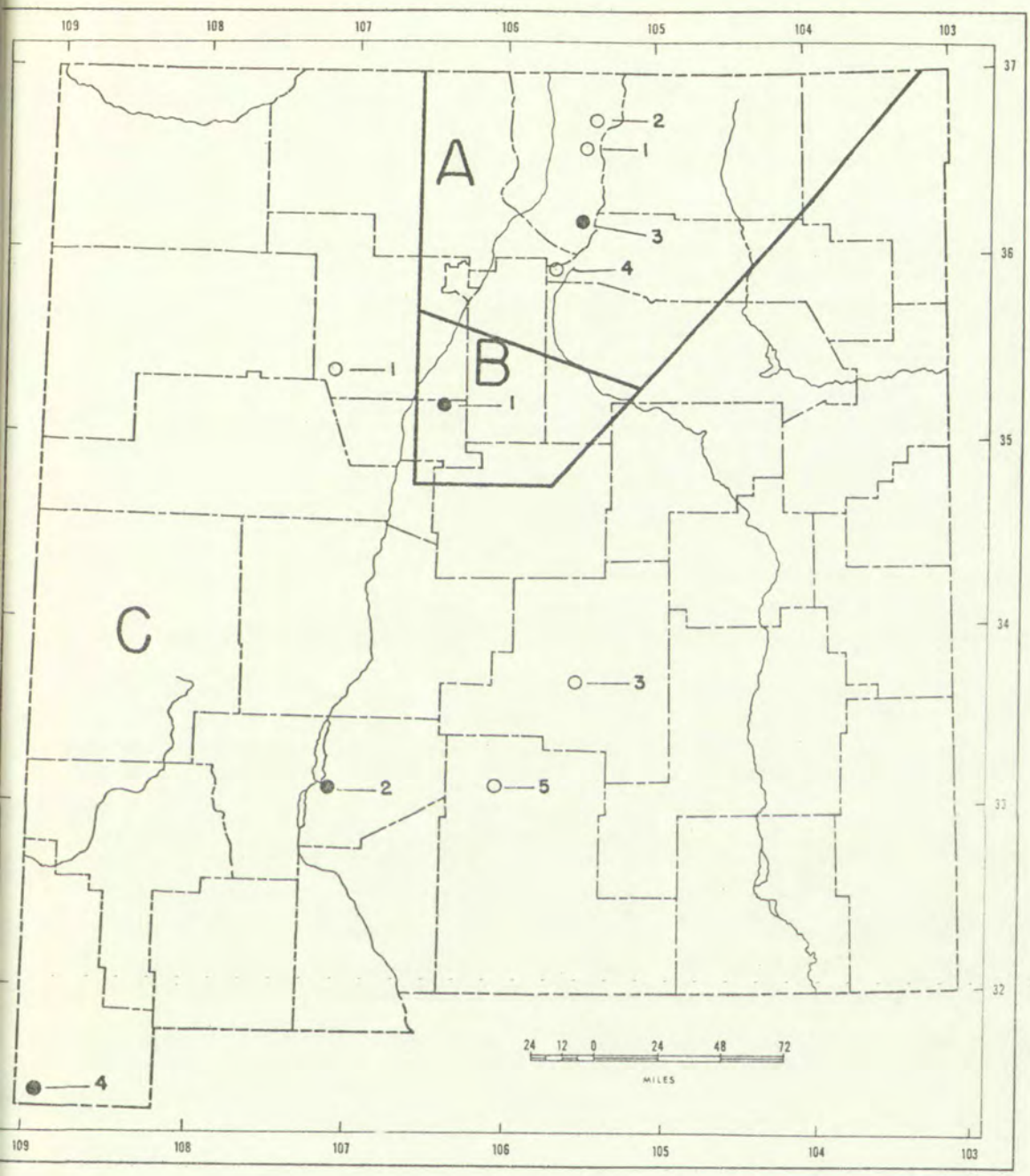

Fig. 4. A. Sorex cinereus

B. Sorex merriami

C. Noteosorex crawfordi

idalgo Co.:

1. Skeleton Canyon, Peloncillo Mts., 10 mi. S Rodeo Findley, 1957: 513).

2. Guadalupe Mts., T33S-R21W, Sec. 20 (UNMCV); uadalupe Mts., T33S-R21W, Sec. 26 (UNMCV); Guadalupe Mts., 33S-R21W, Sec. 28 (UNMCV); Guadalupe Mts., T33S-R21W, ec. 19 (UNMCV); Guadalupe Mts., T33S-R21W, Sec. 21 (UNMCV).

FAMILY VESPERTILIONIDAE

MYOTIS LUCIFUGUS (Le Conte)

Little Brown Myotis

Myotis lucifugus carissima Thomas.

General remarks.--The inclusion of the little brown yotis in the New Mexican state list must be considered s provisional. The one record for New Mexico is based n a skull only and, according to Miller and Allen (1928: 2), the identification is not positive.

Subspecies ascribed to New Mexico.--Myotis lucifugus arissima Thomas.

Records of occurence (Fig. 7).--

nion Co.:

1. Sierra Grande (Miller and Allen, 1928: 52).

MYOTIS YUMANENSIS (H. Allen)

Yuma Myotis

Myotis yumanensis (H. Allen).

General remarks.--The Yuma myotis inhabits the Lower

nd Upper Sonoran Life Zones in New Mexico.

Subspecies ascribed to New Mexico.--Myotis yumanensis umanensis (H. Allen).

Records of occurence (Fig. 5).--

io Arriba Co.:

1. Rinconada (Bailey, 1931: 392).

nion Co.:

2. Apache Canyon, near Clayton (Bailey, 1931: 392).

ernalillo Co.:

3. Sandia Mts. (Ivey, 1957: 493).

ocorro Co.:

4. Bosque del Apache Nat'l Wildlife Refuge, near an Antonio (Mumford, 1957: 260).

ona Ana Co.:

5. Mesilla Park (Bailey, 1931: 392).

MYOTIS VELIFER (J. A. Allen)

Cave Myotis

Myotis velifer velifer (J. A. Allen).

Myotis velifer incautus (J. A. Allen).

General remarks.--Most of the specimens of Myotis elifer from New Mexico have been taken in the Lower onoran Life Zone.

The UNMCV specimens are lacking skulls and identifiation is based on characteristics of the skins only. he Carlsbad Cavern record of Bailey is based on a skull nly.

Subspecies ascribed to New Mexico.--Myotis velifer velifer (J. A. Allen); Myotis velifer incautus (J. A. Allen).

Records of occurence (Fig. 5).--

McKinley Co.:

1. Fort Wingate (Bailey, 1931: 386).

Hidalgo Co.:

2. Big Hatchet Mts., T31S-R15W, Sec. 36, 5250 ft. (UNMCV).

Eddy Co.:

3. McKittrick Cave, 20 mi. W Carlsbad (Bailey, 1931: 387).

4. Santa Fe water tower, 4 mi. SW Carlsbad (Bailey, 1928: 124); ½ mi. NW Santa Fe water tower (Bailey, 1931: 387); Bat Cave in Dow's Pasture, 4 mi. W Carlsbad (Bailey, 1928: 125).

5. Bolle's Ranch, 6 mi. S Carlsbad (Bailey, 1931: 386).

6. Carlsbad Cave (Bailey, 1931: 387).

MYOTIS OCCULTUS Hollister

Arizona Myotis

Myotis occultus Hollister.

General remarks.--Most specimens of Myotis occultus from New Mexico have been taken in the Transition Life Zone. There are some records from the Lower Sonoran Life Zone, however.

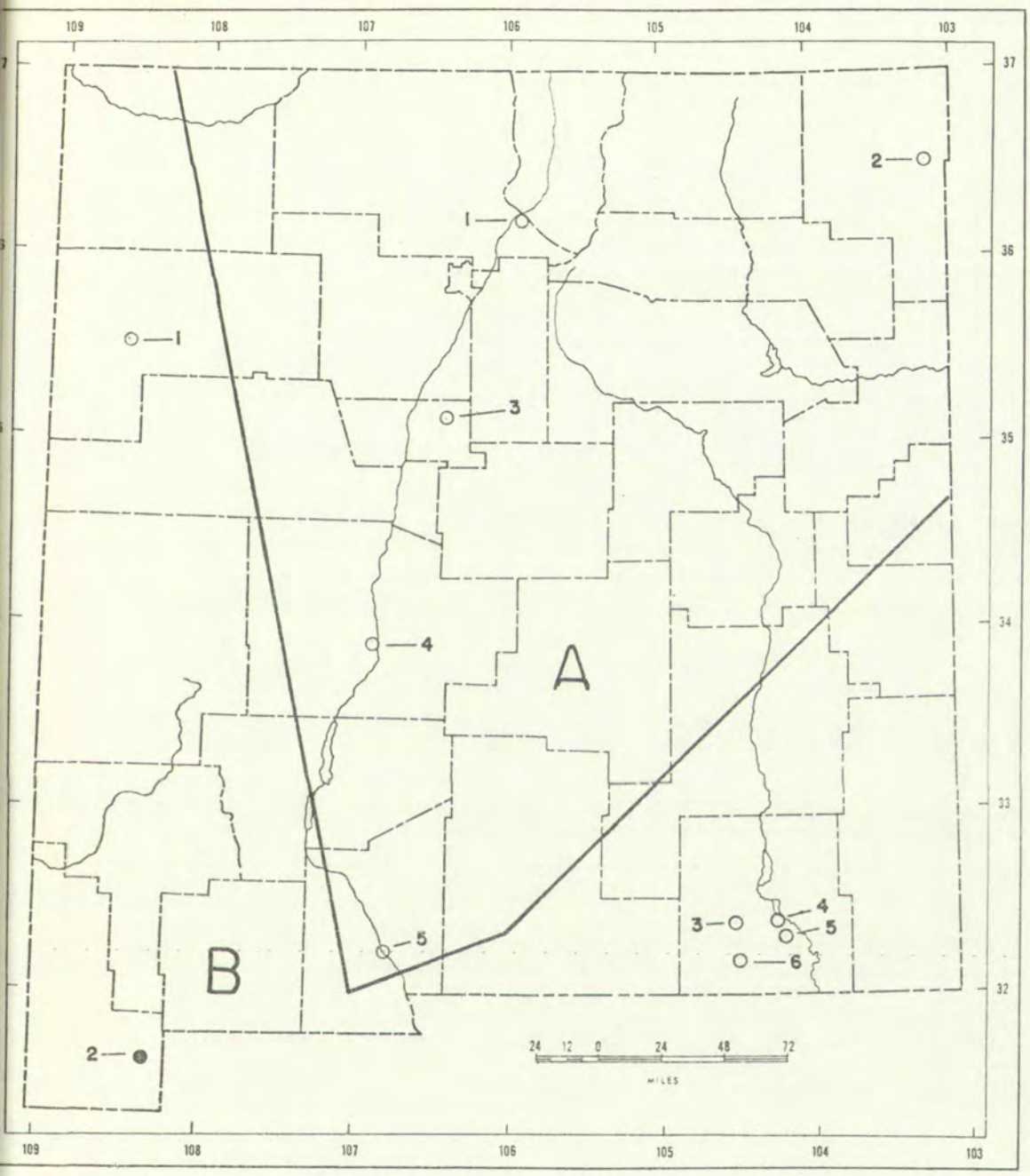

Fig. 5. A. Myotis yumanensis

B. Myotis velifer

Subspecies ascribed to New Mexico.--The species is considered to be monotypic.

Records of occurence (Fig. 6).--

Valencia Co.:

1. Zuni Mts., slopes of Mt. Sedgewick (Bailey, 1931: 389); Zuni Mts., Bear Ridge (Miller and Allen, 1928: 100).

Catron Co.:

2. Luna Valley near head San Francisco River (Bailey, 1931: 388-389).

Socorro Co.:

3. Bosque del Apache Nat'l Wildlife Refuge, near San Antonio (Mumford, 1957: 260).

Lincoln Co.:

4. Ruidoso Creek, 7500 ft., White Mts. (Bailey, 1931: 388).

Dona Ana Co.:

5. 3 mi. W Las Cruces, on the Rio Grande (G. M. Allen, 1922: 157).

Otero Co.:

6. 7 mi. E and 2½ mi. N Cloudcroft, Sacramento Mts. (UNMCV).

MYOTIS KEENII (Merriam)

Keen's Myotis

General remarks.--Keen's myotis is known from two localities in New Mexico, both in the Transition Life Zone.

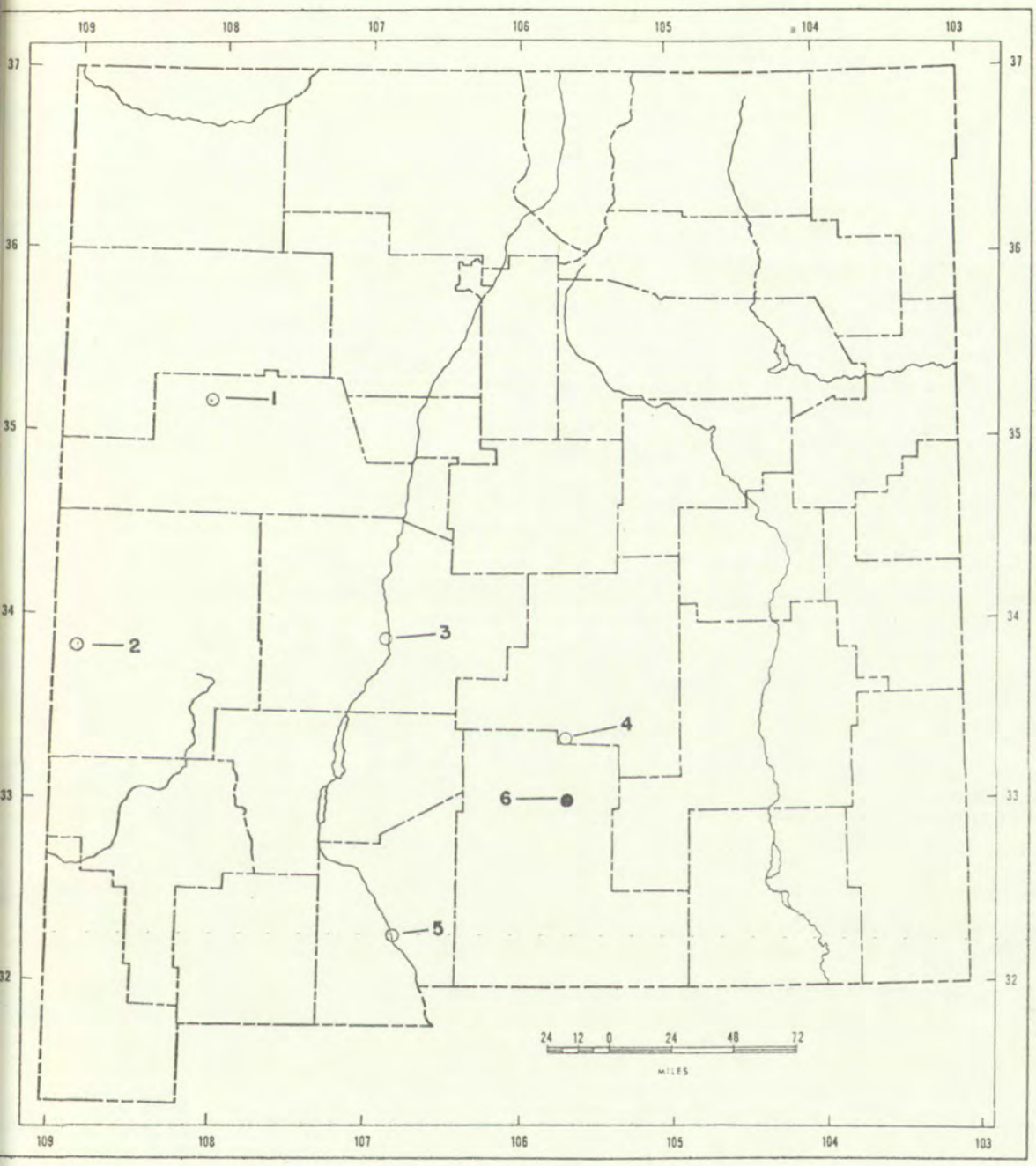

Fig. 6. Myotis occultus

Subspecies ascribed to New Mexico.--Myotis keenii apache Hoffmeister and Krutzsch.

Records of occurence (Fig. 7).--

Catron Co.:

1. 3 mi. NE Aragon (Findley, Jour. Mamm., in press).

Socorro Co.:

2. Springtime Canyon, San Mateo Mts., 38 mi. S and 6 mi. W Magdalena (Findley, Jour. Mamm., in press).

MYOTIS EVOTIS (H. Allen)

Long-eared Myotis

Myotis evotis chrysonotus (J. A. Allen).

General remarks.--In New Mexico, this bat ranges from the Upper Sonoran to the Canadian Life Zone.

Subspecies ascribed to New Mexico.--Myotis evotis evotis (H. Allen).

Records of occurence (Fig. 8).--

Colfax Co.:

1. Vermejo River (Bailey, 1931: 389).

McKinley Co.:

2. Fort Wingate (Bailey, 1931: 389).

Valencia Co.:

3. 1½ mi. SW San Mateo (Hooper, 1941a: 20).

4. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 20).

San Miguel Co.:

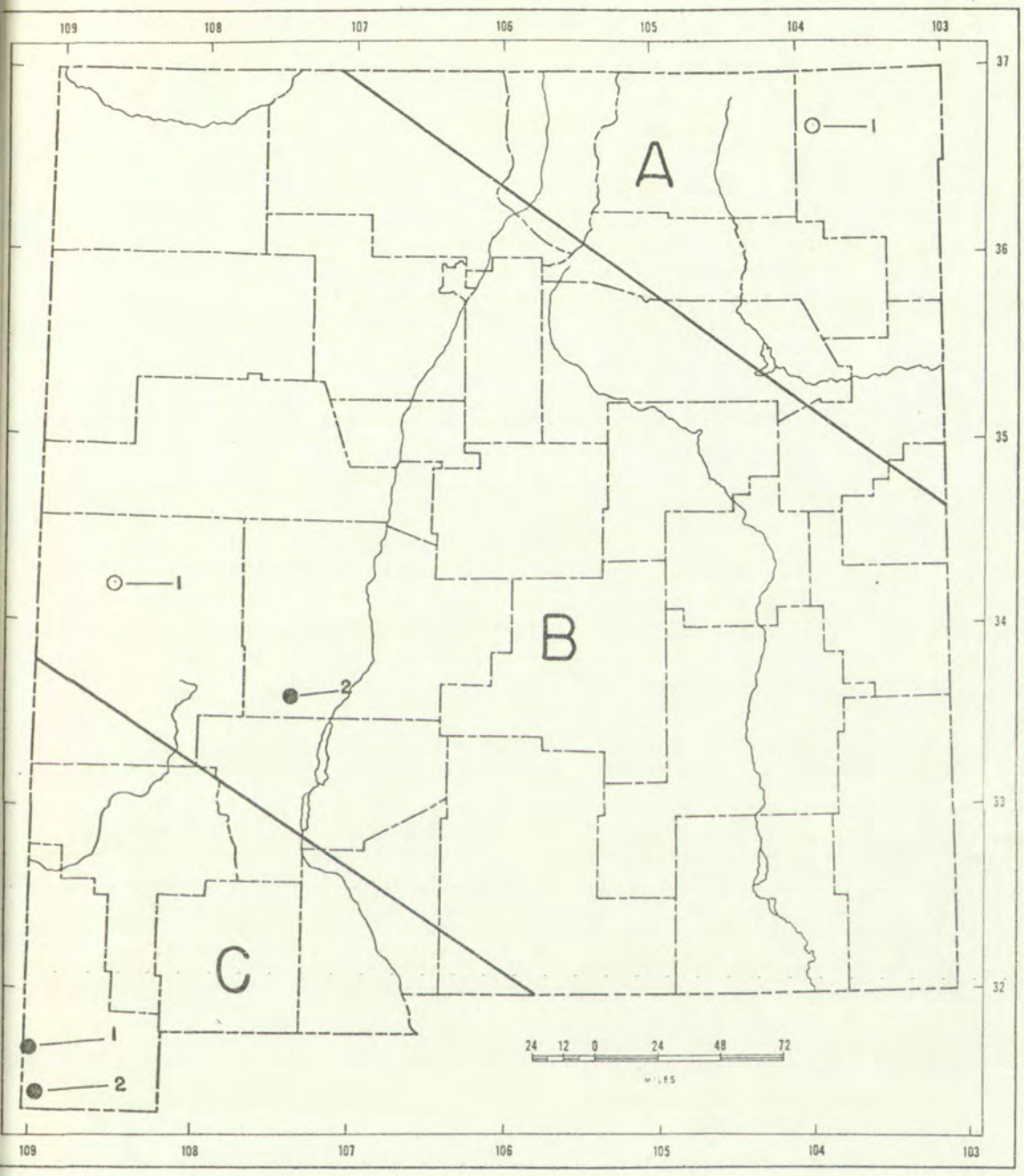

Fig. 7. A. Myotis lucifugus

B. Myotis keenii

C. Choeronycteris mexicana

5. Sapello Canyon, 10,000 ft. (Miller and Allen, 1928: 117).

Socorro Co.:

6. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 20 mi. S Magdalena (UNMCV).

7. Springtime Canyon, San Mateo Mts., 38 mi. S and 6 mi. W Magdalena (UNMCV).

Sierra Co.:

8. Mimbres Mts. (Miller and Allen, 1928: 117).

MYOTIS THYSANODES Miller

Fringed Myotis

Myotis thysanodes thysanodes Miller.

General remarks.--In New Mexico, the fringed myotis has been taken in the Lower and Upper Sonoran, Transition, and Canadian Life Zones.

Subspecies ascribed to New Mexico.--Myotis thysanodes thysanodes Miller.

Records of occurence (Fig. 9).--

Rio Arriba Co.:

1. Espanola (Bailey, 1931: 387).

McKinley Co.:

2. Gallup (Bailey, 1931: 387).

Valencia Co.:

3. Agua Fria Spring (Bailey, 1931: 387).

4. Canyon Lobo Ranger Station (Hooper, 1941a: 20).

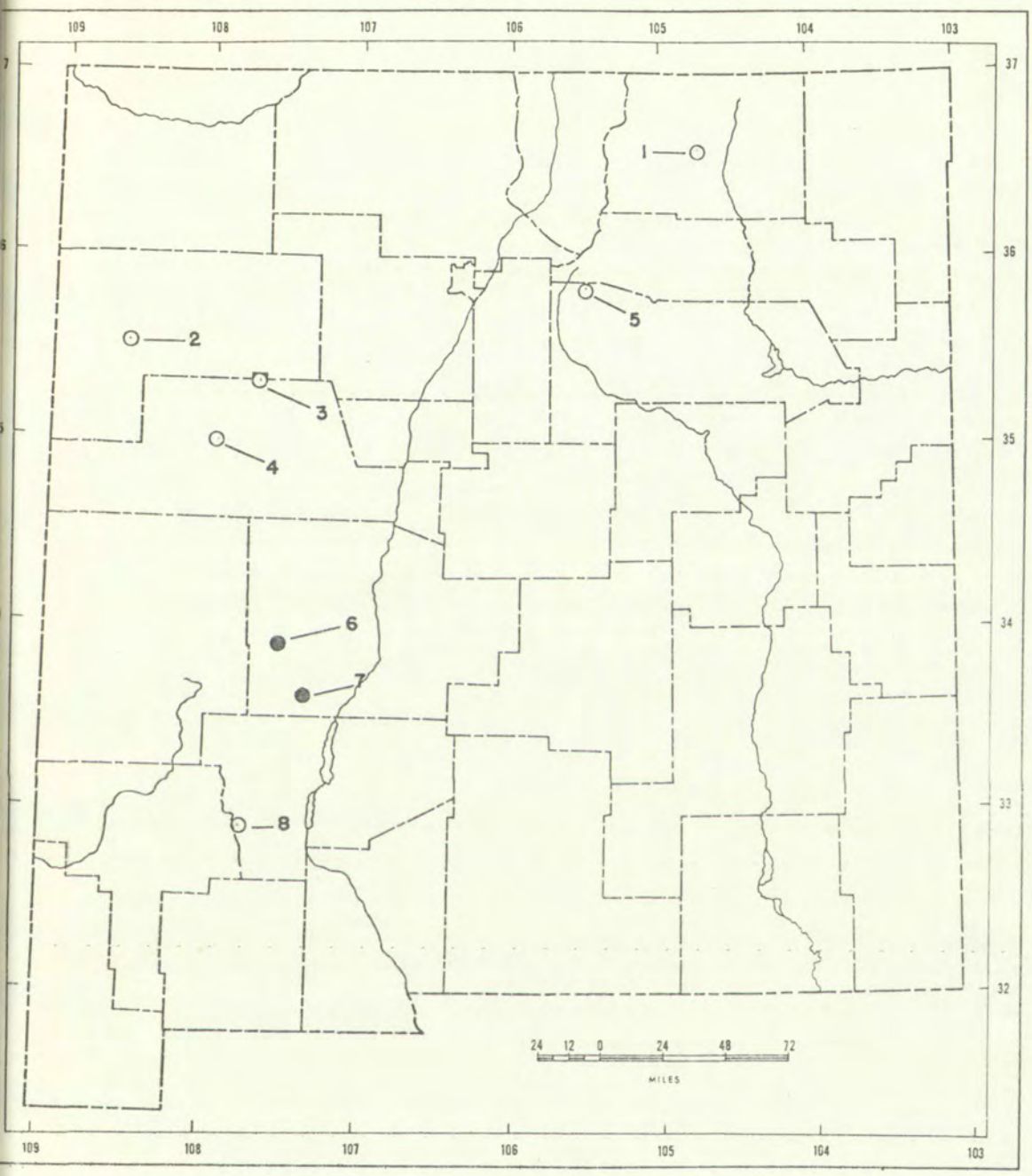

Fig. 8. Myotis evotis

5. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 20).

Bernalillo Co.:

6. Sandia Mts. (Ivey, 1957: 492).

Socorro Co.:

7. Mill Canyon, Magdalena Mts., R3S-R4W, Sec. 36 (UNMCV).

8. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 20 mi. S Magdalena (UNMCV).

9. Springtime Canyon, San Mateo Mts., 38 mi. S and 6 mi. W Magdalena (UNMCV).

Torrance Co.:

10. Gran Quivera (Bailey, 1931: 387).

Grant Co.:

11. W base Mimbres Mts., Rocky Creek, 8000 ft. (Bailey, 1931: 388).

Hidalgo Co.:

12. Near head Whitemire Creek, Cloverdale Hills (Bailey, 1931: 388).

13. San Luis Mts. (Bailey, 1931: 387).

Otero Co.:

14. Near Mayhill (Mulaik, 1943: 269).

Eddy Co.:

15. McKittrick Cave, about 15 mi. W Carlsbad (Parker, 1932: 70).

16. Carlsbad (Miller and Allen, 1928: 127).

17. Carlsbad Cave (Bailey, 1931: 387).

MYOTIS VOLANS (H. Allen)

Long-legged Myotis

Myotis volans interior Miller.

General remarks.--In New Mexico, Myotis volans has ost commonly been taken in the Transition and Canadian ife Zones.

Subspecies ascribed to New Mexico.--Myotis volans nterior Miller.

Records of occurence (Fig. 10).--

aos Co.:

1. Costilla River (Bailey, 1931: 392).

2. Culebra Mts. (Bailey, 1931: 393).

3. 5 mi. S Twining, 11,300 ft., Taos Mts. (Bailey, 931: 392).

4. Cantonment Burgwyn (Bailey, 1931: 392).

olfax Co.:

5. Raton Range (Bailey, 1931: 392).

6. SW Colfax Co. (Hill, 1942: 77).

nion Co.:

7. Sierra Grande (Miller, 1914: 211).

andoval Co.:

8. Santa Clara Canyon, Jemez Mts. (Bailey, 1931: 92).

alencia Co.:

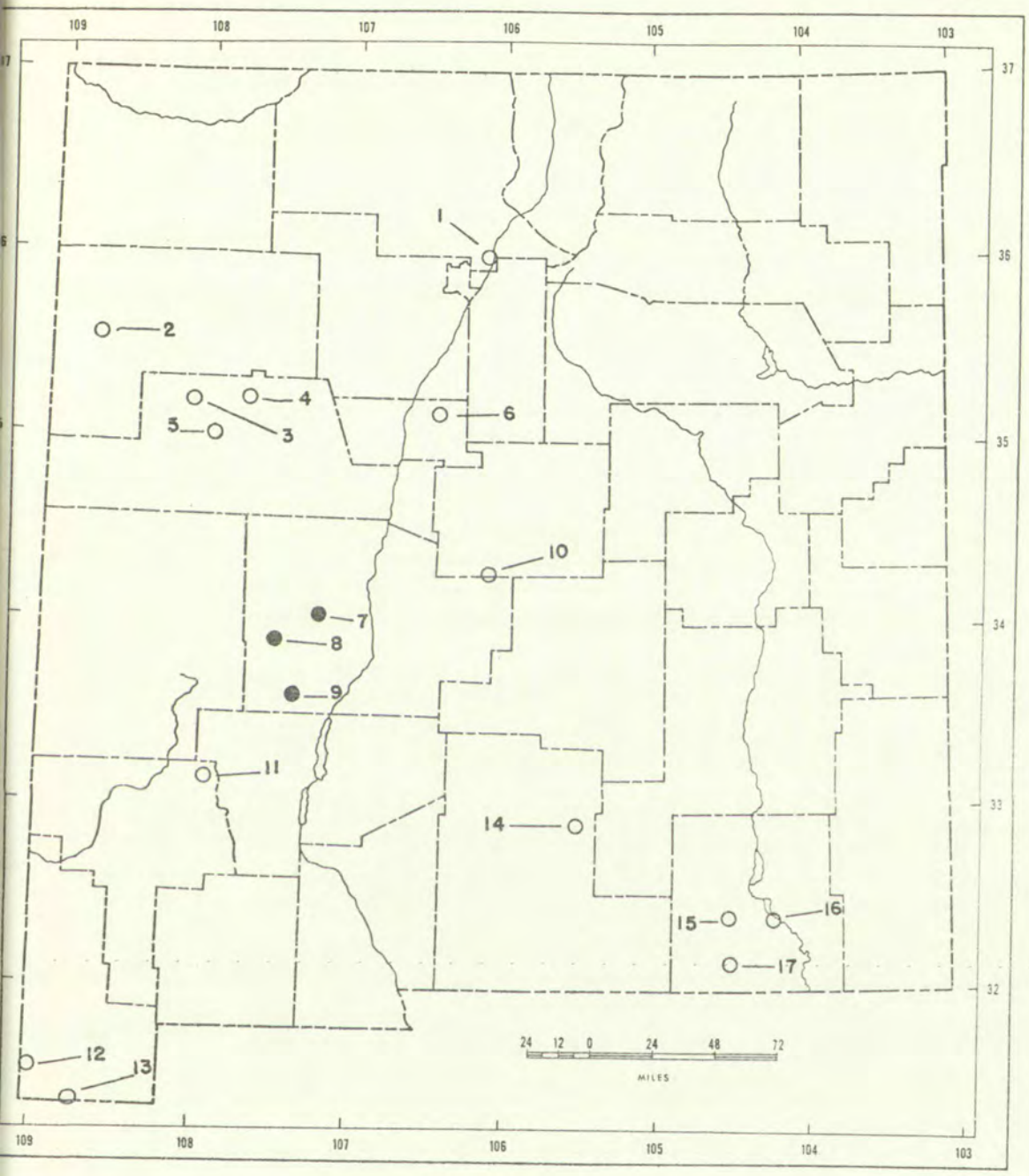

Fig. 9. Myotis thysanodes

9. Canyon Lobo Ranger Station (Hooper, 1941a: 20).

10. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 20).

Bernalillo Co.:

11. T11N-R4E, Sec. 3 (UNMCV).

Santa Fe Co.:

12. Santa Fe (Bailey, 1931: 392).

San Miguel Co.:

13. Willis, Pecos River Mts. (Bailey, 1931: 392).

Catron Co.:

14. Willow Creek, Mogollon Mts., 10 mi. E Mogollon (UNMCV).

Socorro Co.:

15. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 0 mi. S Magdalena (UNMCV).

16. Springtime Canyon, San Mateo Mts., 38 mi. S and mi. W Magdalena (UNMCV).

Lincoln Co.:

17. Red Cloud Canyon, Gallinas Mts. (UNMCV).

MYOTIS CALIFORNICUS (Audubon and Bachman)

California Myotis

Myotis californicus californicus (Audubon and Bachman).

General remarks.--The California myotis has been taken in Lower and Upper Sonoran habitats in New Mexico.

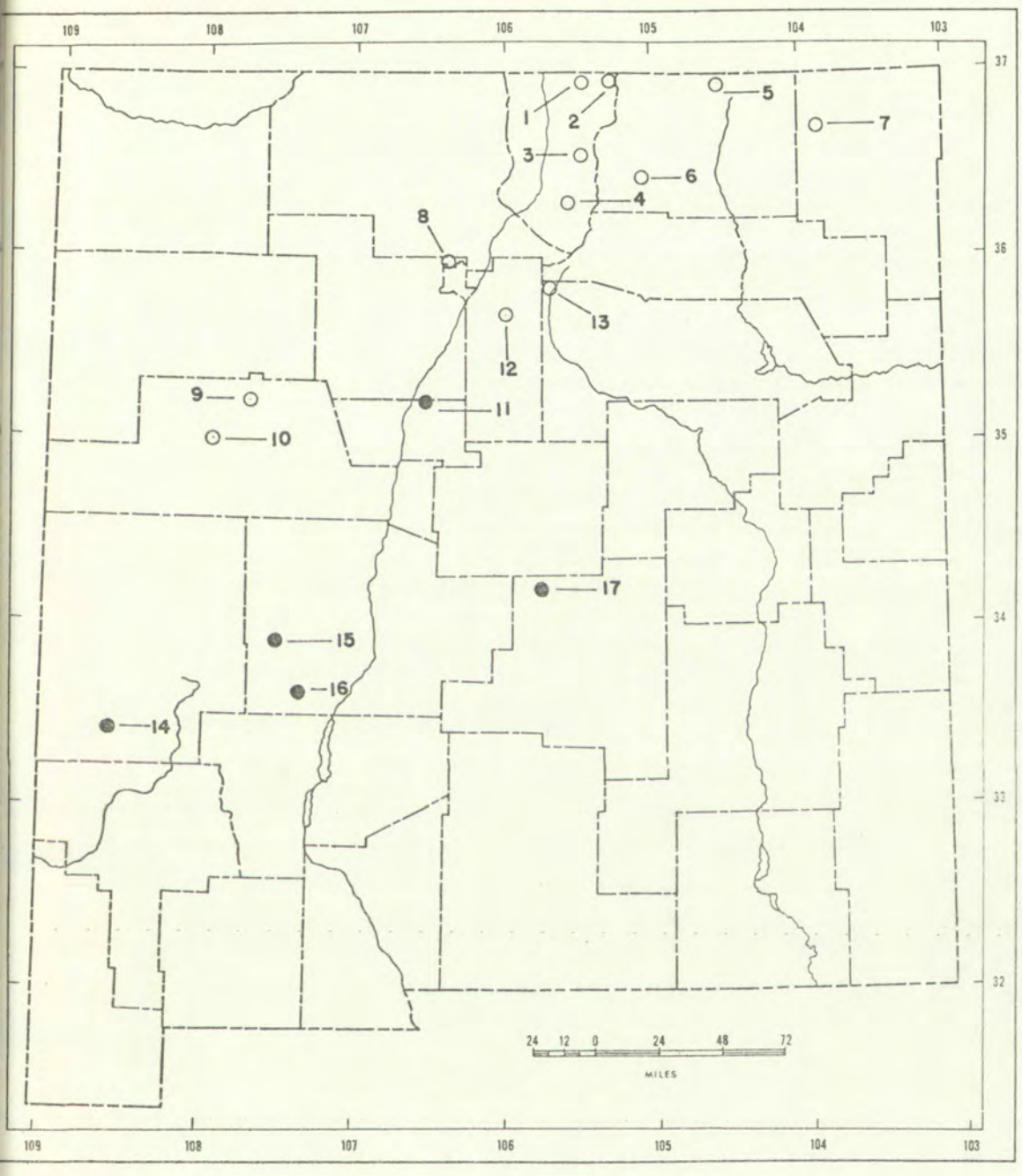

Fig. 10. Myotis volans

The record for Carlsbad Cave is evidently based on a ull only.

Subspecies ascribed to New Mexico.--Myotis californi-s (Audubon and Bachman).

Records of occurence (Fig. 11).--

Kinley Co.:

1. Fort Wingate (Miller, 1897: 71).

rnalillo Co.:

2. Tijeras Ranger Station, Manzano Mts. (Clothier, 57b: 27).

corro Co.:

3. San Mateo Canyon (Bailey, 1931: 390).

4. Springtime Canyon, San Mateo Mts., 38 mi. S and mi. W Magdalena (UNMCV).

ant Co.:

5. Silver City (Miller, 1897: 71).

6. Apache (Bailey, 1931: 390).

dalgo Co.:

7. Lang's Ranch, Animas Valley (Bailey, 1931: 390).

8. Whitewater Canyon, San Luis Mts., 13 mi. W telope Wells (UNMCV).

na Ana Co.:

9. Bear Canyon, San Andres Mts. (Bailey, 1931: 390).

dy Co.:

10. Carlsbad Cave (Bailey, 1931: 390).

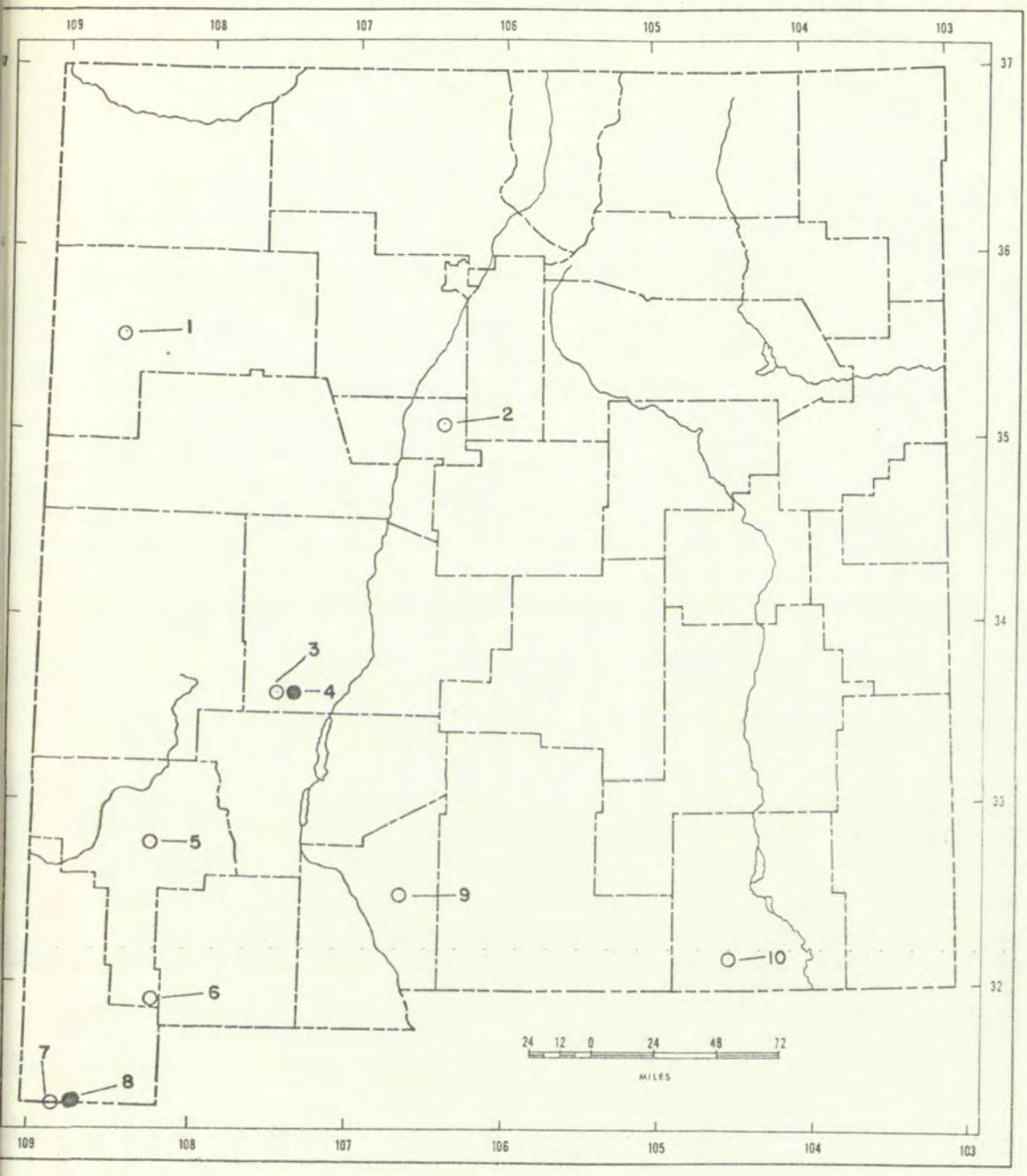

Fig. 11. Myotis californicus

MYOTIS SUBULATUS (Say)

Small-footed Myotis

Myotis subulatus melanorhinus (Merriam).

General remarks.--The small-footed myotis appears to be primarily a bat of the Upper Sonoran and Transition Life Zones.

The UNMCV specimens from the Big Hatchet Mountains are skull-less and identification is based on characteristics of the skin only.

Subspecies ascribed to New Mexico.--Myotis subulatus melanorhinus (Merriam).

Records of occurence (Fig. 12).--

Taos Co.:

1. Tres Piedras (Bailey, 1931: 391).

2. Cantonment Burgwyn (Bailey, 1931: 391).

McKinley Co.:

3. Fort Wingate (Bailey, 1931: 390); Wingate (Bailey, 1931: 391).

Valencia Co.:

4. 1½ mi. SW San Mateo (Hooper, 1941a: 20).

5. Zuni Mts. (Bailey, 1931: 391).

6. Near Canyon Lobo Ranger Station (Hooper, 1941a: 20).

7. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 20).

Bernalillo Co.:

8. T11N-R4E, Sec. 3 (UNMCV).

an Miguel Co.:

9. Pecos (Bailey, 1931: 391).

10. Las Vegas (Bailey, 1931: 391).

ocorro Co.:

11. Magdalena Mts., 2 mi. E South Baldy, 11 mi. S nd 4 mi. E Magdalena (UNMCV).

12. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 0 mi. S Magdalena (UNMCV).

13. Springtime Canyon, San Mateo Mts., 38 mi. S and mi. W Magdalena (UNMCV).

uadalupe Co.:

14. Santa Rosa (Bailey, 1931: 391).

rant Co.:

15. Silver City (Bailey, 1931: 391).

ierra Co.:

16. Hot Springs (Bailey, 1931: 391).

ncoln Co.:

17. E base Capitan Mts. (Bailey, 1931: 391).

dalgo Co.:

18. Doyle's Well, 10 mi. S and 5 mi. E Hachita (UNMCV).

19. Big Hatchet Mts., T31S-R15W, Sec. 36, 5250 ft. NMCV).

20. Black Bill Canyon, Animas Mts. (UNMCV).

21. Upper Animas Valley, 36 mi. S and 3 mi. W Animas NMCV).

22. Whitewater Canyon, San Luis Mts., 13 mi. W ntelope Wells (UNMCV).

LASIONYCTERIS NOCTIVAGANS (Le Conte)

Silver-haired Bat

Lasionycteris noctivagans (Le Conte).

General remarks.--The silver-haired bat may appear uring migration in most or all of the life zones repre-ented in New Mexico.

Subspecies ascribed to New Mexico.--Lasionycteris octivagans is a monotypic species.

Records of occurence (Fig. 13).--

io Arriba Co.:

1. Lake Burford (Bailey, 1931: 383).

2. Rinconada (Bailey, 1931: 383).

alencia Co.:

3. Near Mt. Sedgewick, Zuni Mts. (Bailey, 1931: 383).

4. 6 mi. NE summit Mt. Taylor (Hooper, 1941a: 20).

5. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 0).

6. 11 mi. SSE Grants (Hooper, 1941a: 20).

ernalillo Co.:

7. Albuquerque (Ivey, 1957: 493).

atron Co.:

8. Willow Creek, Mogollon Mts., 10 mi. E Mogollon UNMCV).

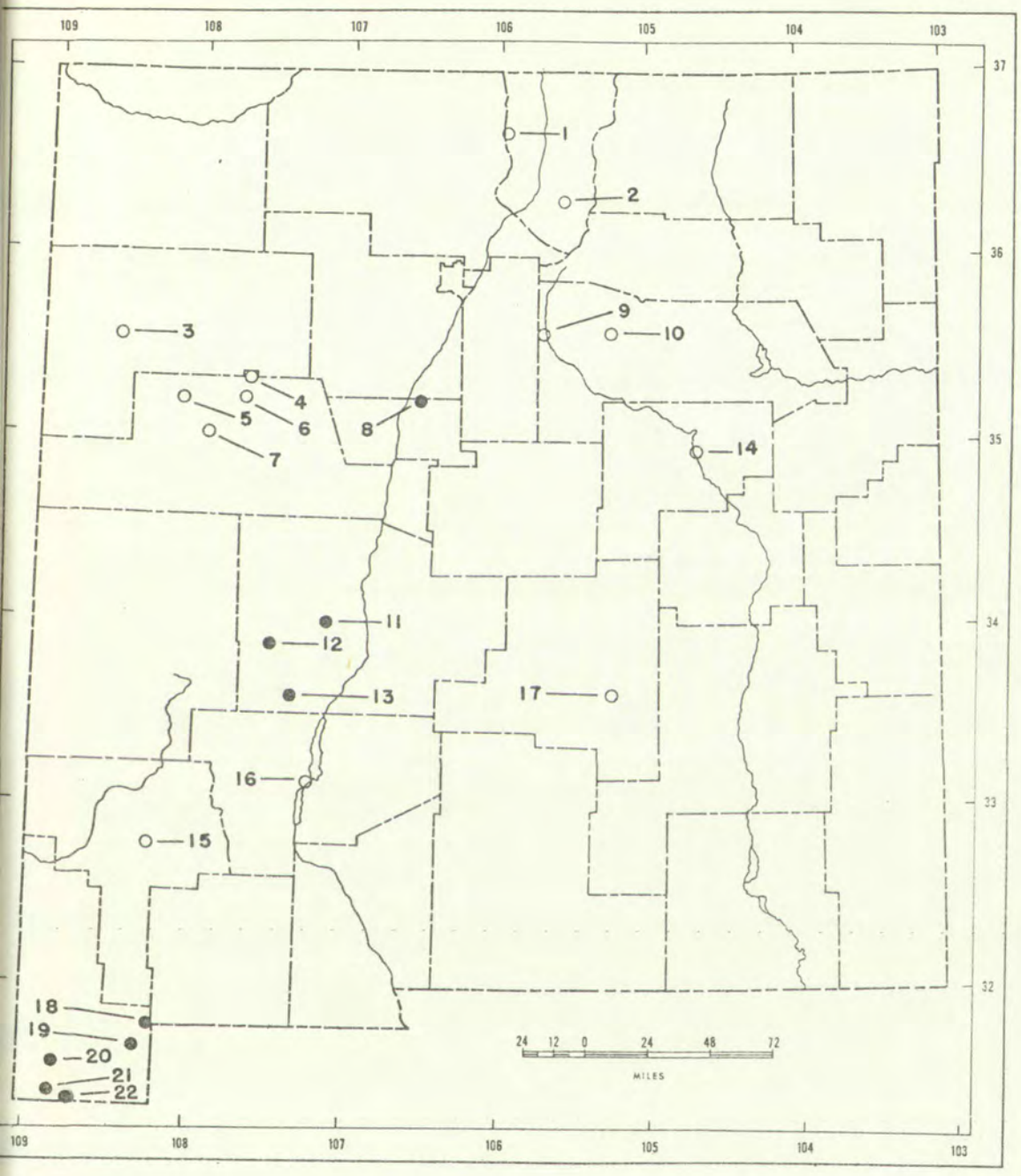

Fig. 12. Myotis subulatus

Otero Co.:

9. 7 mi. E and 2½ mi. N Cloudcroft (UNMCV).

Eddy Co.:

10. Carlsbad (Bailey, 1931: 383).

11. Walnut Canyon (Bailey, 1928: 122); Oak Spring, near Carlsbad Cavern (Bailey, 1925: 329).

PIPISTRELLUS HESPERUS (H. Allen)

Western Pipistrelle

Pipistrellus hesperus hesperus (H. Allen).

General remarks.--The western pipistrelle is widespread in the Lower Sonoran Life Zone of New Mexico and its range extends into the Upper Sonoran.

Subspecies ascribed to New Mexico.--Pipistrellus hesperus maximus Hatfield; Pipistrellus hesperus santarosae Hatfield.

Records of occurence (Fig. 14).--

McKinley Co.:

1. Fort Wingate (Miller, 1897: 90).

Sandoval Co.:

2. Jemez (Bailey, 1931: 385).

Valencia Co.:

3. Laguna (Bailey, 1931: 385).

Socorro Co.:

4. Socorro (Bailey, 1931: 385).

Guadalupe Co.:

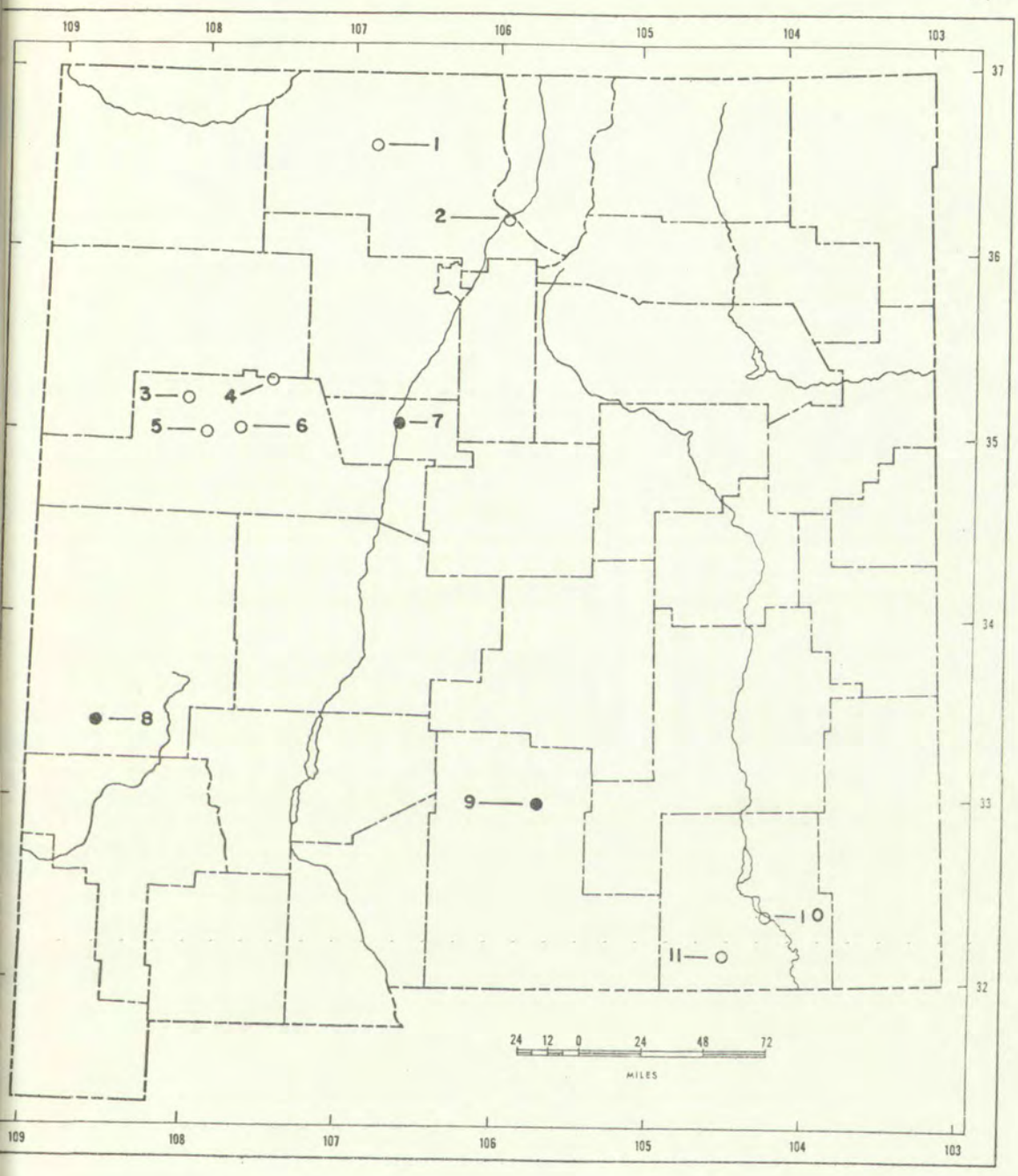

Fig. 13. Lasionycteris noctivagans

5. A few mi. N Santa Rosa (Bailey, 1931: 385).

rant Co.:

6. 3 mi. above Redrock (Bailey, 1931: 385).

idalgo Co.:

7. Animas Valley (Bailey, 1931: 385).

8. Skeleton Canyon, Peloncillo Mts., 10 mi. S Rodeo UNMCV).

9. Big Hatchet Mts., T31S-R15W, Sec. 36, 5250 ft. UNMCV).

10. Guadalupe Canyon, T34S-R22W, Sec. 13 (UNMCV).

11. Pascoe's Ranch, T34S-R21W, Sec. 22 (UNMCV).

12. Dog Spring (Bailey, 1931: 385).

una Co.:

13. Florida Mts. (Bailey, 1931: 385).

ona Ana Co.:

14. W side Organ Mts. (G. M. Allen, 1922: 158).

cero Co.:

15. Malpais Spring, 14 mi. W Three Rivers (Benson, 933: 20).

16. ½ mi. SW Highrolls (Dice, 1930: 21).

dy Co.:

17. Dark Canyon, near Carlsbad (Bailey, 1931: 385).

18. Carlsbad Cave (Bailey, 1931: 385); Oak Spring, ear Carlsbad Caverns (Bailey, 1925: 330).

19. Guadalupe Mts. (Bailey, 1931: 385).

t Located:

Guadalupe Canyon, Otero Co. (Hatfield, 1936: 261).

EPTESICUS FUSCUS (Palisot de Beauvois)

Big Brown Bat

Eptesicus fuscus fuscus (Beauvois).

General remarks.--Writing of this bat, Bailey (1931: 384) says, "Its center of abundance seems to be in the Transition Zone, but specimens are often taken somewhat above and below this level."

Bailey (1931: 384) reported sight records of bats probably referable to this species at Black Lake and in the Moreno Valley.

Subspecies ascribed to New Mexico.--Eptesicus fuscus pallidus Young.

Records of occurence (Fig. 15).--

Rio Arriba Co.:

1. Lake La Jara (Bailey, 1931: 384).
2. Brazos Canyon near Tierra Amarilla (Bailey, 1931: 384).
3. Lake Burford (Bailey, 1931: 384).
4. Las Tusas River, San Juan Mts. (Bailey, 1931: 384).
5. El Rito (Engles, 1936: 657).

Taos Co.:

6. About Tres Piedras (Bailey, 1931: 384).
7. Hondo Canyon, Taos Mts. (Bailey, 1931: 384).

Colfax Co.:

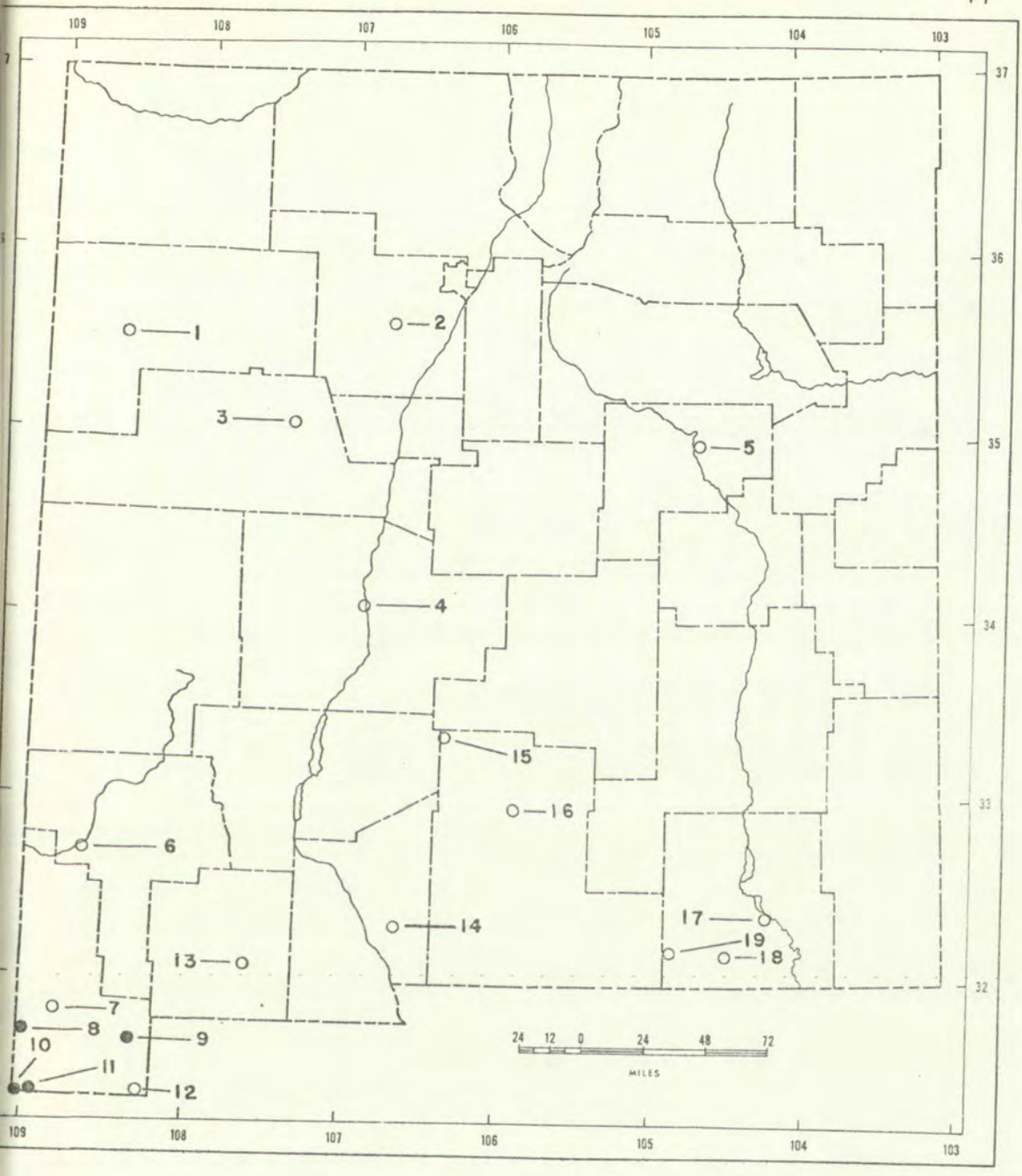

Fig. 14. Pipstrellus hesperus

8. SW Colfax Co. (Hill, 1942: 77).

cKinley Co.:

9. Wingate (Bailey, 1931: 384).

andoval Co.:

10. Santa Clara Canyon, Jemez Mts. (Bailey, 1931: 84).

alencia Co.:

11. Near Mt. Sedgewick, Zuni Mts. (Bailey, 1931: 384).

12. 6 mi. NE summit Mt. Taylor (Hooper, 1941a: 21).

13. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 0).

14. Near Point of Malpais, T6N-R11W, Sec. 2 (Hooper, 941a: 20).

ernalillo Co.:

15. Tijeras Ranger Station, Tijeras (Clothier, 1957b: 0).

anta Fe Co.:

16. Glorieta (Bailey, 1931: 384).

an Miguel Co.:

17. Junction Mora Creek with Pecos River (Bailey, 931: 384).

18. 10 mi. S Mora, Pecos Mts. (Bailey, 1931: 384).

atron Co.:

19. Luna Valley (Bailey, 1931: 384).

20. Negrito Creek, Mogollon Mts. (Bailey, 1931: 384).

21. Willow Creek, Mogollon Mts., 10 mi. E Mogollon

NMCV).

22. Beaver Lake, Mogollon Mts. (Bailey, 1931: 384).

23. Diamond Creek, Mogollon Mts. (Bailey, 1931: 384).

corro Co.:

24. Water Canyon, Magdalena Mts. (Bailey, 1931: 384).

25. Bear Trap Canyon, San Mateo Mts., 19 mi. W and mi. S Magdalena (UNMCV).

rrance Co.:

26. Near Eastview, Manzano Mts. (Bailey, 1931: 384).

ant Co.:

27. Rocky Creek, Mogollon Mts. (Bailey, 1931: 384).

ncoln Co.:

28. Capitan Mts. (Bailey, 1931: 384).

29. Ruidoso Creek (Bailey, 1931: 384).

na Ana Co.:

30. 15 mi. NW Las Cruces, opposite Shalen Colony . M. Allen, 1922: 159).

31. Las Cruces (G. M. Allen, 1922: 158).

ero Co.:

32. ½ mi. SW Highrolls (Dice, 1930: 21).

33. 7 mi. E and 2½ mi. N Cloudcroft (UNMCV).

dy Co.:

34. Slaughter Canyon, Guadalupe Mts. (Bailey, 1931: 4).

35. Carlsbad Cavern (Bailey, 1931: 384).

36. 30 mi. SW Carlsbad (Engels, 1936: 657).

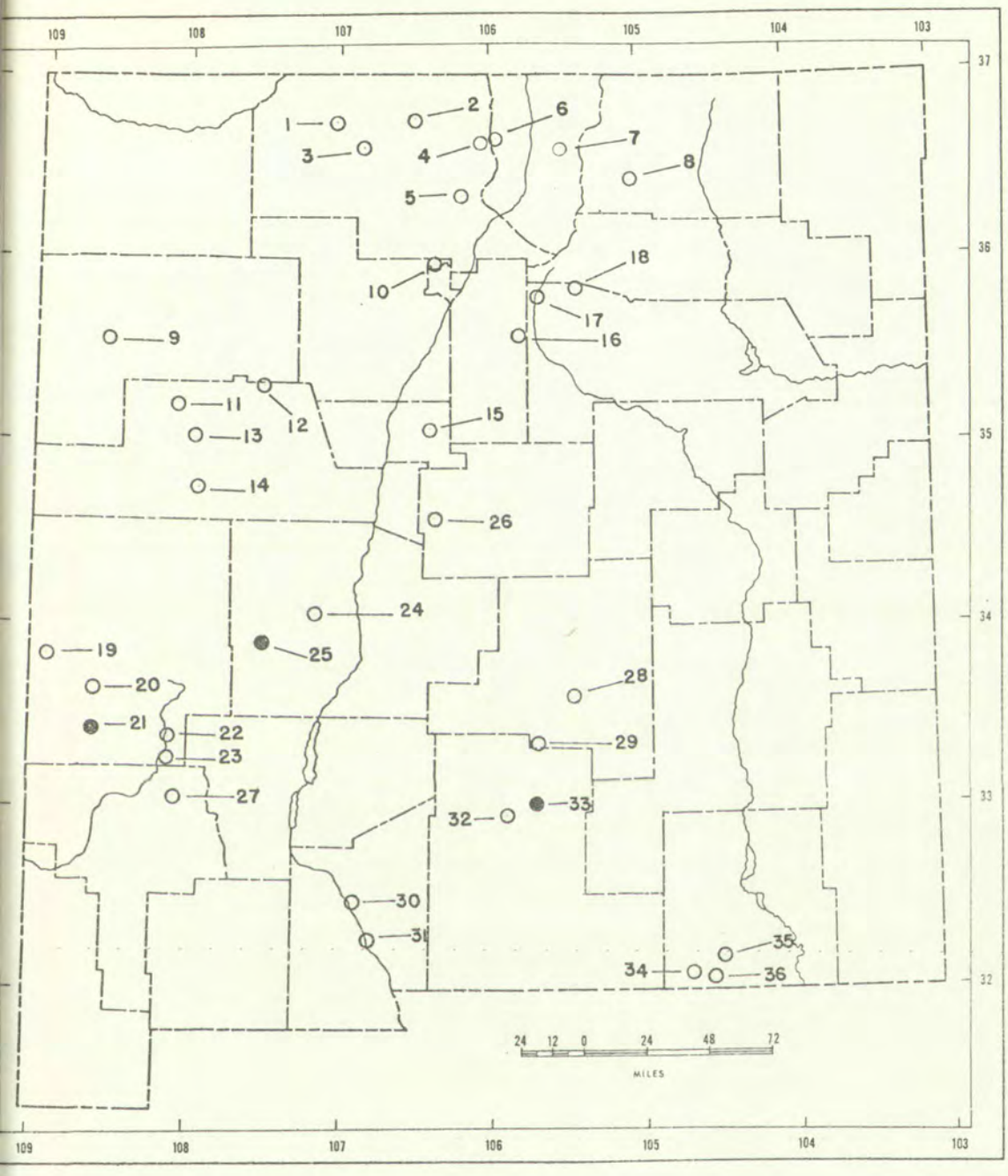

Fig. 15. Eptesicus fuscus

LASIURUS BOREALIS (Muller)

Red Bat

General remarks.--In New Mexico, the red bat is known only from Carlsbad Cavern. Skulls of this bat were reported from the caverns by Bailey (1928: 123), but only recently has an actual living specimen been taken. The subspecies represented by this specimen is unknown to the author.

Records of occurence (Not mapped).--

Eddy Co.:

Carlsbad Cavern (Personal communication to Dr. James S. Findley by Dr. D. Constantine).

LASIURUS CINEREUS (Palisot de Beauvois)

Hoary Bat

Nycteris cinerea (Beauvois).

General remarks.--As is the case with the silver-haired bat, the hoary bat is migratory and may be expected in any of the life zones of New Mexico.

The Carlsbad Cave record is based on bone material and a report of one of these bats in the vicinity of the caverns.

Subspecies ascribed to New Mexico.--Lasiurus cinereus cinereus (Palisot de Beauvois).

Records of occurence (Fig. 16).--

Colfax Co.:

1. Moreno Valley, E Taos Mts. (Bailey, 1931: 382).

2. Open plains of SW Colfax Co. (Hill, 1942: 77).

nion Co.:

3. N Moses (UNMCV).

alencia Co.:

4. Near Canyon Lobo Ranger Station (Hooper, 1941a: 1).

ernalillo Co.:

5. 1 mi. NE Univ. N. Mex. campus, Albuquerque (UNMCV).

ocorro Co.:

6. Water Canyon, Magdalena Mts. (Bailey, 1931: 382).

7. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 9 mi. S Magdalena (UNMCV).

rant Co.:

8. Gila (Bailey, 1931: 382).

idalgo Co.:

9. Lang's Ranch (Bailey, 1931: 382).

10. San Luis Mts. (Bailey, 1931: 382).

11. Dog Spring (Bailey, 1931: 382).

na Ana Co.:

12. 5 mi. W. Las Cruces (G. M. Allen, 1922: 159).

13. Dona Ana (Bailey, 1931: 382).

dy Co.:

14. Carlsbad Cave (Bailey, 1931: 382).

EUDERMA MACULATA (J. A. Allen)

Spotted Bat

Euderma maculatum (J. A. Allen).

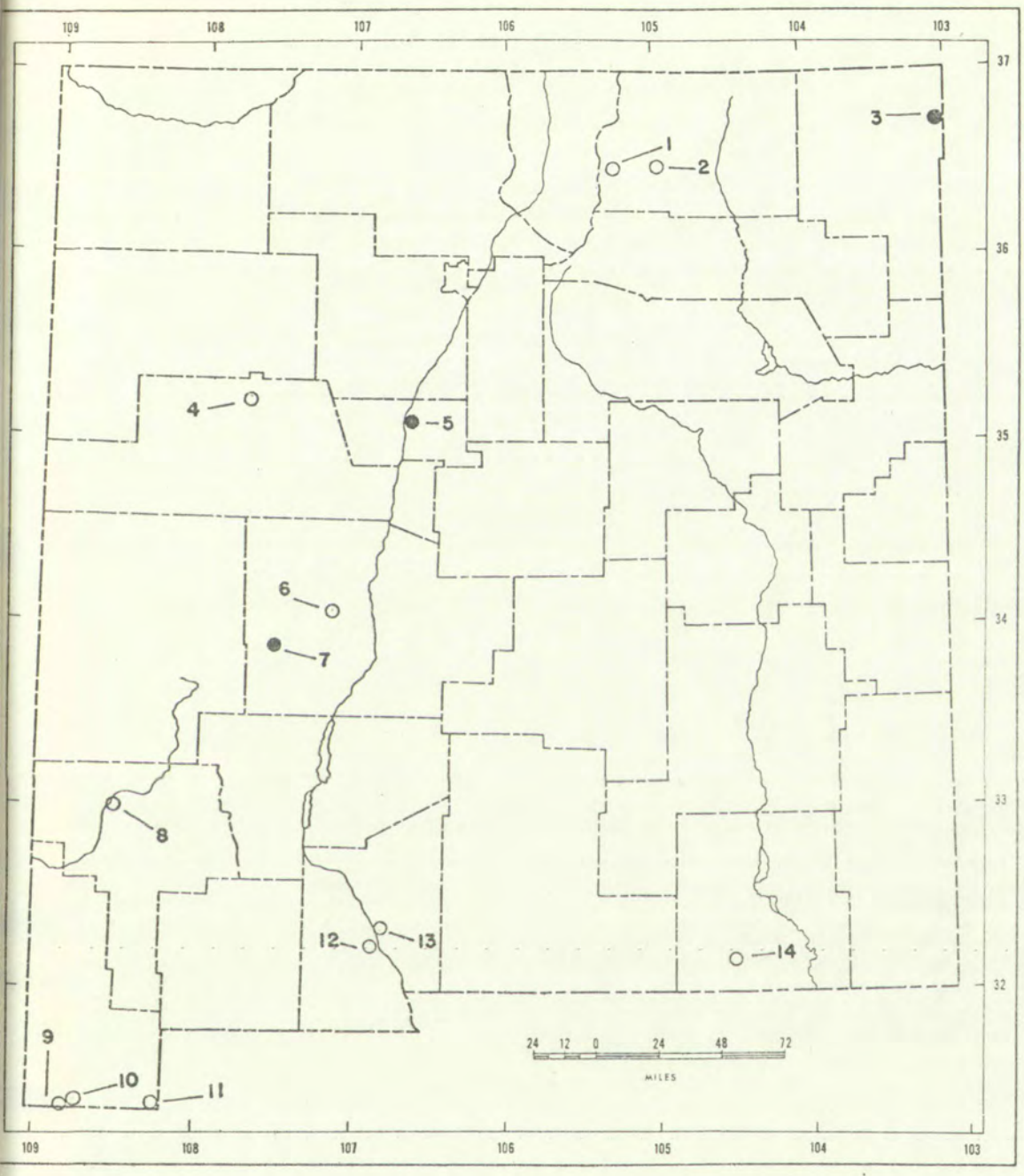

Fig. 16. Lasiurus cinereus

General remarks.--Judging from the two localities known for the spotted bat in New Mexico, the species inhabits the Lower and Upper Sonoran Life Zone in the state.

Subspecies ascribed to New Mexico.--The species is considered to be monotypic.

Records of occurence (Not mapped).--

Rio Arriba Co.:

Ghost Ranch (UNMCV).

Dona Ana Co.:

Mesilla Park (Bailey, 1931: 381).

CORYNORHINUS TOWNSENDII (Lesson)

Townsend's Big-eared Bat

Corynorhinus macrotis pallescens Miller.

General remarks.--In New Mexico, Corynorhinus townsendii probably ranges from the Lower Sonoran to the Canadian Life Zone.

Subspecies ascribed to New Mexico.--Corynorhinus townsendii pallescens Miller.

Records of occurence (Fig. 17).--

San Juan Co.:

1. Cave near Los Pinos River, T30N-R7W, SE ¼ Sec. (UNMCV).

Sandoval Co.:

2. Sandia Mts., small cave ½ mi. N Sandia Cave (Clothier, 1957b: 32); Sandia Cave (UNMCV).

ernalillo Co.:

3. Rio Grande Valley at Albuquerque (Ivey, 1957: 93).

anta Fe Co.:

4. Santa Fe (Bailey, 1931: 381).

5. San Pedro Mts., 10 mi. S Madrid (Holdenried and orlan, 1956: 374).

ocorro Co.:

6. Mill Canyon, Magdalena Mts., T3S-R4W, Sec. 36 UNMCV).

rant Co.:

7. Cliff dwellings on Mule Creek (Bailey, 1931: 381).

idalgo Co.:

8. Occidental Mines, Sierra Rica, T29S-R14W, Sec. 5 (UNMCV).

ddy Co.:

9. McKittrick Cave, 20 mi. W. Carlsbad (Bailey, 931: 381).

ANTROZOUS PALLIDUS (Le Conte)

Pallid Bat

Antrozous pallidus pallidus (Le Conte).

General remarks.--Antrozous pallidus apparently ocurs over most of the Lower Sonoran Life Zone of New Mexco and extends its range into the Upper Sonoran Zone in t least some areas of the state.

The record from Carlsbad Cavern is based on skeletal

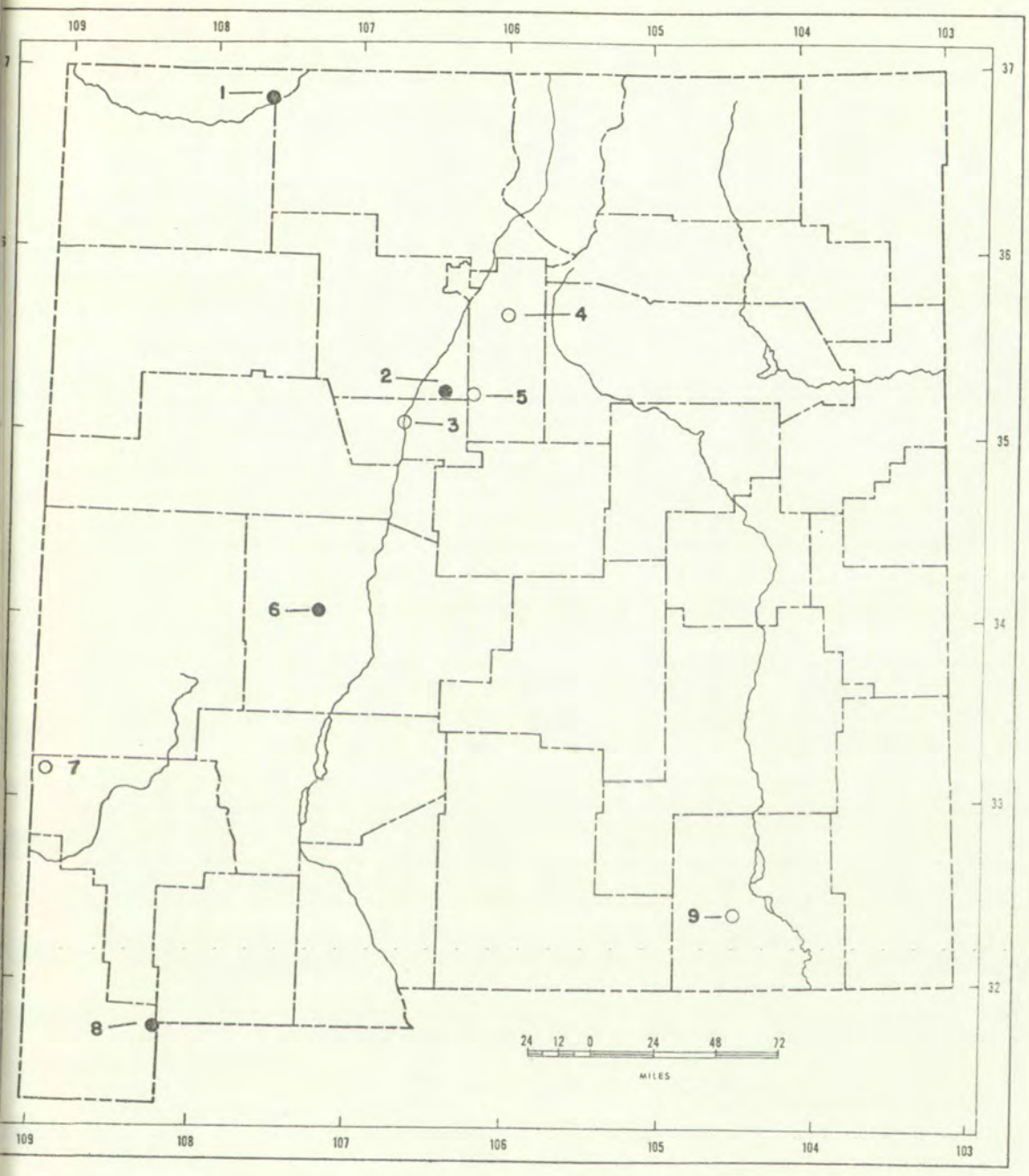

Fig. 17. Corynorhinus townsendii

emains only.

Subspecies ascribed to New Mexico.--Antrozous pallidus allidus (Le Conte).

Records of occurence (Fig. 18).--

andoval Co.:

2. N end Sandia Mts. (Ivey, 1957: 493).

alencia Co.:

4. Laguna (Bailey, 1931: 379).

5. 8 mi. SW Coors Rd. and Isleta Hwy (UNMCV).

ernalillo Co.:

3. Rio Grande Valley in Albuquerque (Ivey, 1957: 93); 4 mi. N. Albuquerque (Borell, 1942: 337).

anta Fe Co.:

1. Santa Fe (UNMCV).

ocorro Co.:

7. Monica Spring, near the San Mateo Mts. (Bailey, 931: 379-380).

orrance Co.:

6. Mountainair (UNMCV).

rant Co.:

9. Silver City (Bailey, 1931: 379).

idalgo Co.:

15. Base of Big Hatchet Mts. (Bailey, 1931: 379); g Hatchet Mts., T31S-R15W, Sec. 36, 5250 ft. (UNMCV).

16. Cloverdale Mts. (Bailey, 1931: 379); Guadalupe s., T33S-R21W, Sec. 25 (UNMCV).

17. Animas Valley, Lang's Ranch (Bailey, 1931: 379).

)ona Ana Co.:

10. Las Cruces (Bailey, 1931: 379).

11. Mesilla Park (Bailey, 1931: 379).

)tero Co.:

8. Malpais Spring, 14 mi. W Three Rivers (Benson, 933: 20).

ddy Co.:

12. Near Carlsbad (Bailey, 1931: 379).

13. Carlsbad Cavern (Bailey, 1928: 121).

14. Slaughter Canyon (Bailey, 1931: 379).

FAMILY MOLOSSIDAE

TADARIDA BRASILIENSIS (I. Geof. St.-Hilaire)

Brazilian Free-tailed Bat

Tadarida mexicana (Saussure).

General remarks.--In New Mexico, Tadarida brasiliensis s found in the Lower and Upper Sonoran and in the Transi- ion Life Zones.

Subspecies ascribed to New Mexico.--Tadarida brasil- ensis mexicana (Saussure).

Records of occurence (Fig. 19).--

ernalillo Co.:

1. Rio Grande Valley at Albuquerque (Ivey, 1957: 93).

atron Co.:

2. Datil Mts., 10 mi. N and 5 mi. W Datil (UNMCV).

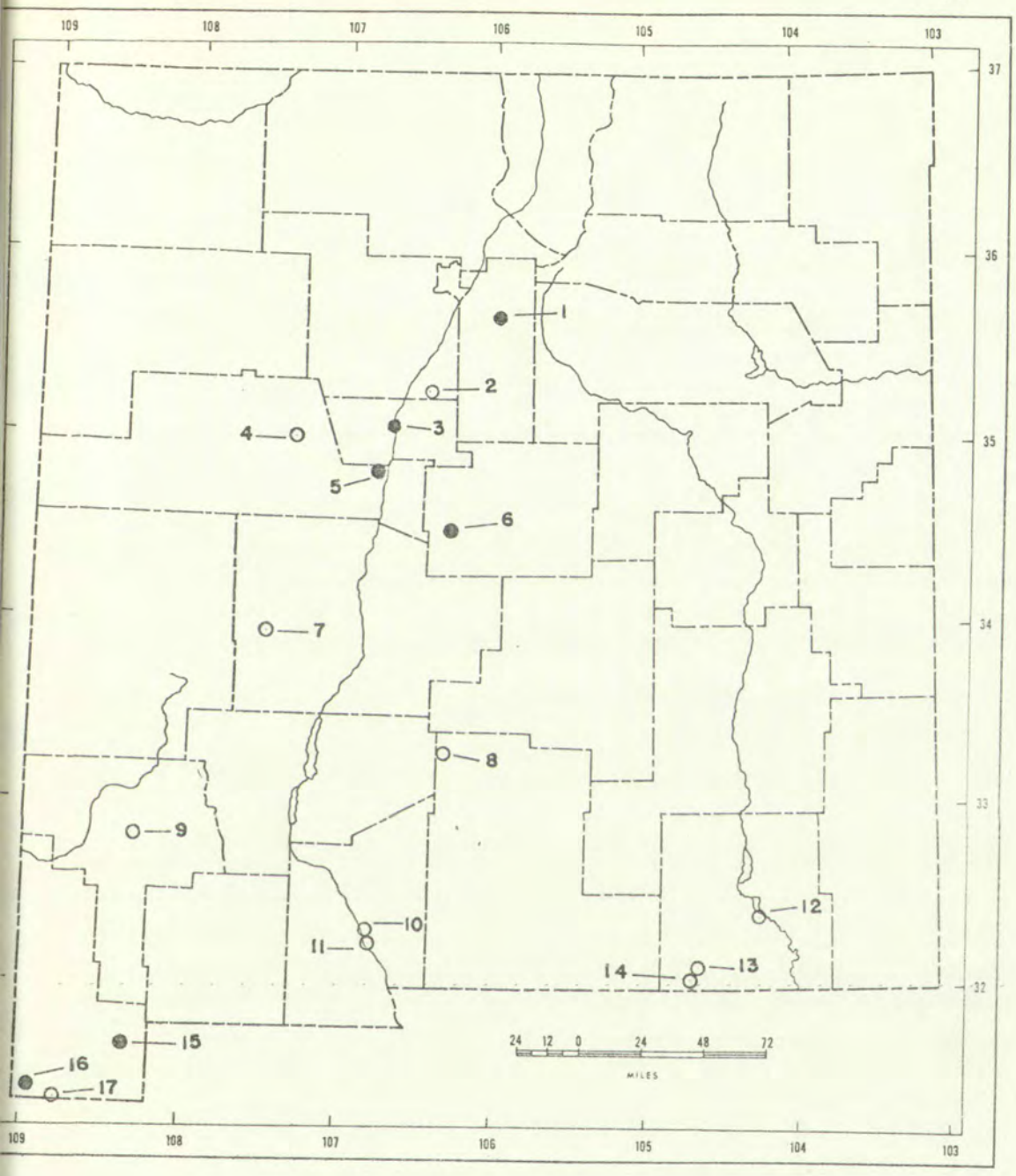

Fig. 18. Antrozous pallidus

corro Co.:

3. Near Monica Spring on the San Augustin Plain
ailey, 1931: 377).

dalgo Co.:

4. Skeleton Canyon, Peloncillo Mts., 10 mi. S Rodeo
NMCV).

5. Head of Whitemire Creek, Cloverdale Hills
ailey, 1931: 377).

6. Lang's Ranch, Animas Valley (Bailey, 1931: 377).

na Co.:

7. Deming (Bailey, 1931: 377).

na Ana Co.:

8. 15 mi. NW Las Cruces (G. M. Allen, 1922: 161).

9. Las Cruces (Constantine, 1957: 463); Mesilla
k (Bailey, 1931: 377); Mesilla (Stone and Rehn, 1903:
).

10. Berino (Constantine, 1957: 463).

ro Co.:

11. White Sands (Constantine, 1957: 463).

ves Co.:

12. Roswell (Bailey, 1931: 377).

y Co.:

13. Carlsbad (Bailey, 1931: 377).

14. Carlsbad Cave (Bailey, 1931: 377).

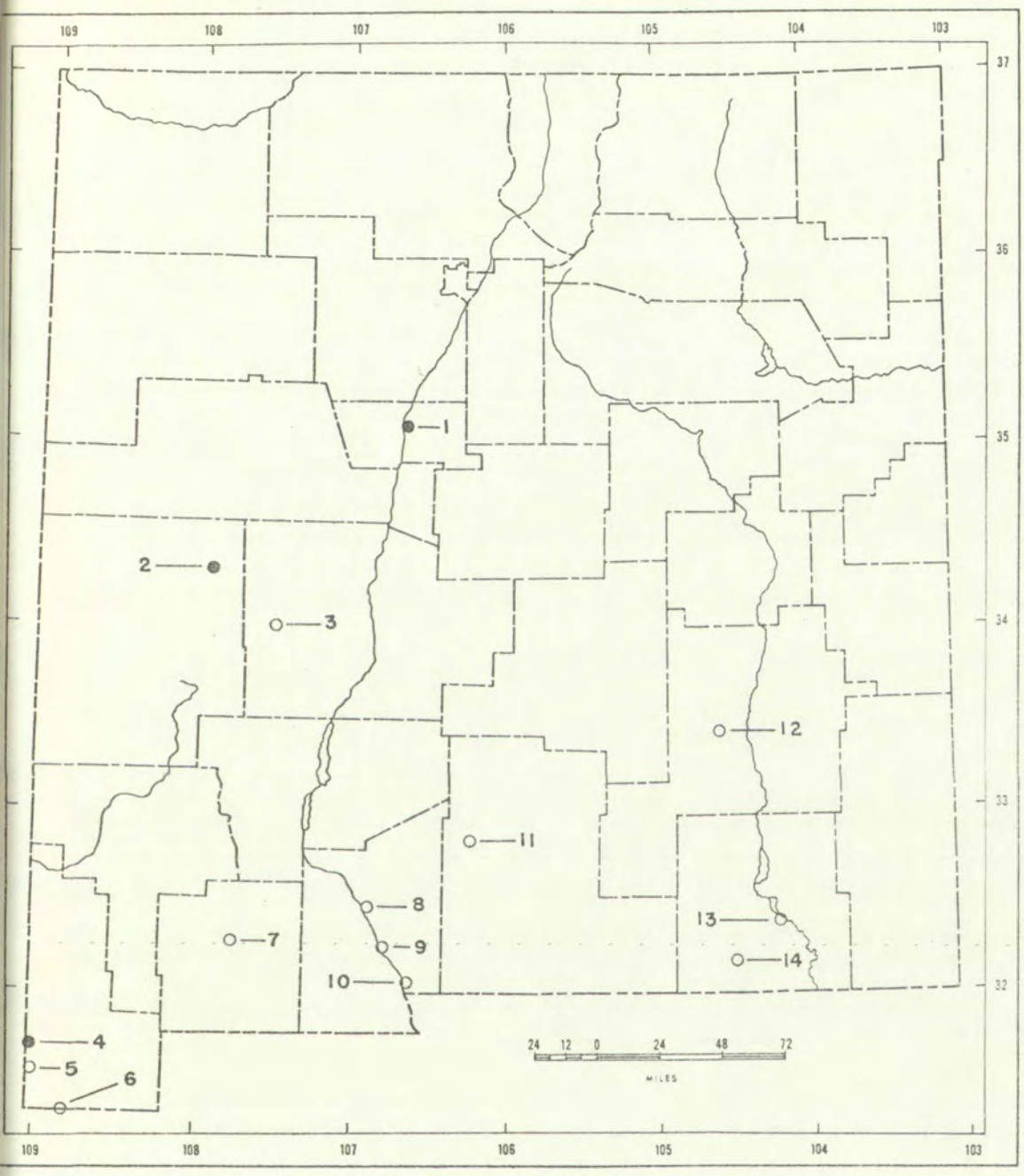

Fig. 19. Tadarida brasiliensis

TADARIDA FEMOROSACCA (Merriam)

Pocketed Free-tailed Bat

General remarks.--This species has been recorded only nce in New Mexico.

Subspecies ascribed to New Mexico.--Tadarida femoro- acca is a monotypic species.

Records of occurence (Not mapped).--

ddy Co.:

Carlsbad Cavern (Constantine, 1958: 293).

TADARIDA MOLOSSA (Pallas)

Big Free-tailed Bat

General remarks.--Distribution of Tadarida molossa n New Mexico is probably primarily Upper Sonoran.

Subspecies ascribed to New Mexico.--At present, this pecies is considered to be monotypic.

Records of occurence (Fig. 20).--

io Arriba Co.:

3. Ghost Ranch (Personal communication to Dr. James . Findley by Dr. D. Constantine).

ernalillo Co.:

1. Albuquerque (UNMCV).

ddy Co.:

2. Carlsbad Cavern (Constantine, 1958: 293).

ORDER EDENTATA

FAMILY DASYPODIDAE

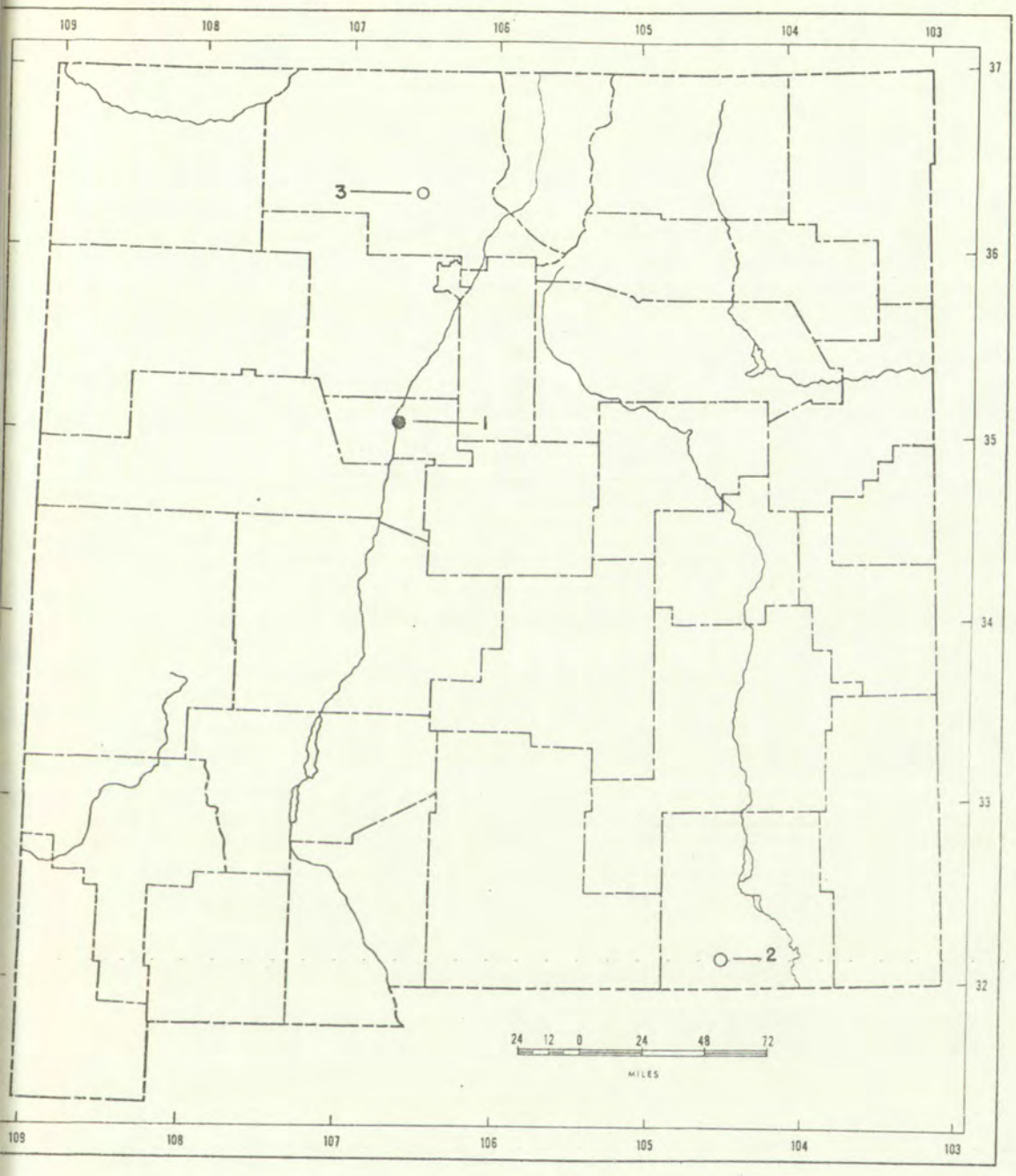

Fig. 20. Tadarida molossa

DASYPUS NOVEMCINCTUS Linnaeus

Nine-banded Armadillo

Dasypus novemcinctum texanum Bailey.

General remarks.--Although there seems to be a wide-
pread belief that the armadillo should be considered a
art of the New Mexican fauna, actual specimens from the
tate appear to be lacking. Bailey (1931: 8) records
ight records in extreme southeastern New Mexico, but no
pecimens. Buchanan and Talmage (1954: 143) report that
rmadillo shells have been found in the San Simon Sink
rea of Lea Co. This latter bit of evidence would seem
o indicate past occurence in the state--how distant past
s not indicated, however.

ORDER LAGOMORPHA

FAMILY OCHOTONIDAE

OCHOTONA PRINCEPS (Richardson)

Pika

Ochotona saxatilis incana Howell.

Ochotona nigrescens Bailey.

General remarks.--The pika in New Mexico is an animal
the high mountains near timberline.

Subspecies ascribed to New Mexico.--Ochotona princeps
grescens Bailey; Ochotona princeps incana Howell.

Records of occurence (Fig. 21).--

os Co.:

1. Culebra Mts. (Bailey, 1931: 64).

2. Near head Lake Fork, Taos Mts. (Bailey, 1931: 64).

3. Goose Lake, 7 mi. S and 1 mi. W Red River, 12,000 ft. (UNMCV).

4. Taos Mts., near top Wheeler Peak (Bailey, 1931: 64).

Sandoval Co.:

5. Jemez Mts. at 10,000 ft. on Goat Peak, head Santa Clara Creek (Bailey, 1931: 67); Jemez Mts., Santa Clara Peak (Bailey, 1931: 67); Jemez Mts., Pelado Peak (Bailey, 1931: 67).

Mora Co.:

6. Pecos Baldy, 12,000 ft. (Bailey, 1931: 64); Truchas Peaks, Pecos River Mts. (Bailey, 1931: 64); E base Pecos Baldy, 11,600 ft. (Bailey, 1931: 65).

Santa Fe Co.:

7. Santa Fe Ski Basin area (Holdenried and Morlan, 1956: 374).

FAMILY LEPORIDAE

SYLVILAGUS FLORIDANUS (Allen)

Eastern Cottontail

Sylvilagus cognatus Nelson.

Sylvilagus floridanus holzneri (Mearns).

General remarks.--Sylvilagus floridanus in New Mexico ranges throughout the Transition Life Zone and over-

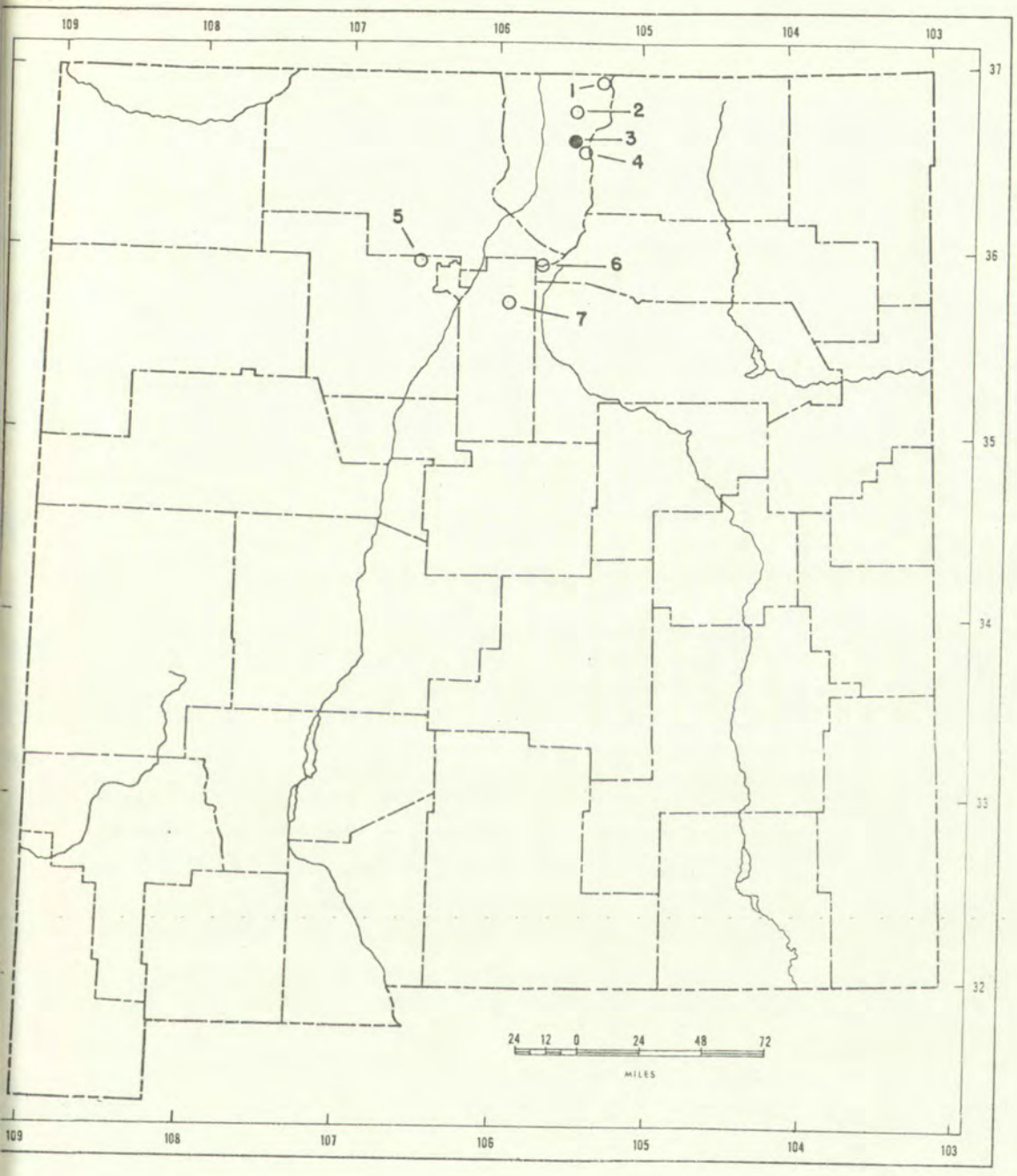

Fig. 21. Ochotona princeps

laps considerably into the Canadian and Upper Sonoran Life Zones.

Sight records, unlisted below because of the difficulties involved in identification in the field, have been reported for the Gallinas Mts., Socorro Co. (Bailey, 1931: 53), and for Capillo Peak, 9000 ft., Manzano Mts. (Clothier, 1957b: 152).

Also unlisted is a record based on a young cottontail from Willow Creek, Mogollon Mts., 10 mi. E Mogollon, Catron Co. This specimen is in the University of New Mexico Collection of Vertebrates and has been examined by the author. Lack of sufficient comparative material of like age prevents definite identification, but it is considered likely that the specimen should be referred to this species.

The specimen from the Sandia Mountains reported by Ivey is based on fragmentary material and perhaps should be assigned only tentatively to this species.

Subspecies ascribed to New Mexico.--Sylvilagus floridanus cognatus Nelson; Sylvilagus floridanus holzneri (Mearns).

Records of occurence (Fig. 22).--

Bernalillo Co.:

1. E slope Sandia Mts. (Ivey, 1957: 494).

San Miguel Co.:

2. Mesa de la Yegua, 40 mi. SE Las Vegas (Bailey, 1931: 62).

Catron Co.:

3. Datil Mts. (Bailey, 1931: 62).

Socorro Co.:

4. ¼ mi. E Baldy Crossing, Magdalena Mts. (UNMCV).

5. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 10 mi. S Magdalena (UNMCV).

Torrance Co.:

6. Tajique Ranch, 10,000 ft., Manzano Mts. (Nelson, 1909: 192).

7. E slope, extreme S end Manzano Mts. (Nelson, 1909: 192).

Grant Co.:

8. Pinos Altos Range back of Siver City (Bailey, 1931: 63).

9. Burro Mts. (Bailey, 1931: 63).

10. Silver City (Nelson, 1909: 180).

Lincoln Co.:

11. Capitan Mts. (Bailey, 1931: 63).

Hidalgo Co.:

12. Hatchet Mts. (Bailey, 1931: 63).

13. Clanton Canyon, Peloncillo Mts., 5700 ft., 22 mi. and 2 mi. E Rodeo (UNMCV).

14. Animas Mts. (Bailey, 1931: 63).

15. Guadalupe Mts., T34S-R21W, Sec. 22 (UNMCV).

16. San Luis Mts. (Bailey, 1931: 63).

17. Dog Mts. (Bailey, 1931: 63).

Luna Co.:

18. Carrizalillo Mts. near Monument 31 (Bailey, 1931: 53).

SYLVILAGUS NUTTALLII (Bachman)

Nuttall's Cottontail

Sylvilagus nuttalli pinetis (Allen).

General remarks.--Sylvilagus nuttallii in New Mexico is to be found primarily in the Transition Zone with a considerable overlap into the Canadian Life Zone and a lesser overlap into the Upper Sonoran.

A young cottontail from Washington Pass, Chuska Mts., 5 mi. E Crystal, San Juan Co. (UNMCV) has been tentatively identified as belonging to this species. Because identification is not positive, this record has been omitted from the list below.

Subspecies ascribed to New Mexico.--Sylvilagus nuttallii pinetus (Allen).

Records of occurence (Fig. 23).--

an Juan Co.:

1. Chuska Mts. (Bailey, 1931: 60).

io Arriba Co.:

2. San Antonio Mtn. (Nelson, 1909: 211).
3. Tierra Amarilla (Nelson, 1909: 211).
4. San Juan Mts. (Bailey, 1931: 60).
5. Gallinas Mts. (Bailey, 1931: 61).

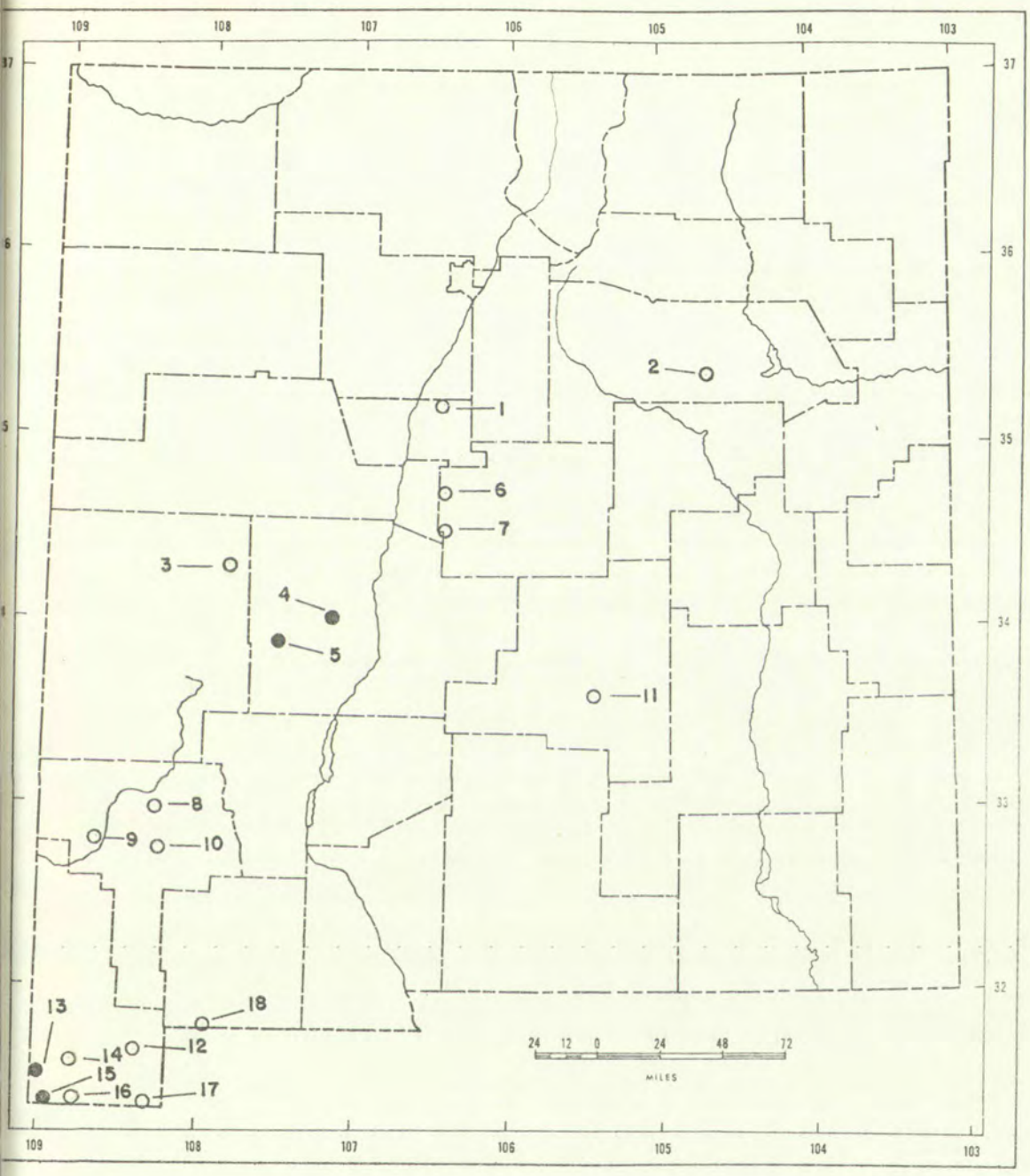

Fig. 22. Sylvilagus floridanus

'aos Co.:

6. W slope Culebra Mts. (Bailey, 1931: 61).

7. Costilla Pass (Bailey, 1931: 61).

8. Tres Piedras region (Bailey, 1931: 61).

9. Twining (Nelson, 1909: 211); Goose Lake, 12,000 't., 7 mi. S and 1 mi. W Red River (UNMCV).

11. Arroyo Hondo (Nelson, 1909: 211).

13. 4 mi. NE Tres Ritos (UNMCV).

:olfax Co.:

14. Catskill (Bailey, 1931: 61).

15. Bear Canyon, Raton Range (Bailey, 1931: 61).

16. Road Canyon, 7 mi. SW Catskill (Nelson, 1909: 211).

17. Moreno Valley, E slope Taos Mts. (Bailey, 1931: 61).

Jnion Co.:

18. Oak Canyon, Raton Range (Bailey, 1931: 61).

19. Sierra Grande (Nelson, 1909: 211).

Sandoval Co.:

20. Bluebird Mesa, 5 mi. E and 3 mi. S Cuba, 8500 ft. (UNMCV).

21. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

22. Santa Clara Mts. (Nelson, 1909: 211).

Mora Co.:

23. Halls Peak (Nelson, 1909: 211).

alencia Co.:

24. Copperton, near Mt. Sedgewick, Zuni Mts. (Hooper, 941a: 39).

an Miguel Co.:

25. Willis (Nelson, 1909: 211).

ot Located:

Martinez (Nelson, 1909: 211).

SYLVILAGUS AUDUBONII (Baird)

Desert Cottontail

Sylvilagus auduboni neomexicanus Nelson.

Sylvilagus auduboni minor (Mearns).

Sylvilagus auduboni cedrophilus Nelson.

Sylvilagus auduboni warreni Nelson.

General remarks.--In New Mexico, the desert cottontail is found primarily in the Lower and Upper Sonoran Life Zones. However, it is not uncommonly found in the lower portions of the Transition Zone, also.

Clothier (1957b: 155) gives a number of sight records in the vicinity of the Sandia-Manzano chain of mountains. These have not been listed in the records of occurence because of the difficulty of sure identification of cottontails under other than laboratory conditions.

Subspecies ascribed to New Mexico.--Sylvilagus audubonii minor (Mearns); Sylvilagus audubonii cedrophilus Nelson; Sylvilagus audubonii warreni Nelson; Sylvilagus audubonii neomexicanus Nelson.

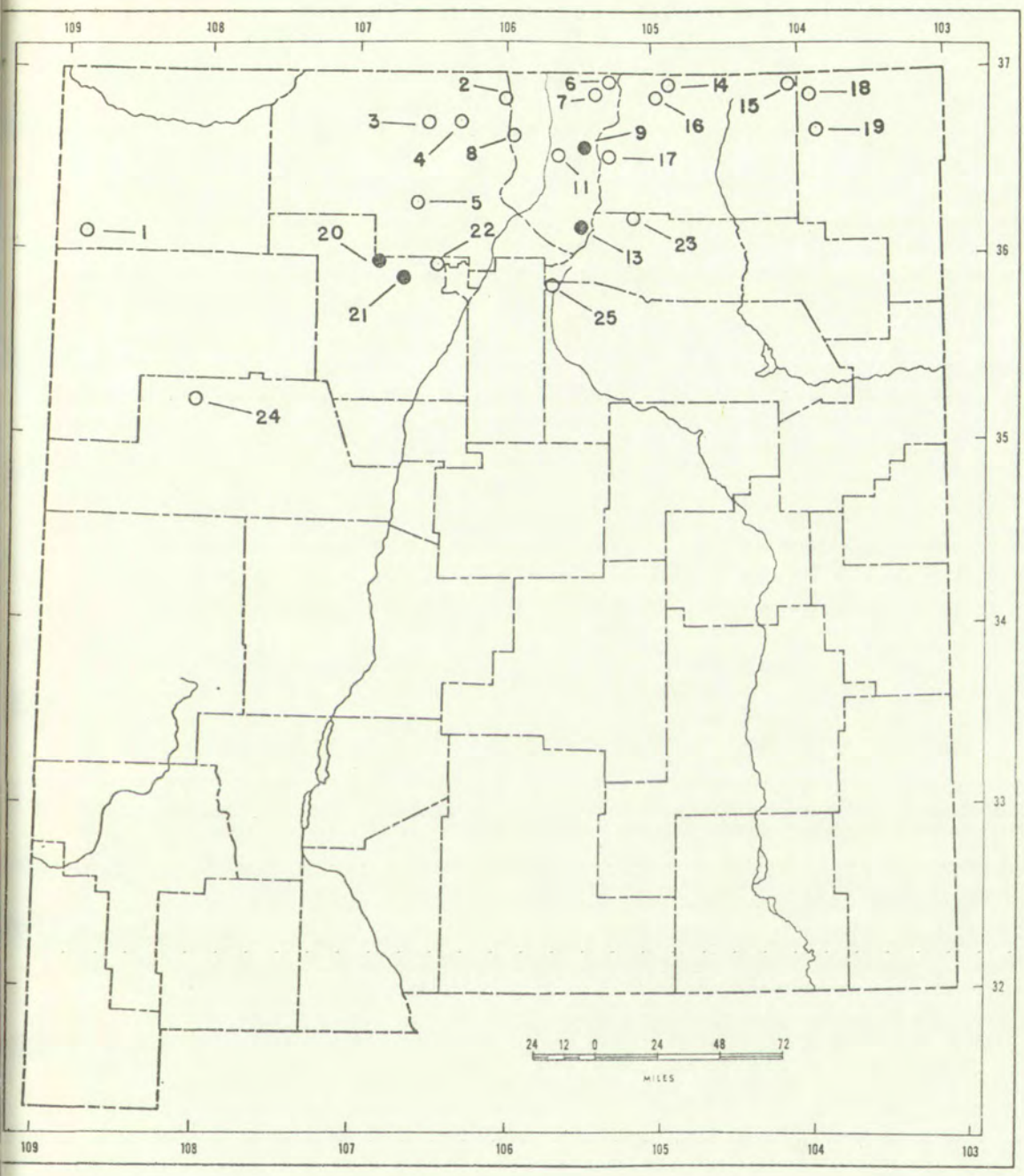

Fig. 23. Sylvilagus nuttallii

Records of occurence (Fig. 24).--

an Juan Co.:

1. Fruitland (Nelson, 1909: 232).

2. Aztec (J. A. Allen, 1893b: 70).

3. Blanco (Nelson, 1909: 232); Canyon Blanco (Nelson, 909: 232).

4. Chaco Canyon (J. A. Allen, 1896: 244).

io Arriba Co.:

5. Dulce (Nelson, 1909: 232).

6. San Antonio Mtn. (Nelson, 1909: 232).

7. Stinking Spring Lake (Nelson, 1909: 232).

Taos Co.:

8. Tres Piedras (Nelson, 1909: 232).

9. Cienequilla (Nelson, 1909: 232); Hondo Canyon (Nelson, 1909: 232).

Colfax Co.:

10. Near Cimarron (Hill, 1942: 82).

Union Co.:

11. Emery Peak (Bailey, 1931: 54).

12. Sierra Grande (Nelson, 1909: 235).

13. Perico Arroyo (Nelson, 1909: 235).

14. Clayton (Bailey, 1931: 54).

McKinley Co.:

15. Gallup (Nelson, 1909: 230).

16. Wingate (Bailey, 1931: 58); Fort Wingate (Nelson, 1909: 230).

andoval Co.:

17. Juan Tafoya (Nelson, 1909: 232).

18. 17 mi. E and 20 mi. N Albuquerque (UNMCV).

alencia Co.:

21. 1½ mi. SW San Mateo (Hooper, 1941a: 39).

22. Agua Fria Spring, S edge Zuni Mts. (Bailey, 1931: 8); Copperton (Nelson, 1909: 230).

23. Grants (Nelson, 1909: 230).

24. San Rafael (Nelson, 1909: 230).

25. 8 mi. SE Grants (Hooper, 1941a: 39).

26. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 9).

27. Point of Malpais, T6N-R11W, Sec. 2 (Hooper, 941a: 39).

28. Along the Rio Puerco (Bailey, 1931: 58).

ernalillo Co.:

29. Juan Tabo Recreation Area, Sandia Mts. (Clothier, 957b: 155); 2 mi. W Juan Tabo Recreation Area, Sandia ts. (Clothier, 1957b: 155); Juan Tabo (UNMCV); La Cueva amp Ground, Sandia Mts. (UNMCV).

30. 5 mi. S Juan Tabo Recreation Area (Clothier, 957b: 155); Bear Canyon, Sandia Mts. (Clothier, 1957b: 55); 8 mi. E and 3 mi. N Albuquerque (UNMCV); 5 mi. E nd 4 mi. N Univ. N. Mex. (UNMCV).

31. Albuquerque (Bailey, 1931: 58).

32. Mesa E Albuquerque, W Sandia Mts. (Clothier,

957b: 154-155).

33. 2 mi. W Tijeras, Tijeras Canyon (Clothier, 957b: 155).

34. Isleta (Bailey, 1931: 57).

35. 1 mi. S Escabosa, Manzano Mts. (Clothier, 1957b: 55).

anta Fe Co.:

19. Santa Fe (Holdenried, 1957: 333); Santa Fe unicipal Airport (Holdenried and Morlan, 1956: 374).

20. Lamy-Glorieta vicinity (Holdenried and Morlan, 956: 374).

an Miguel Co.:

36. Conchas Creek (Bailey, 1931: 59).

37. Bell Ranch (UNMCV).

uay Co.:

50. Near Tucumcari (Bailey, 1931: 54).

atron Co.:

38. Datil Mts. (Bailey, 1931: 58).

39. Datil (Nelson, 1909: 230).

ocorro Co.:

40. Burley (Nelson, 1909: 230).

41. Bear Spring Mts. (Nelson, 1909: 230).

42. Escondida (Benson, 1933: 45).

43. Big Rosa Canyon, San Mateo Mts. (UNMCV).

44. On the Rio Alamosa (Bailey, 1931: 57).

orrance Co.:

45. Tajique Canyon, 7800 ft., Manzano Mts. (Clothier, 1957b: 155); Just outside Tajique, Manzano Mts. (Clothier, 1957b: 155).

46. 10 mi. E and 2 mi. S Willard (UNMCV).

47. Abo Canyon, Manzano Mts. (Clothier, 1957b: 155).

Guadalupe Co.:

48. Santa Rosa (Nelson, 1909: 230).

49. Near Cuervo (Bailey, 1931: 59).

Grant Co.:

51. Cactus Flat, 20 mi. N Cliff (Bailey, 1931: 57).

52. Burro Mts. (Nelson, 1909: 230).

53. Silver City (Nelson, 1909: 230).

54. Redrock (Bailey, 1931: 56).

55. Hachita (Nelson, 1909: 228).

Sierra Co.:

56. Lake Valley (Bailey, 1931: 58).

Lincoln Co.:

57. Corona (Nelson, 1909: 230).

58. Gallo Canyon (Nelson, 1909: 230).

59. Ancho (Nelson, 1909: 230).

60. Jicarilla Mts. (Nelson, 1909: 230).

61. French's Ranch, 12 mi. NW Carrizozo (Benson, 1933: 45).

62. Capitan (Nelson, 1909: 230).

63. Capitan Mts. (Nelson, 1909: 230).

64. ½ mi. S summit Capitan Gap, 7 mi. NE Capitan

)ice, 1942: 203).

e Baca Co.:

65. Fort Sumner (Nelson, 1909: 48).

idalgo Co.:

66. Lordsburg (Nelson, 1909: 228).

67. Adobe Ranch (Nelson, 1909: 228).

68. E slope Big Hatchet Mts. (Bailey, 1931: 56).

69. Guadalupe Mts., T24S-R21W, Sec. 22 (UNMCV).

70. Walnut Wells (UNMCV).

71. T33S-R19W, Sec. 29 (UNMCV).

72. 12½ mi. W Antelope Wells, San Luis Mts. (UNMCV).

73. 3 mi. W San Luis Pass and 1½ mi. N State Rd. 79 UNMCV); 3 mi. W and 1 mi. N San Luis Pass (UNMCV).

74. Dog Spring (Nelson, 1909: 228).

75. Corner Monument, Mexican Boundary (Nelson, 1909: 28).

una Co.:

76. About Deming (Bailey, 1931: 56).

77. Carrizalillo Mts. (Nelson, 1909: 228); Carri-alillo Spring (Nelson, 1909: 228).

)ona Ana Co.:

78. Garfield (Bailey, 1931: 56).

79. Jornada Experimental Range (Halloran, 1944: 10); Jornada del Muerto (Baird, 1857: 605).

80. San Andres Mts. (Nelson, 1909: 228).

81. Mesilla Park (Bailey, 1931: 57).

82. La Mesa (J. A. Allen, 1903: 590).

83. Chamberino (J. A. Allen, 1903: 590).

84. Mexican Boundary, 40 mi. W El Paso (Nelson, 1909: 28).

tero Co.:

85. Malpais Spring (Benson, 1933: 45).

86. Salinas (Blair, 1941: 228).

87. Slopes of Dry Canyon, Sacramento Mts. (Dice, 930: 27).

88. 14 mi. W Tularosa (Benson, 1933: 45).

89. White Sands, 10 mi. SW Tularosa (Benson, 1933: 5).

90. About 4 mi. N Alamogordo (Dice, 1930: 14).

91. White Sands, 18 mi. SW Tularosa (Benson, 1933: 5).

98. Near Alamogordo (Dice, 1930: 8).

92. About 9 mi. W Alamogordo (Dice, 1930: 10).

93. About 6 mi. SW Alamorgordo (Dice, 1930: 10).

94. Jarilla (Nelson, 1909: 228).

haves Co.:

95. Roswell (Bailey, 1931: 54).

ddy Co.:

96. Carlsbad (Bailey, 1931: 54).

97. About Carlsbad Cavern (Bailey, 1928: 62); E lope Guadalupe Mts. (Bailey, 1931: 54).

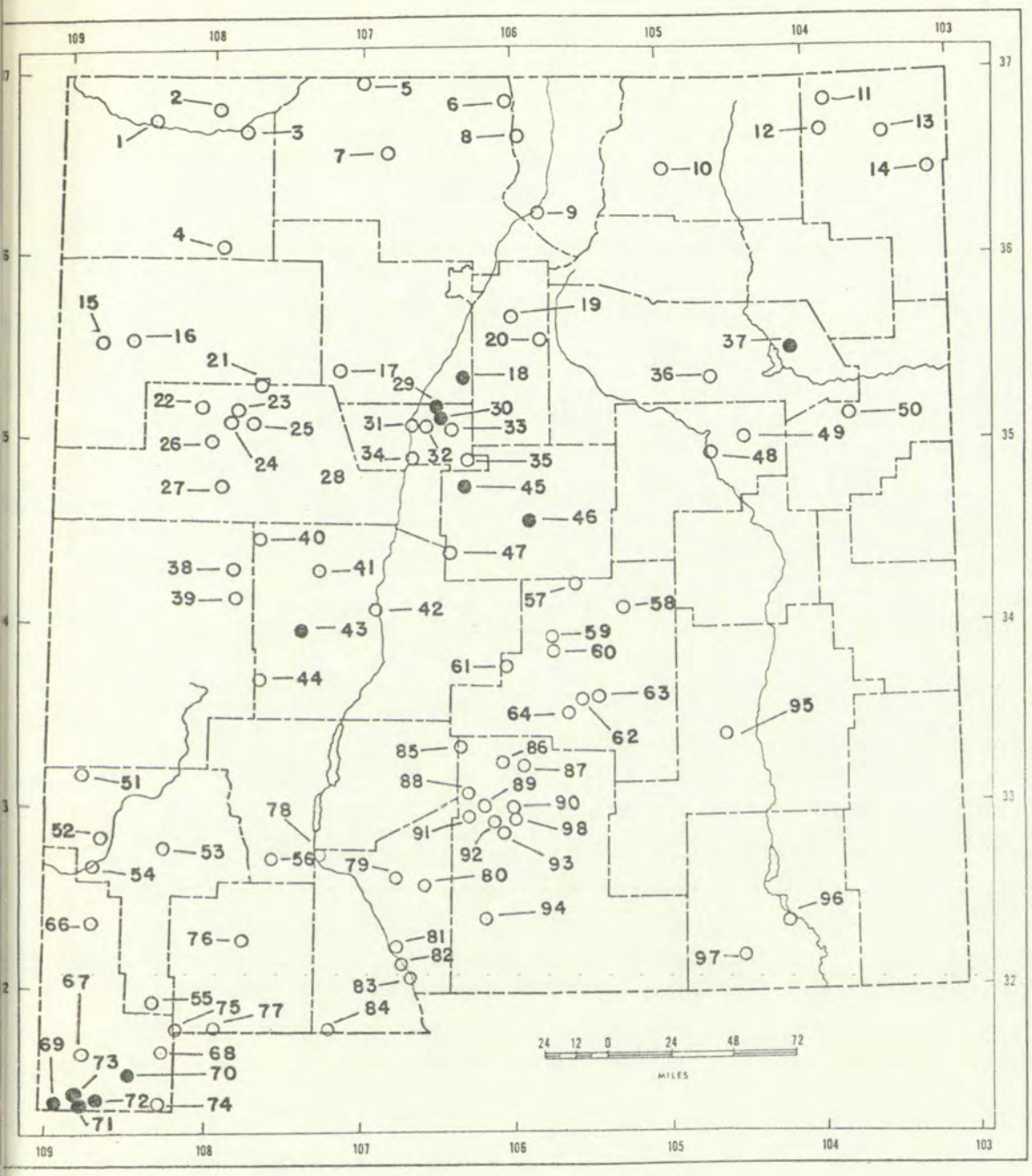

Fig. 24. Sylvilagus audubonii

LEPUS AMERICANUS Erxleben

Snowshoe Rabbit

Lepus americanus bairdi Hayden.

General remarks.--In New Mexico, the snowshoe rabbit s generally considered to be a creature of the Canadian nd Hudsonian Life Zones.

Subspecies ascribed to New Mexico.--Lepus americanus airdi Hayden.

Records of occurence (Fig. 25).--

io Arriba Co.:

1. Chama (Bailey, 1931: 45).

2. San Juan Range between Hopewell and Tierra narilla (Bailey, 1931: 45).

3. Canjilon (UNMCV).

4. Gallinas Mts. (Bailey, 1931: 46).

aos Co.:

5. Near Anchor Mine on Bitter Creek, about 10,000 ., Culebra Mts. (Bailey, 1931: 45).

6. Red River, 30 mi. N Taos (Nelson, 1909: 112).

7. 7 mi. S and 1 mi. W Red River, Goose Lake, ,000 ft. (UNMCV).

8. Taos Mts. (Bailey, 1931: 45).

9. Cantonment Burgwyn (Nelson, 1909: 112).

lfax Co.:

10. Agua Fria Mtn., 10,500 ft. (Hill, 1942: 82).

ndoval Co.:

11. Jemez Mts. (Bailey, 1931: 46).

Mora Co.:

13. Jack Creek, 11,000 ft., Pecos Baldy (Bailey, 1931: 45).

Santa Fe Co. (?):

12. 45 mi. NW Las Vegas (Nelson, 1909: 112).

LEPUS TOWNSENDII Bachman

White-tailed Jack Rabbit

Lepus townsendii campanius Hollister.

General remarks.--Lepus townsendii occurs in the high areas of north central New Mexico, probably from just below the Transition Life Zone up into the Canadian Life Zone.

James L. Sands, of the New Mexico Department of Game and Fish, has reported to the author sight records of the white-tailed jack rabbit from Sunshine Valley and from San Antonio Mountain, both in Taos Co.

Subspecies ascribed to New Mexico.--Lepus townsendii campanius Hollister.

Records of occurence (Fig. 27).--

Rio Arriba Co.:

1. Top of San Juan Mts. W Hopewell, about 10,000 ft. (Bailey, 1931: 47).

2. Hopewell (Nelson, 1909: 78).

Taos Co.:

3. Edge of Hondo Valley, just N Taos (Bailey, 1931: 47).

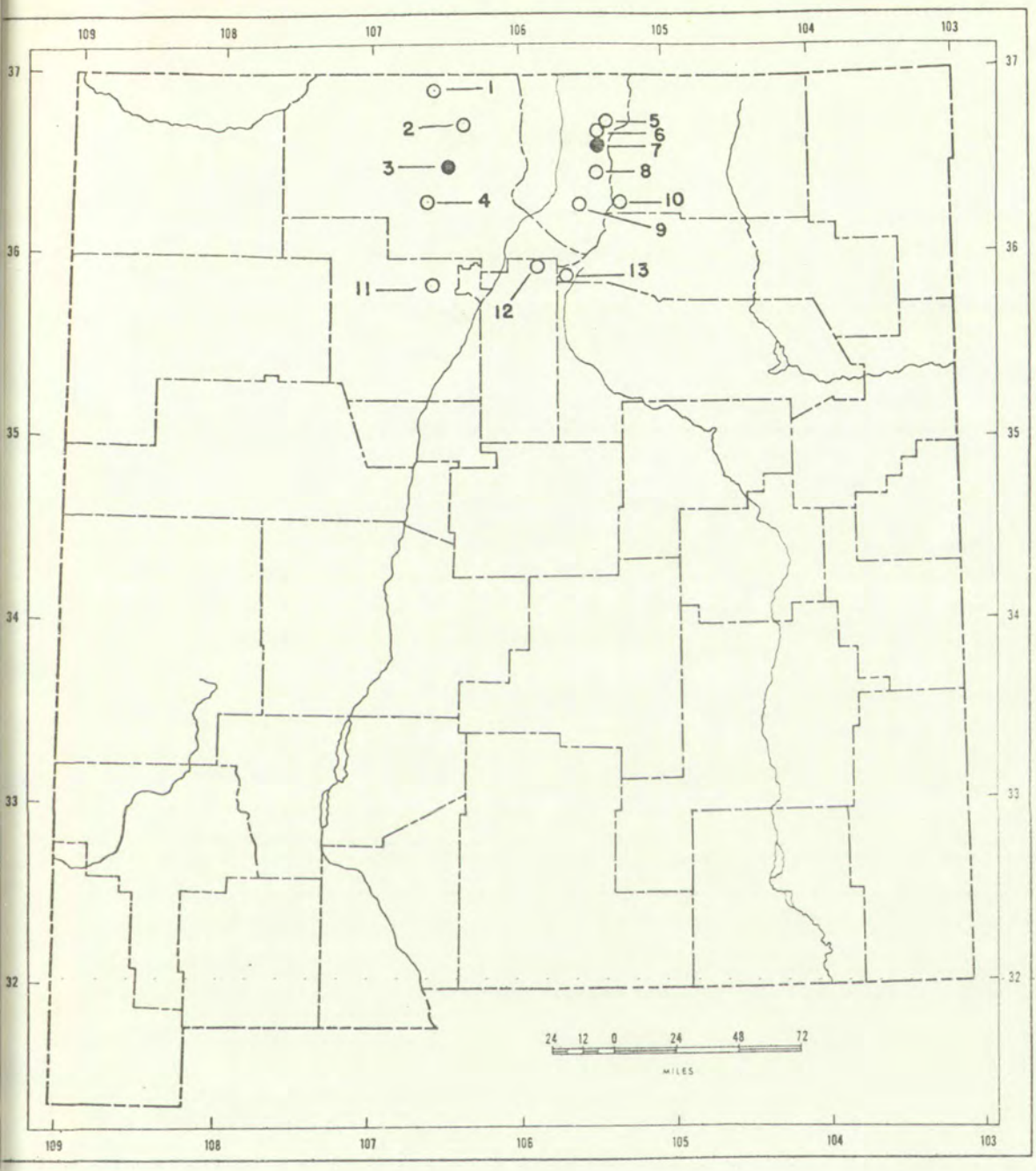

Fig. 25. Lepus americanus

LEPUS CALIFORNICUS Gray

Black-tailed Jack Rabbit

Lepus californicus texianus Waterhouse.

Lepus californicus melanotis Mearns.

General remarks.--In New Mexico, Lepus californicus is concentrated in the Lower and Upper Sonoran Life Zones, but occurs sparingly in the Transition Life Zone, also.

Sight records are marked with an asterisk.

Subspecies ascribed to New Mexico.--Lepus californicus texianus Waterhouse; Lepus californicus melanotis Mearns.

Records of occurence (Fig. 26).--

San Juan Co.:

1. Fruitland (Nelson, 1909: 145).

2. Aztec (Nelson, 1909: 145).

3. E ½ T31N-R8W (UNMCV).

4. Canyon Blanco (Nelson, 1909: 145).

Colfax Co.:

5. SW Colfax Co. (Hill, 1942: 81).

Union Co.:

6. Clayton (Nelson, 1909: 148).

McKinley Co.:

7. Fort Wingate (Nelson, 1909: 145).

Sandoval Co.:

67. *Canyon del Agua, N end Sandia Mts. (Clothier, 1957b: 149); *Near Placitas, Sandia Mts. (Clothier, 1957b:

49); *Juan Tabo Canyon, Sandia Mts. (Clothier, 1957b: 49).

68. *San Pedro Valley, 6000 ft., E Sandia Mts. Clothier, 1957b: 149).

alencia Co.:

8. 1½ mi. SW San Mateo (Hooper, 1941a: 39).

9. 2 mi. E Grants on US Hwy 66 (Hooper, 1941a: 39); rants (Nelson, 1909: 145).

10. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 39).

11. Acoma (Nelson, 1909: 145).

Bernalillo Co.:

12. Rio Puerco Valley (Ivey, 1957: 493).

13. N Albuquerque (UNMCV).

14. 5 mi. S Juan Tabo Recreation Area, Juan Tabo Rd. (Clothier, 1957b: 148); Mesa W Sandia Mts., near Embudo Arroyo (UNMCV); *Bear Canyon, 6500 ft., Sandia Mts. (Clothier, 1957b: 149).

15. Rio Grande Valley (Ivey, 1957: 493); S Albuquerque (UNMCV).

16. ½ mi. S Tijeras Ranger Station, Cedro Canyon, Manzano Mts. (Clothier, 1957b: 148); 2 mi. S Tijeras Ranger Station, Cedro Canyon, Manzano Mts. (Clothier, 1957b: 148).

69.*Sabino Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 149); *Juan Tabo Canyon, 7000 ft., Manzano Mts.

atron Co.:

17. S slope Elk Mts. (Bailey, 1931: 49).

ocorro Co.:

18. Mesa Jumanes (Nelson, 1909: 145).

19. Escondida (Benson, 1933: 45).

orrance Co.:

20. Moe's Ranch E State Rd. 41, between Estancia and illard (UNMCV); 5 mi. S and 1½ mi. E Estancia (UNMCV); stancia Valley E Sandia and Manzano Mts. (Clothier, 957b: 149).

21. 10 mi. E and 2 mi. S Willard (UNMCV).

uadalupe Co.:

22. Santa Rosa (Nelson, 1909: 148).

urry Co.:

27. 18 mi. NW Melrose, in sand hills (UNMCV).

rant Co.:

23. Head of Mimbres River (Nelson, 1909: 145).

24. Burro Mts. (Nelson, 1909: 145).

25. Silver City (Nelson, 1909: 145).

26. Hachita (Nelson, 1909: 145).

incoln Co.:

28. Ancho (Nelson, 1909: 145).

29. Jicarilla Mts. (Nelson, 1909: 145).

30. Near French's Ranch, 12 mi. NW Carrizozo (Ben-on, 1933: 45).

31. Carrizozo (Nelson, 1909: 145).

32. Capitan Mts. (Nelson, 1909: 145).

e Baca Co.:

33. Fort Sumner (Bailey, 1931: 50).

idalgo Co.:

34. Lordsburg (Nelson, 1909: 145).

35. Along E side Playas Valley (Bailey, 1931: 50).

36. Animas Mts. (Mearns, 1896: 563).

37. Animas Valley (Nelson, 1909: 145).

38. San Luis Mts. (Mearns, 1896: 563).

39. Dog Spring (Nelson, 1909: 145).

40. Monument 40 (Nelson, 1909: 145).

una Co.:

41. Deming (Nelson, 1909: 145).

42. Carrizalillo Springs (Nelson, 1909: 145).

ona Ana Co.:

43. Garfield (Bailey, 1931: 51).

44. T19S-R1E, SE corner Sec. 16 (Kennedy, 1949: 02).

45. Near Bear Canyon, E side San Andres Mts. (Nelson, 909: 145).

46. Organ City (Nelson, 1909: 145).

47. Mesilla Park (Bailey, 1931: 51).

48. La Mesa (Nelson, 1909: 145).

49. Chamberino (Nelson, 1909: 145).

50. 35 mi. W El Paso (Nelson, 1909: 140).

51. 15 mi. W El Paso (Nelson, 1909: 145).

tero Co.:

52. 14 mi. W Tularosa (Benson, 1933: 45).

53. Tularosa (Nelson, 1909: 145).

54. Between Alamogordo and Dry Canyon (Nelson, 1909: 145).

55. About 9 mi. W Alamogordo (Dice, 1930: 10).

56. Near Highrolls (Dice, 1930: 26).

57. Near Alamogordo (Dice, 1930: 8).

58. About 6 mi. SW Alamogordo (Dice, 1930: 10).

59. White Sands (Blair, 1941: 228).

60. Jarilla (Nelson, 1909: 145).

61. Guadalupe Mts. (Nelson, 1909: 145); Guadalupe Ranch (Nelson, 1909: 145).

62. Salt Valley, W Guadalupe Mts. (Nelson, 1909: 145).

Chaves Co.:

63. Roswell (Nelson, 1909: 145).

Eddy Co.:

64. Carlsbad (Bailey, 1931: 51).

65. Between Carlsbad and Carlsbad Cave (Bailey, 1928: 61).

66. A couple mi. S Carlsbad Cave (Bailey, 1928: 60).

LEPUS GAILLARDI Mearns

Gaillard's Jack Rabbit

Lepus gaillardi gaillardi Mearns.

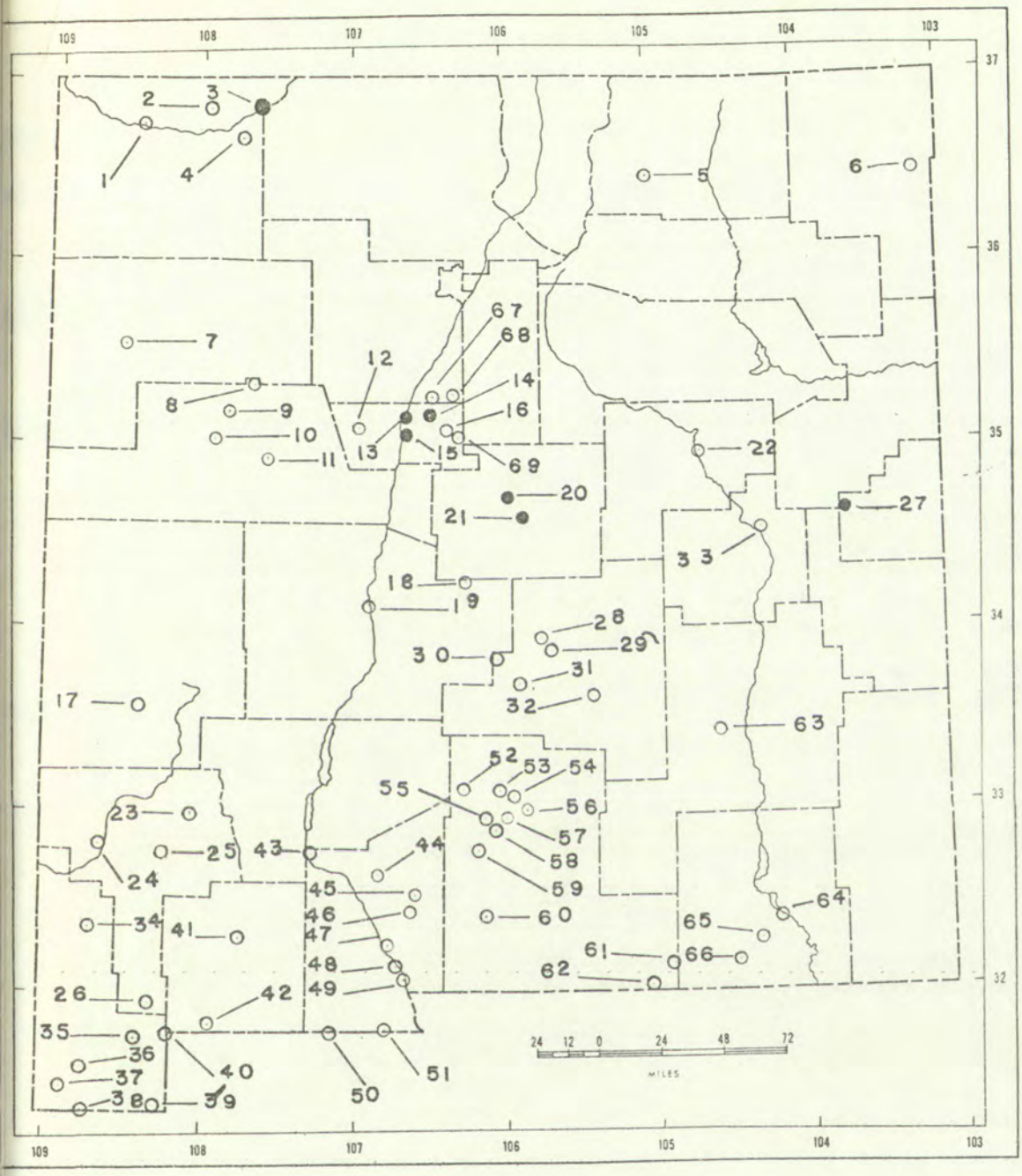

Fig. 26. Lepus californicus

General remarks.--In New Mexico, Gaillard's jack bbit is limited to the valleys bordering the continen- l divide, predominately in the Upper Sonoran Life Zone.

Subspecies ascribed to New Mexico.--Lepus gaillardi illardi Mearns.

Records of occurence (Fig. 27).--

dalgo Co.:

1. East Fork of Playas Valley (Bailey, 1931: 53).
2. Animas Valley (Bailey, 1931: 53).
3. E side San Luis Mts. (Bailey, 1931: 53).
4. Mexican Boundary, near Monument 63, W arm Playas alley (Bailey, 1931: 53).

ORDER RODENTIA

FAMILY SCIURIDAE

EUTAMIAS MINIMUS (Bachman)

Least Chipmunk

Eutamias minimus operarius Merriam.

Eutamias minimus atristriatus Bailey.

General remarks.--The northern subspecies (E. m. perarius) of the New Mexican least chipmunks occurs in he Transition and Canadian Life Zones. The southern ubspecies (E. m. atristriatus) seems to be more limited o Transition Zone habitats.

Subspecies ascribed to New Mexico.--Eutamias minimus perarius Merriam; Eutamias minimus atristriatus Bailey.

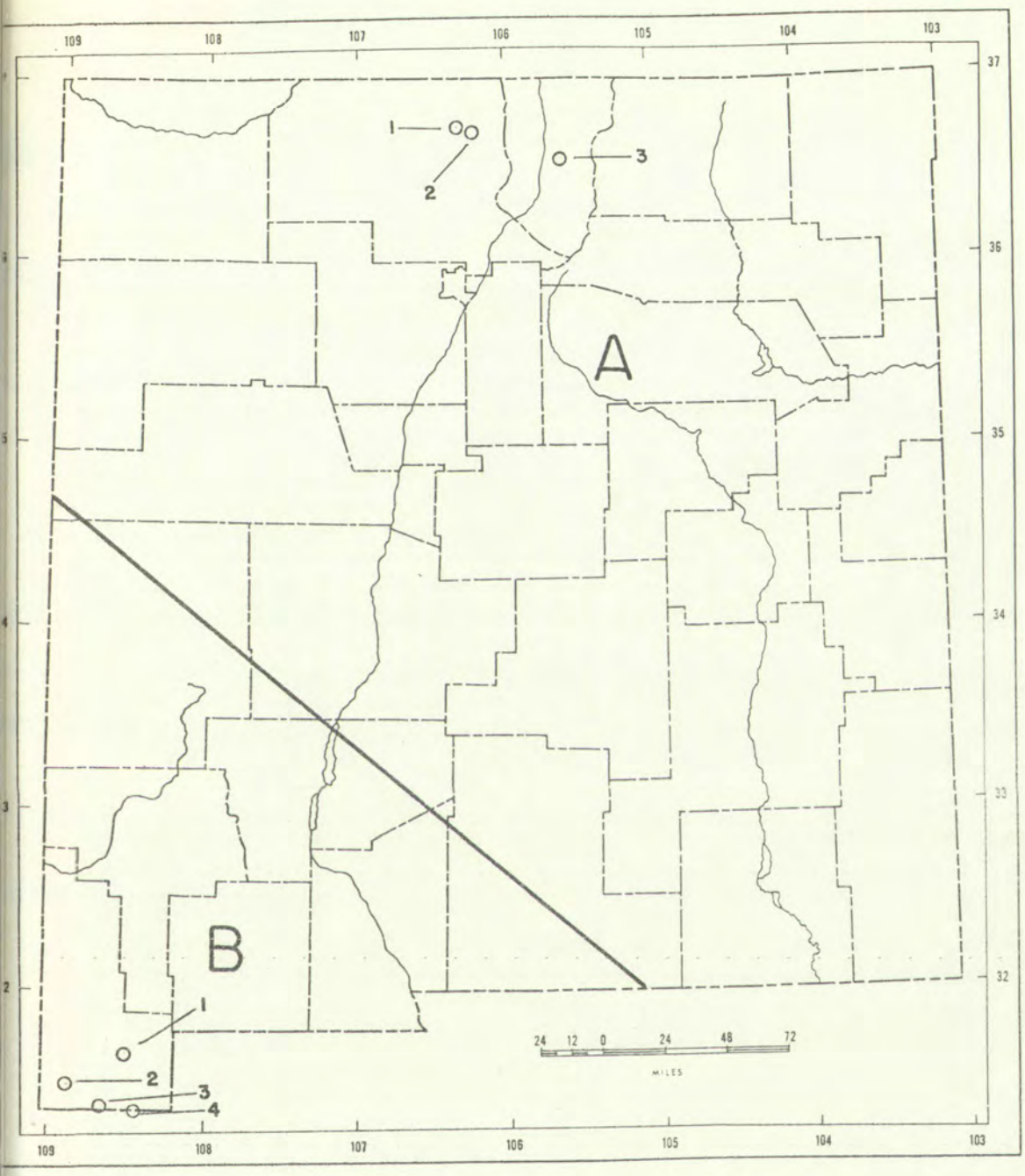

Fig. 27. A. Lepus townsendii

B. Lepus gaillardi

Records of occurence (Fig. 28).--

an Juan Co.:

1. Chuska Mts. (Bailey, 1931: 90).

io Arriba Co.:

2. 10½ mi. E Chama, East Fork Rio Brazos, 10,400 t. (UNMCV).

3. Brazos (Howell, 1929: 51).

4. Hopewell (Howell, 1929: 51).

6. Gallinas Mts. (Howell, 1929: 51).

aos Co.:

7. Culebra Mtn., 13,200 ft. (Howell, 1929: 51); ostilla Pass (Howell, 1929: 51).

5. Tres Piedras (Howell, 1929: 51).

8. Goose Lake, 12,000 ft., 7 mi. S and 1 mi. W Red iver (UNMCV).

9. Twining (Howell, 1929: 51).

10. Arroyo Hondo (Howell, 1929: 51).

11. Hondo Canyon (Howell, 1929: 51).

12. Tres Ritos, Rio la Junta (UNMCV); 4 mi. N Tres itos (UNMCV); Rio la Junta, 2 mi. NE Tres Ritos (UNMCV).

13. 23 mi. S and 6 mi. E Taos, 8750 ft. (White, 953b: 618).

olfax Co.:

14. Road Canyon (Howell, 1929: 51).

15. Catskill (Howell, 1929: 51); Long Canyon, 3 mi. Catskill (Howell, 1929: 51).

16. Bear Canyon, near Trinchera Pass (Howell, 1929: 1).

andoval Co.:

17. American Creek, 11 mi. E Cuba (UNMCV).

18. Fenton Lake, 10 mi. N Jemez Springs (UNMCV); 8 i. N Jemez Springs (UNMCV); 7 mi. N Jemez Springs (UNMCV).

ora Co.:

20. Pecos Baldy (Howell, 1929: 51); Truchas Peak Howell, 1929: 51).

21. Halls Peak (Howell, 1929: 51).

ernalillo Co.:

22. Sandia Crest, 9 mi. N and 3 mi. W Tijeras (UNMCV); iwanis Point, Sandia Crest, 9½ mi. E Alameda (UNMCV).

anta Fe Co.:

23. 10 mi. NE Santa Fe (Howell, 1929: 51).

an Miguel Co.:

24. Pecos River near Willis (Howell, 1929: 51); 1 ni. NW Cowles (UNMCV).

25. Gallinas Creek, Sangre de Cristo Mts., T17N-R14E, Sec. 13 (Koster and Clothier, 1952: 251).

26. Las Vegas (Howell, 1929: 51).

Otero Co.:

27. Penasco Creek, 12 mi. E Cloudcroft (Bailey, 1931: 91).

28. 6 mi. E Cloudcroft (Howell, 1929: 52); 7 mi. E Cloudcroft, Sacramento Mts. (UNMCV).

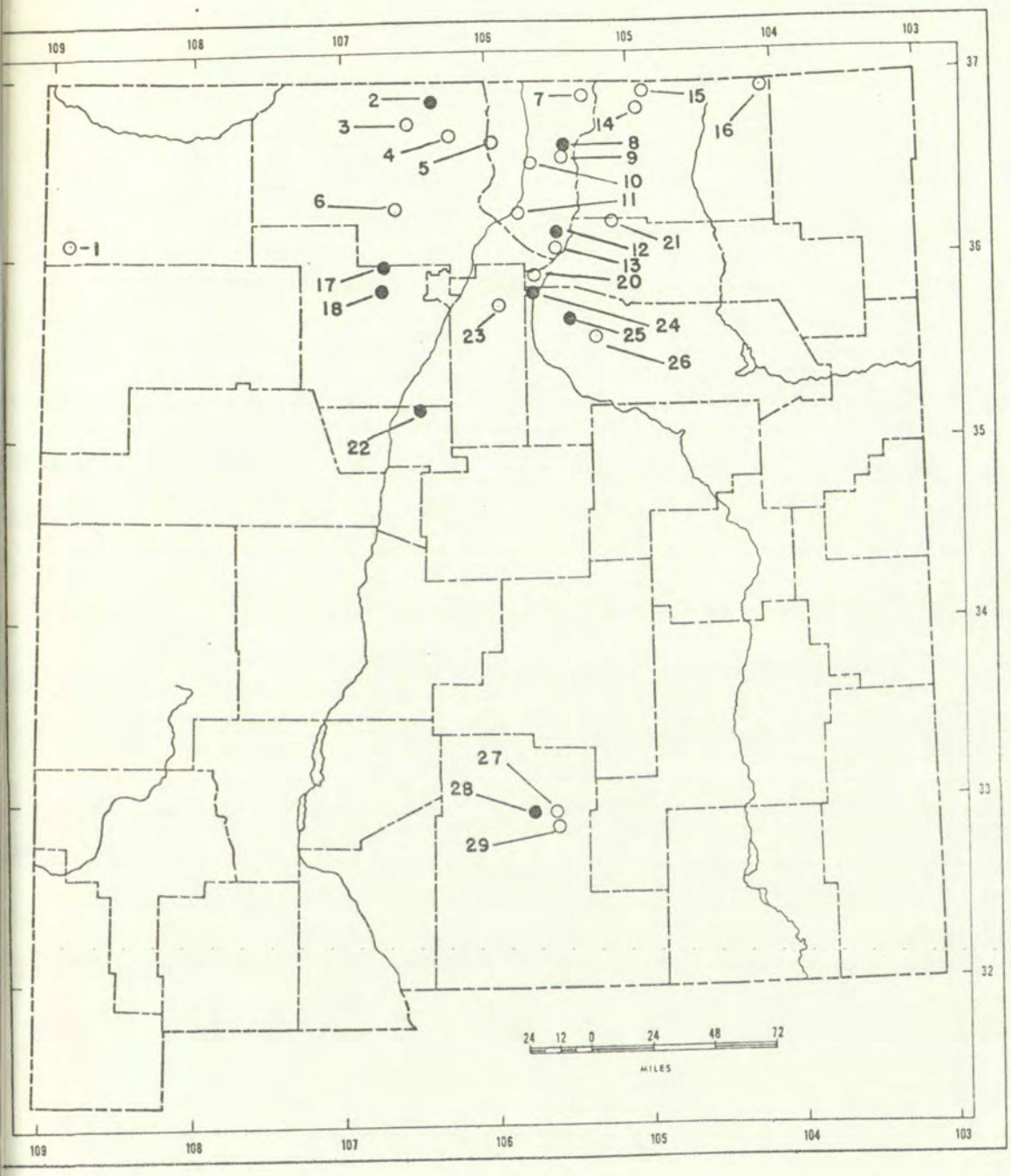

Fig. 28. Eutamias minimus

29. Penasco (Howell, 1929: 52).

EUTAMIAS DORSALIS (Baird)

Cliff Chipmunk

Eutamias dorsalis dorsalis (Baird).

General remarks.--In New Mexico, the cliff chipmunk pparently occurs in several life zones, from Upper onoran through Transition into Canadian, although it ppears to be most common in the lower portions of the ransition and in the Upper Sonoran Life Zones.

Bailey (1931: 92) reports that he saw, but was unable to collect, chipmunks probably of this species at haco Canyon.

Subspecies ascribed to New Mexico.--Eutamias dorsalis dorsalis (Baird).

Records of occurence (Fig. 29).--

cKinley Co.:

1. Nakaibito (UNMCV).
2. Gallup (Howell, 1929: 133).
3. Fort Wingate (Howell, 1929: 133).
4. Zuni (Bailey, 1931: 92).

Valencia Co.:

5. Mirabal Spring, Mt. Taylor (Hooper, 1941a: 25).
6. Canyon Lobo Ranger Station (Hooper, 1941a: 25).
7. 1 mi. N Cebolleta (Hooper, 1941a: 25).
8. About San Rafael (Bailey, 1931: 93).
9. 4 mi. WSW Cebolleta (Hooper, 1941a: 25).

10. El Moro (Howell, 1929: 133).

11. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a:).

12. 8 mi. SE Grants (Hooper, 1941a: 25); 4 mi. W Cartys (Hooper, 1941a: 25).

13. 9 mi. SSE Grants (Hooper, 1941a: 25).

14. Acoma Pueblo (Bailey, 1931: 93); Base of Enchant- Mesa (Bailey, 1931: 93).

15. Cliffs near mouth Rio San Jose (Bailey, 1931: 93).

16. Shuman's Ranch, T6N-R10W, Sec. 30 (Hooper, 1941a:).

rnalillo Co.:

17. Bernalillo Co. (Howell, 1929: 133).

ıtron Co.:

18. Datil Mts., 10 mi. N and 5 mi. W Datil (UNMCV).

19. Datil (Howell, 1929: 133).

20. Greens Gap (UNMCV).

21. Luna (Howell, 1929: 133).

22. Beaver Lake (Howell, 1929: 133).

ocorro Co.:

23. Jara Peak, near Riley (Bailey, 1931: 93).

24. Gallina Mts. (Howell, 1929: 133).

25. 2 mi. E South Baldy, Magdalena Mts., 11 mi. S nd 4 mi. E Magdalena (UNMCV).

26. Hardy Spring, Magdalena Mts. (UNMCV).

27. Big Rosa Canyon, San Mateo Mts. (UNMCV).

28. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 2 mi. S Magdalena (UNMCV); Bear Trap Canyon, San Mateo ts., 19 mi. W and 20 mi. S Magdalena (UNMCV).

29. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 6 mi. S Magdalena (UNMCV).

30. Springtime Canyon, San Mateo Mts., 38 mi. S and mi. W Magdalena (UNMCV).

rant Co.:

31. Pinos Altos Mts. (Howell, 1929: 133).

32. Head of Mimbres River (Howell, 1929: 133).

33. Silver City (Howell, 1929: 133).

34. Fort Webster, copper mines of the Mimbres (Baird, 859: 38).

35. Burro Mts. (Howell, 1929: 133).

36. Redrock (Howell, 1929: 133).

Sierra Co.:

37. 5 mi. W Chloride, Black Range, 7000 ft. (UNMCV).

38. 10 mi. E Chloride (Howell, 1929: 133).

45. Fairview (Howell, 1929: 133).

39. Kingston (Howell, 1929: 133).

Hidalgo Co.:

40. Doubtful Canyon, Peloncillo Mts., 8 mi. N and 2 ni. W Steins (UNMCV).

41. Clanton Canyon, Peloncillo Mts., 5700 ft., 22 mi. S and 2 mi. E Rodeo (UNMCV); Pass at top Peloncillo Mts. on Geronimo Trail, 5900 ft. (UNMCV).

42. Aspen Spring, Indian Creek Canyon, Animas Mts. (UNMCV); 1 mi. SW Aspen Spring, Animas Mts. (UNMCV).

43. Guadalupe Canyon, 31 mi. S Rodeo (UNMCV).

44. San Luis Mts. (Howell, 1909: 133).

Not Located:

Tres Pinos Mts. (Bailey, 1931: 92).

South Fork Gila River (Bailey, 1931: 92).

EUTAMIAS QUADRIVITTATUS (Say)

Colorado Chipmunk

Eutamias quadrivittatus quadrivittatus (Say).

Eutamias quadrivittatus hopiensis Merriam.

General remarks.--In New Mexico, the Colorado chipmunk is predominantly an animal of the Transition and Canadian Life Zones. In portions of its range within the state, however, it is found well into the pinyon and juniper of the Upper Sonoran Zone.

Subspecies ascribed to New Mexico.--Eutamias quadrivittatus quadrivittatus (Say); Eutamias quadrivittatus hopiensis Merriam.

Records of occurence (Fig. 30).--

San Juan Co.:

1. Near confluence of San Juan and Los Pinos Rivers, T30N-R7W, NW ¼ Sec. 7 (UNMCV); Near confluence of San Juan and Los Pinos Rivers, T30N-R7W, SW ¼ Sec. 8 (UNMCV).

2. Largo Canyon, Blanco (Bailey, 1931: 85).

3. Washington Pass, Chuska Mts., 6 mi. E Crystal

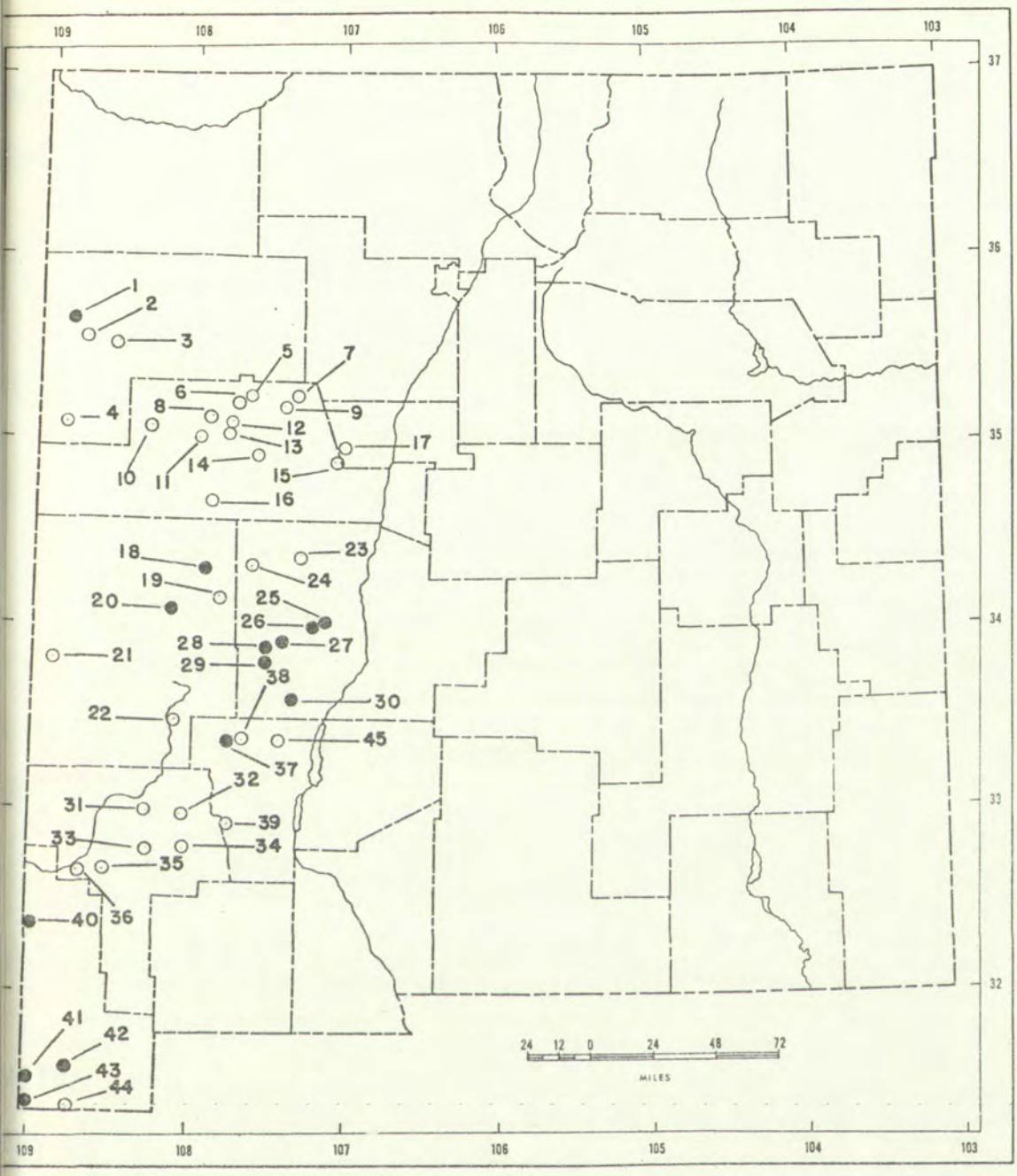

Fig. 29. Eutamias dorsalis

UNMCV).

io Arriba Co.:

4. Dulce (Howell, 1929: 83).

5. Horse Lake (Howell, 1929: 83).

6. La Jara Lake (Howell, 1929: 83); La Jara (Bailey, 931: 85).

7. Tierra Amarilla (Howell, 1929: 83).

8. 8 mi. N El Rito (White, 1953a: 568).

9. 4 mi. N El Rito (White, 1953a: 568).

10. Gallinas Mts. (Howell, 1929: 83).

11. Rim Rock, El Rito (White, 1953a: 568); 2 mi. E. l Rito, 7000 ft. (White, 1953a: 568); 2 mi. SE El Rito White, 1953a: 568).

12. Rinconada (Howell, 1929: 83).

13. 2 mi. S and 4 mi. W Coyote, 8100 ft. (White, 953a: 568).

14. 6 mi. E and ½ mi. S Truchas, 8500 ft. (White, 953a: 568).

aos Co.:

15. Costilla (Howell, 1929: 83).

16. Tres Piedras (Howell, 1929: 83).

17. Twining (Howell, 1929: 83).

18. 3 mi. N Taos Pueblo (White, 1953a: 568).

19. Taos (Howell, 1929: 83); Taos Pueblo (Howell, 929: 83).

20. Cienequilla (Howell, 1929: 83); Hondo Canyon

Howell, 1929: 83).

21. 4 mi. NE Tres Ritos, Sangre de Cristo Mts. (Fleharty, 1958: 16).

22. 23 mi. S and 6 mi. E Taos (White, 1953a: 568).

Colfax Co.:

23. Road Canyon, 7 mi. SW Catskill (Howell, 1929: 83).

24. Raton Mts. (Bailey, 1931: 81).

25. Moreno Valley (Howell, 1929: 83).

26. Taos Pass (Howell, 1929: 83).

Union Co.:

27. Emery Peak (Howell, 1929: 83).

28. Folsom (Howell, 1929: 83).

29. Sierra Grande (Howell, 1929: 83).

McKinley Co.:

30. 1 mi. E McGaffey, Zuni Mts. (Fleharty, 1958: 16); Bear Ridge, Zuni Mts. (White, 1953a: 568).

Sandoval Co.:

36. Santa Clara Canyon (Howell, 1929: 83).

37. Fenton Lake, 10 mi. N Jemez Springs, Jemez Mts. (Fleharty, 1958: 16).

38. 5 mi. N Jemez Springs, Jemez Mts. (Fleharty, 1958: 16).

39. Osha Spring, 9000 ft., Sandia Mts. (Clothier, 1957b: 78); Capulin Ranger Station, Sandia Mts., T12N-R5E, Sec. 33 (Clothier, 1957a: 256); Las Huertas Canyon,

ndia Mts. (UNMCV).

s Alamos Co.:

40. Rito de los Frijoles (Howell, 1929: 83).

ra Co.:

50. Coyote Creek (Howell, 1929: 83).

51. Guadalupita (Howell, 1929: 83).

52. 10 mi. S Mora (Howell, 1929: 83).

lencia Co.:

31. 6 mi. NE summit Mt. Taylor (Hooper, 1941a: 24).

32. Mirabal Spring, 9000 ft., Mt. Taylor (UNMCV); irror Spring, Mt. Taylor (White, 1953b: 622); 1 mi. NE a Mosca Lookout, Mt. Taylor Range (UNMCV); ½ mi. NE La osca Peak, Mt. Taylor (Fleharty, 1958: 16).

34. Copperton (Howell, 1929: 83).

35. Agua Fria Creek, T10N-R12W, Sec. 28, Zuni Mts. UNMCV).

ernalillo Co.:

41. Bear Canyon, 8000 ft., Sandia Mts. (Clothier, 957b: 78); Juan Tabo, Sandia Mts. (Fleharty, 1958: 16); andia Crest, 9 mi. N and 3 mi. W Tijeras (UNMCV).

42. Tejano Canyon, 3/4 mi. below Tree Springs Clothier, 1957b: 78); Tree Springs, 8 mi. N and ½ mi. W ijeras (UNMCV); Madera Canyon, 9 mi. N and 1 mi. W ijeras (UNMCV); Sandia Crest Rd., T11N-R5E, 10,350 ft. UNMCV); Sandia Crest Rd., T11N-R5E, 9300 ft. (UNMCV); andia Crest Rd., T11N-R5E, 8840 ft. (UNMCV); Sandia Crest

d., 8640 ft. (UNMCV); 3½ mi. E Sandia Crest, Sandia Mts. Fleharty, 1958: 16).

39. Capulin Camp Ground, 9½ mi. N and 1 mi. W Tijeras UNMCV).

43. Embudito Canyon, along creek, about 7500 ft. Clothier, 1957b: 78); Embudo Canyon (Clothier, 1957b: 78).

44. Cedro Peak, 7700 ft., Manzano Mts. (Clothier, 957b: 78-79); 3 mi. up Cedro Canyon from Tijeras (UNMCV); an Tomas Canyon, 7000 ft. (Clothier, 1957b: 79).

45. Near State Hwy 10, at S boundary Sandia Division ibola Nat'l Forest (Clothier, 1957b: 79).

46. Carolina Canyon, 7600 ft., Manzano Mts. (Clothier, 957b: 79).

anta Fe Co.:

47. 10 mi. NE Santa Fe (Howell, 1929: 83).

48. Glorieta (Howell, 1929: 83).

49. San Pedro (Howell, 1929: 83).

an Miguel Co.:

53. Willis (Howell, 1929: 83).

54. 12 mi. N Las Vegas (Howell, 1929: 83).

55. 10 mi. N Cabra Spring (Howell, 1929: 83).

56. Pecos (Howell, 1929: 83).

57. Canadian River 30 mi. NW Tucumcari (Howell, 1929: 3).

58. Bernal (Howell, 1929: 83).

59. Ribera (Howell, 1929: 83).

67. Canoncito, above Cleveland (Stone and Rehn, 1903: 0).

ıay Co.:

60. Canadian River 4 mi. NW Tucumcari (White, 1953a: 58).

61. 25 mi. W Tucumcari (Howell, 1929: 83).

orrance Co.:

62. Mosca Peak, 8400 ft., Manzano Mts. (Clothier, 957b: 79).

63. New Canyon Camp, 7750 ft., 3 mi. W and 1 mi. N anzano (UNMCV); Red Canyon, 4 mi. W and 1 mi. S Manzano UNMCV).

64. Manzano Peak, 9000 ft., Manzano Mts. (Clothier, 957b: 79).

65. S end, E slope Manzano Mts. (White, 1953b: 622).

uadalupe Co.:

66. Near Cuervo (Bailey, 1931: 81).

ot Located:

Canadian River near Liberty (Bailey, 1931: 81).

Carasal, Bernalillo Co. (Howell, 1929: 83).

EUTAMIAS CINEREICOLLIS (Allen)

Gray-collared Chipmunk

Eutamias cinereicollis cinereicollis (Allen).

Eutamias cinereicollis cinereus Bailey.

General remarks.--The gray-collared chipmunk is pri-

arily a creature of the Canadian and Transition Life
ones.

Specimens from the Organ Mountains have been tenta-
ively placed with this species. The true status of the
hipmunks from this mountain range must remain in doubt
ntil specimens can be re-examined in the light of a
ecent study which has separated the former species E.
inereicollis into two species (Fleharty, Jour. Mamm.,
n press).

Bailey's record for the Datil Mountains may actually
efer to the Datil Range, to the south and west. The
ocation which Howell gives for the Datil Range apparent-
y is incorrect. This station has been mapped at the
robable true location of 35 miles from the Arizona line
nd 20 miles northeast of Joseph (see F. Bailey, 1928:
5).

Subspecies ascribed to New Mexico.--Eutamias
inereicollis cinereus Bailey; Eutamias cinereicollis
inereicollis (Allen).

Records of occurence (Fig. 30).--
atron Co.:

1. Datil Mts. (Bailey, 1931: 86).

2. Datil Range, 22 mi. NW Fort Tularosa (Howell,
929: 101).

3. Tularosa Mts. (Bailey, 1931: 86).

4. San Francisco Mts. (Bailey, 1931: 86).

5. Elk Mts. (Bailey, 1931: 86).

6. 10 mi. NE Mogollon (Hall and Kelson, 1959: 314).

7. Willow Creek, Mogollon Mts., 10 mi. E Mogollon Fleharty, Jour. Mamm., in press); Gillito Creek, Mogollon ts., 10 mi. E Mogollon (UNMCV).

8. Willow Creek Ranger Station, 16 mi. E Mogollon UNMCV).

9. 8 mi. SE Mogollon (Hall and Kelson, 1959: 314).

ocorro Co.:

10. Copper Canyon, 8200 ft., Magdalena Mts. (Bailey, 931: 88); 1½ mi. E South Baldy, Magdalena Mts., 11 mi. S nd 3½ mi. E Magdalena (Fleharty, Jour. Mamm., in press).

11. Monica Canyon, San Mateo Mts. (Bailey, 1931: 89).

12. Mt. Withington, San Mateo Mts. (Fleharty, Jour. amm., in press); Bear Trap Canyon, San Mateo Mts., 19 mi. and 20 mi. S Magdalena (UNMCV); San Mateo Mts., 19 mi. W nd 18 mi. S Magdalena (UNMCV).

13. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 26 i. S Magdalena (UNMCV).

14. San Mateo Peak, San Mateo Mts. (Bailey, 1931: 89).

rant Co.:

15. 15 mi. E and 28 mi. N Silver City, Black Range UNMCV).

16. Head of Mimbres River (Howell, 1929: 101).

17. Iron Canyon, Black Range, 15 mi. E and 6 mi. N anta Rita (Fleharty, Jour. Mamm., in press).

Sierra Co.:

18. Mimbres Mts. (Howell, 1929: 101).

Dona Ana Co.:

19. Organ Mts. (Bailey, 1931: 89).

EUTAMIAS CANIPES Bailey

Gray-footed Chipmunk

Eutamias cinereicollis canipes Bailey.

General remarks.--In New Mexico, Eutamias canipes is found in the Transition and Canadian Life Zones of the southeastern mountain ranges. These chipmunks have been separated taxonomically from E. cinereicollis only recently (Fleharty, Jour. Mamm., in press).

For the status of the chipmunks of the Organ Mountains, see remarks under Eutamias cinereicollis.

Subspecies ascribed to New Mexico.--Eutamias canipes canipes Bailey; Eutamias canipes sacramentensis Fleharty.

Records of occurence (Fig. 30).--

Lincoln Co.:

1. Red Cloud Canyon, Gallinas Mts., 3 mi. S and 9 mi. W Corona (Fleharty, Jour. Mamm., in press).

2. Jicarilla Mts. (Bailey, 1931: 87).

3. French's Ranch, 12 mi. NW Carrizozo (Benson, 1933: 24).

4. Capitan Mts., 5 mi. N and 9 mi. E Capitan (Fleharty, Jour. Mamm., in press).

5. Fort Stanton (Baird, 1857: 299).

6. 2 mi. W Alto (UNMCV); Monjeau Mt. (UNMCV).

7. Forks of Ruidoso (Stone and Rehn, 1903: 20); Rio uidoso (Stone and Rehn, 1903: 20); Hale's Ranch, Ruidoso Stone and Rehn, 1903: 20).

tero Co.:

8. Sierra Blanca (Bailey, 1931: 87).

9. Mescalero (Howell, 1929: 102).

10. Cloudcroft, Sacramento Mts. (Bailey, 1931: 87); mi. S Cloudcroft, Sacramento Mts. (Fleharty, Jour. Mamm., n press).

11. About ½ mi. SW Highrolls (Dice, 1930: 17).

12. Penasco Creek, Sacramento Mts. (Bailey, 1931: 7).

13. Dog Canyon (Bailey, 1931: 87).

ddy Co.:

14. Dark Canyon, Guadalupe Mts., 30 mi. W and 21½ i. S Carlsbad (UNMCV).

MARMOTA FLAVIVENTRIS (Audubon and Bachman)

Yellow-bellied Marmot

Marmota flaviventris obscura Howell.

General remarks.--The range of the yellow-bellied armot barely enters into New Mexico. These rodents are imited to the upper portions of the higher northern ountains, descending as far as the upper parts of the anadian Life Zone.

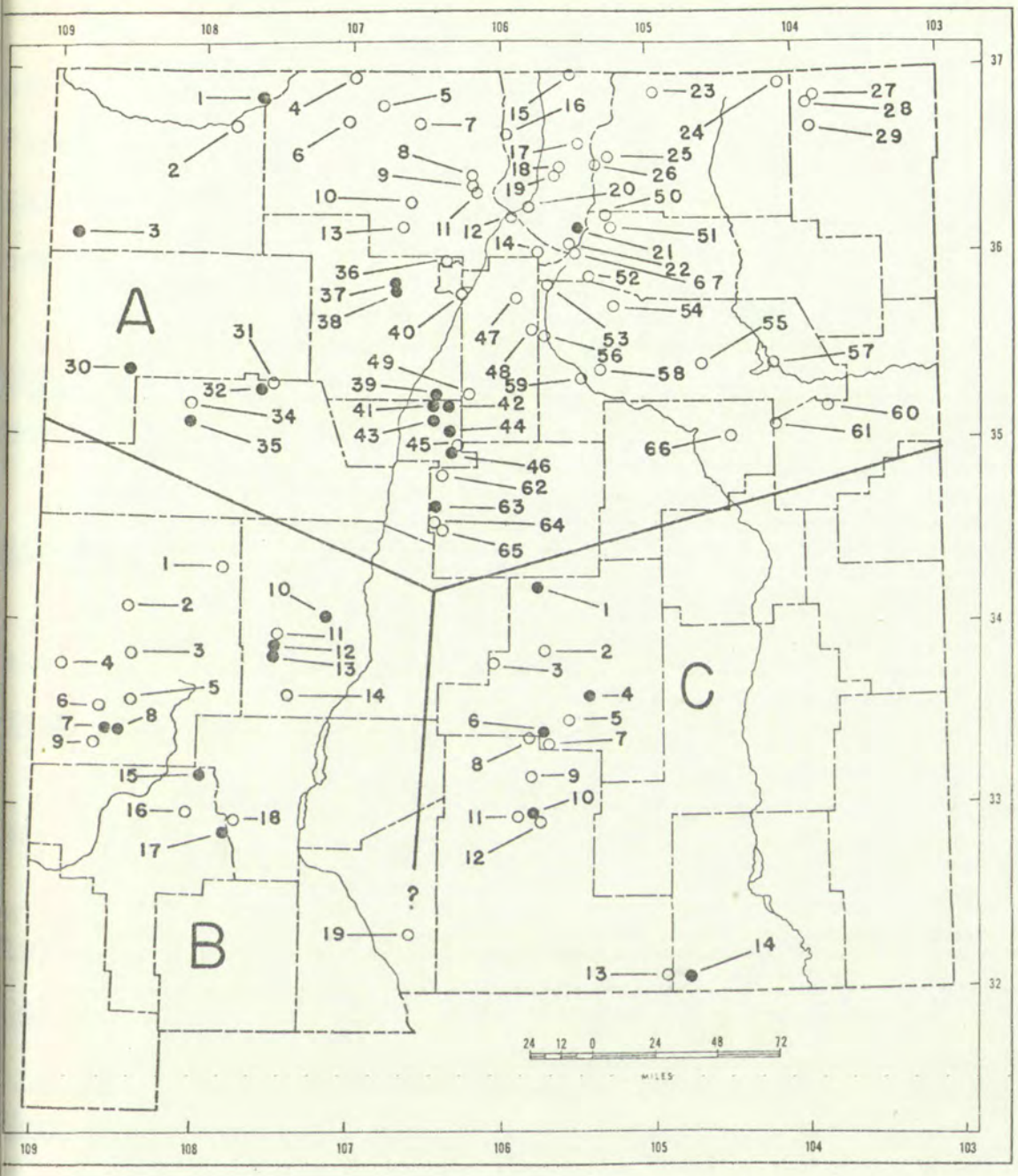

Fig. 30. A. Eutamias quadrivittatus

B. Eutamias cinereicollis

C. Eutamias canipes

The county given here for Hall and Kelson's record at Panchuela, 8 mi. NW Pecos Baldy Lake, may be incorrect. Panchuela is about 6 miles south and 1 mile west of Pecos Baldy Lake. The latter has been assumed here to be the correct locality.

Subspecies ascribed to New Mexico.--*Marmota flaviventris obscura* Howell; *Marmota flaviventris luteola* Howell.

Records of occurence (Fig. 31).--

Rio Arriba Co.:

1. 5 mi. E Brazos Peak (Hall and Kelson, 1959: 326).

Taos Co.:

2. Goose Lake, 12,000 ft., 7 mi. S and 1 mi. W Red River (UNMCV).

3. W base Wheeler Peak, 5 mi. S Twining (Bailey, 1931: 131).

Colfax Co.:

4. Agua Fria Peak (Howell, 1915: 55).

Mora Co.:

5. Pecos Baldy (Howell, 1915: 55); Truchas Peak (Howell, 1915: 55).

Santa Fe Co.:

6. Santa Fe Ski Basin, 9 mi. NE Santa Fe (Holdenried and Morlan, 1956: 374).

San Miguel Co.:

7. Panchuela, 8 mi. NW Pecos Baldy Lake (Hall and Kelson, 1959: 327).

8. 6 mi. W Rociada (Hall and Kelson, 1959: 327).

CITELLUS HARRISII (Audubon and Bachman)

Harris' Antelope Squirrel

Ammospermophilus harrisi harrisi (Audubon and Bachman).

General remarks.--The author has made a somewhat arbitrary choice in his use of Citellus as the generic name for this and following species. The generic names used by Hall and Kelson (1959) for this group are correct at present. However, most works in recent years have used the name Citellus and it is considered very likely that this name will be conserved. It is for these reasons that the generic name Citellus has been given preference over the name Ammospermophilus and Spermophilus in this work.

Harris' antelope squirrel is essentially a Lower Sonoran species and apparently barely enters into New Mexico (however, see remarks under the account of Citellus leucurus).

The record for Pratt is based on reports only (Bailey, 1931: 99). Also, the author has seen this ground squirrel at several places between Steins and Doubtful Canyon along the Peloncillo Mts., Hidalgo Co.

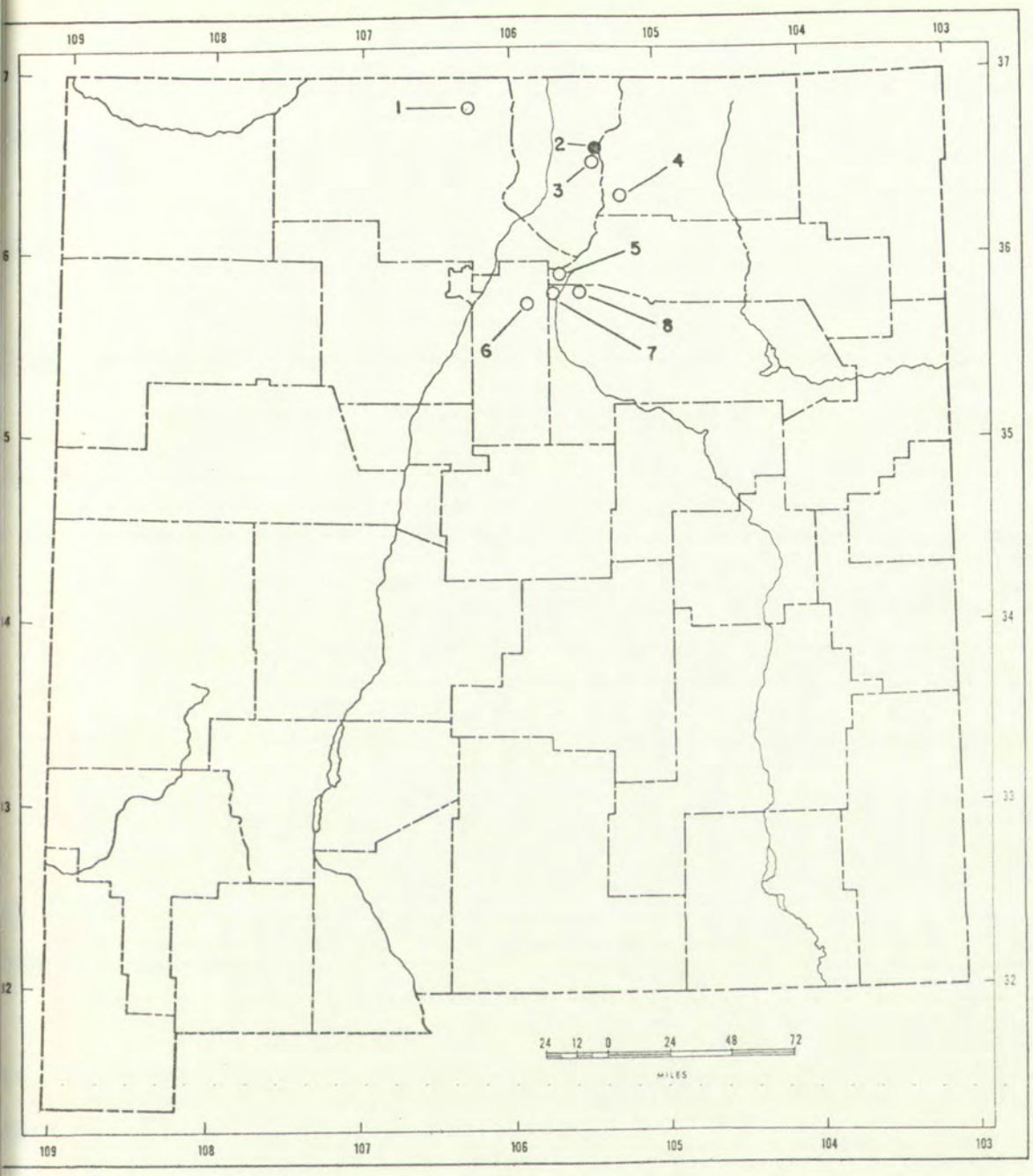

Fig. 31. Marmota flaviventris

Subspecies ascribed to New Mexico.--Citellus harrisii arrisii (Audubon and Bachman).

Records of occurence (Fig. 32).--

rant Co.:

1. 1 mi. E Redrock (UNMCV).

idalgo Co.:

2. Doubtful Canyon, Peloncillo Mts., 8 mi. N and 2 i. W Steins (UNMCV).

3. 12 mi. NW Animas (Bailey, 1931: 99).

4. Pratt, San Simon Valley (Bailey, 1931: 99).

CITELLUS LEUCURUS (Merriam)

White-tailed Antelope Squirrel

Ammospermophilus leucurus cinnamomeus (Merriam).

General remarks.--The white-tailed antelope squirrel s primarily limited to the Upper Sonoran Life Zone in New Mexico.

A sight record of an antelope squirrel, unidentified as to species, by James L. Sands, of the New Mexico Department of Game and Fish, in the vicinity of Winston indicates that the ranges of C. harrisii and C. leucurus much more closely approach one another than is indicated by specimens in hand.

Subspecies ascribed to New Mexico.--Citellus leucurus pennipes (Howell).

Records of occurence (Fig. 32).--

San Juan Co.:

1. Shiprock (Howell, 1938: 176).

2. Between Aztec and Laplata (Bailey, 1931: 96).

3. Aztec (Bailey, 1931: 95).

4. Fruitland (Bailey, 1931: 95).

5. Blanco Canyon (Bailey, 1931: 95).

6. Chaco Canyon (Bailey, 1931: 95).

Sandoval Co.:

7. 1.4 mi. W La Ventana (UNMCV); 1 mi. N La Ventana (UNMCV).

8. Near Cabezon (Bailey, 1931: 95).

9. Near Jemez Pueblo (Bailey, 1931: 95).

Valencia Co.:

10. Near Laguna (Bailey, 1931: 95).

11. 35 mi. W Albuquerque (Howell, 1938: 176).

13. Near junction Rio Puerco and Rio San Jose (Bailey, 1931: 95).

14. Lava bluffs 4 mi. W Los Lunas (UNMCV).

Bernalillo Co.:

12. 6½ mi. W and 5 mi. N Albuquerque (UNMCV).

Socorro Co.:

15. La Joya State Game Refuge (UNMCV).

16. 10 mi. NW Socorro (Bailey, 1931: 95).

17. Socorro Mts. (Warren, 1942: 135).

Not Located:

Chuska River (Bailey, 1931: 95).

CITELLUS INTERPRES (Merriam)

Texas Antelope Squirrel

Ammospermophilus interpres (Merriam).

General remarks.--According to Bailey (1931: 97), he range of Citellus interpres seems to follow the line here the Upper and Lower Sonoran Life Zones meet, it eing difficult, therefore, to determine to which zone hey belong.

Those localities marked by asterisks are based on ight records.

Subspecies ascribed to New Mexico.--The species is onsidered monotypic.

Records of occurence (Fig. 32).--

andoval Co.:

1. *Placitas, Sandia Mts. (Clothier, 1957b: 71).

2. *Jaral Canyon, Sandia Mts. (Clothier, 1957b: 71).

3. Embudo Canyon (Ivey, 1957: 495).

4. Near mouth of Tijeras Canyon (Clothier, 1957b: 1); 3 mi. W Tijeras (Clothier, 1957b: 71).

5. 5 mi. E Albuquerque (UNMCV); 8 mi. E and 3 mi. Albuquerque (UNMCV).

orrance Co.:

6. *Jaramillo Canyon, Manzano Mts. (Clothier, 957b: 71).

7. SE foothills Manzano Mts. (Bailey, 1931: 97).

8. *Abo Canyon, Manzano Mts. (Clothier, 1957b: 71).

ocorro Co.:

9. 10 mi. NE Socorro (Bailey, 1931: 97).

ierra Co.:

13. Near W base Capitol Peak, San Andres Mts. Bailey, 1931: 98).

14. N and W slopes Sheep Mtn., San Andres Mts. Bailey, 1931: 98).

15. W base Salinas Peak, San Andres Mts. (Bailey, 931: 98).

incoln Co.:

10. About 12 mi. NW Carrizozo by road (Bradt, 1932: 24).

11. 8 mi. NW Carrizozo (Benson, 1933: 23); 4 mi. NW arrizozo by road (Bradt, 1932: 324).

12. 3½ mi. W Carrizozo (Benson, 1933: 23).

ona Ana Co.:

16. Bear Canyon, San Andres Mts. (Bailey, 1931: 98).

17. Organ Mts. near San Augustin Pass (Bailey, 1931: 97).

18. Franklin Mts. (Bailey, 1931: 97).

CITELLUS TRIDECEMLINEATUS (Mitchill)

Thirteen-lined Ground Squirrel

Citellus tridecemlineatus arenicola Howell.

Citellus tridecemlineatus parvus (Allen).

Citellus tridecemlineatus hollisteri Bailey.

Citellus tridecemlineatus alleni (Merriam).

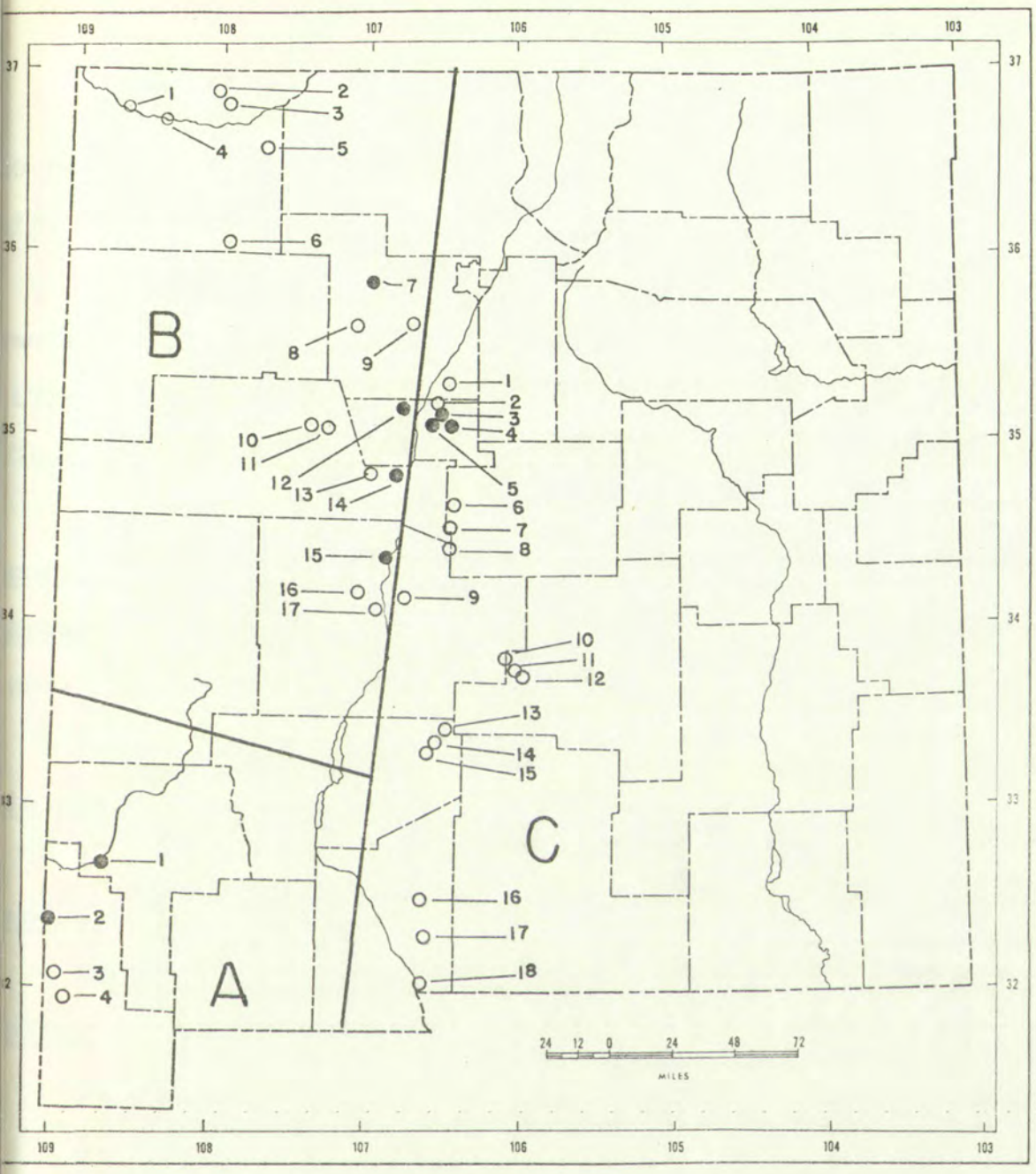

Fig. 32. A. Citellus harrisii

B. Citellus leucurus

C. Citellus interpres

General remarks.--The thirteen-lined ground squirrel is primarily an animal of the Upper Sonoran and Transition Life Zones in New Mexico.

Sight records, not given below, are available for two localities: About 15 mi. SW Acoma (Bailey, 1931: 117); State Hwy 10, 5 mi. S Chilili, Torrance Co. (Clothier, 1957b: 60).

Subspecies ascribed to New Mexico.--Citellus tridecemlineatus hollisteri Bailey; Citellus tridecemlineatus parvus (Allen); Citellus tridecemlineatus arenicola Howell.

Records of occurence (Fig. 33).--

Rio Arriba Co.:

1. Tierra Amarilla (Bailey, 1931: 117).

Taos Co.:

2. 35 mi. NW Cimarron (Howell, 1938: 116).

Colfax Co.:

3. Near Elizabethtown (Bailey, 1931: 119).
4. Maxwell (Howell, 1938: 116).
5. 4 mi. SW Cimarron (Hill, 1942: 79).
6. Near Taos Pass (Bailey, 1931: 119).
7. Agua Fria Park (Stone and Rehn, 1903: 21).
8. Black Lake (Bailey, 1931: 119).
9. Chico (Bailey, 1931: 116).

Union Co.:

10. Folsom (Bailey, 1931: 116).

11. Clayton (Bailey, 1931: 116).

Mora Co.:

12. 10 mi. S Mora (Howell, 1938: 116).

San Miguel Co.:

13. Pecos Mts. (Bailey, 1931: 119).

14. 12 mi. N Las Vegas (Howell, 1938: 116).

15. 6 mi. N Cabra Spring (Bailey, 1931: 116).

Quay Co.:

16. San Jon (Howell, 1938: 112).

17. Tucumcari (Howell, 1928: 214).

18. 25 mi. W Tucumcari (Howell, 1938: 112).

Catron Co.:

19. 6 mi. N and 6 mi. W Datil, Datil Mts. (UNMCV); Datil Mts., 12 mi. NW Datil (Howell, 1938: 119).

Socorro Co.:

20. San Augustin Plains, near Monica Spring (Howell, 1938: 119).

21. 15 mi. SW Monica Spring (Bailey, 1931: 117).

Lincoln Co.:

22. Loveless Lake, 10 mi. NW Capitan Mts. (Howell, 1938: 112).

23. NW base Capitan Mts. (Bailey, 1931: 116).

Dona Ana Co.:

27. Fort Thorn (Baird, 1857: 318).

Otero Co.:

24. Elk Park, SE part Mescalero Indian Reservation,

ear the Indian sawmill (Bailey, 1931: 118).

25. Penasco Creek, about 12 mi. E Cloudcroft (Bailey, 931: 118).

aves Co.:

26. Near Roswell (Bailey, 1931: 116).

CITELLUS MEXICANUS (Erxleben)

Mexican Ground Squirrel

Citellus mexicanus parvidens (Mearns).

General remarks.--Apparently limited in New Mexico the Lower Sonoran Life Zone of the Pecos Valley, the xican ground squirrel is poorly represented in collec- ons from the state.

Subspecies ascribed to New Mexico.--Citellus mexi- nus parvidens (Mearns).

Records of occurence (Fig. 36).--

aves Co.:

1. Roswell (Bailey, 1931: 114).

dy Co.:

2. Carlsbad (Bailey, 1931: 114).

CITELLUS SPILOSOMA (Bennett)

Spotted Ground Squirrel

Citellus spilosoma canescens (Merriam).

Citellus spilosoma major (Merriam).

Citellus spilosoma pratensis (Merriam).

General remarks.--The spotted ground squirrel is

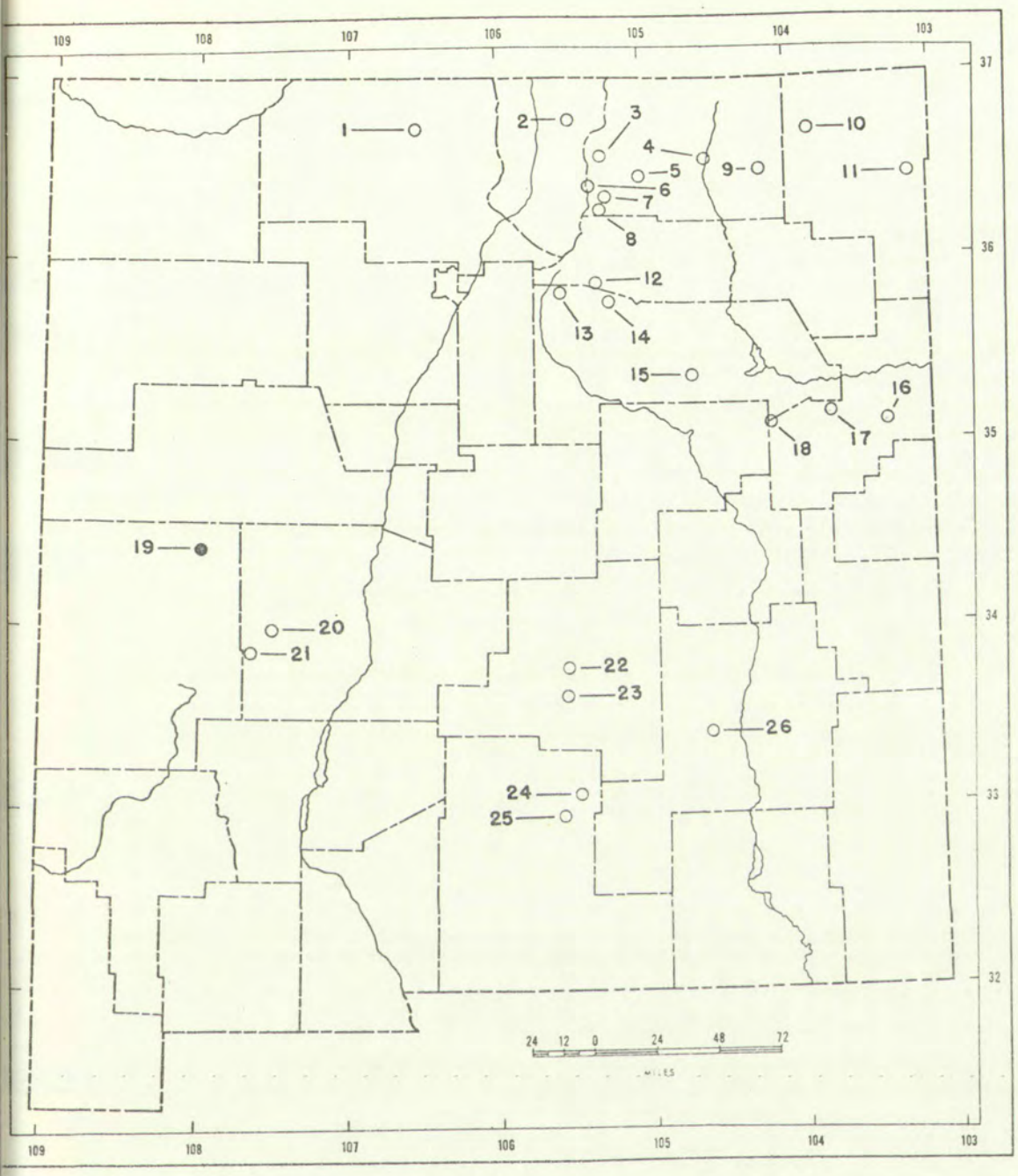

Fig. 33. Citellus tridecemlineatus

ound in the more arid areas of the Lower and Upper
onoran Life Zones of New Mexico.

Sight records are marked by asterisks.

Subspecies ascribed to New Mexico.--Citellus spilo-
oma canescens (Merriam); Citellus spilosoma marginatus
Bailey); Citellus spilosoma cryptospilotus (Merriam).

Records of occurence (Fig. 34).--

Rio Arriba Co.:

1. Espanola (Bailey, 1931: 112).

Colfax Co.:

2. 4 mi. SW Cimarron (Hill, 1942: 79).

3. 3 mi. SE Cimarron (Hill, 1942: 79).

4. Maxwell (Howell, 1938: 127).

McKinley Co.:

5. Gallup (Bailey, 1931: 114).

6. *Wingate (Bailey, 1931: 114).

7. Thoreau, about 15 mi. NW Bluewater (Hooper, 1941a:
4).

Sandoval Co.:

8. Mesa W Rio Grande opposite Bernalillo (Williams,
1949: 23).

Valencia Co.:

9. Ojo Caliente (Bailey, 1931: 114).

Bernalillo Co.:

10. 1½ mi. W and 1 mi. N Alameda (UNMCV).

11. Juan Tabo Rd., opposite mouth Bear Canyon

Clothier, 1957b: 63); East Mesa, on Las Lomas Rd., ½ mi. base of mts. (Clothier, 1957b: 63).

12. Over a 2 sq. mi. area approximately 1 mi. N niv. N. Mex. (Sumrell, 1949: 3); ½ mi. S Roosevelt Park, lbuquerque (UNMCV); East Mesa, T10N-R9E, NE ¼ Sec. 9, lbuquerque (UNMCV).

13. N bluff overlooking mouth of Tijeras Canyon, E lbuquerque (UNMCV).

14. Isleta (Bailey, 1931: 112).

anta Fe Co.:

15. Santa Fe (Holdenried and Morlan, 1956: 375).

16. Lamy-Glorieta region (Holdenried and Morlan, 956: 375).

an Miguel Co.:

17. Cabra Spring, about 30 mi. N Santa Rosa (Bailey, 931: 112).

uay Co.:

18. San Jon (Howell, 1938: 127).

ocorro Co.:

19. 4 mi. E and 7 mi. N Bernardo (UNMCV); 2 mi. E nd 14 mi. S Belen (UNMCV).

20. 4 mi. E and 3½ mi. N Bernardo (UNMCV).

21. Base of Bear Spring Mts. (Bailey, 1931: 110).

22. San Augustin Plains, 12 mi. N Monica Spring Bailey, 1931: 110).

23. 10 mi. SE Magdalena (Bailey, 1931: 110).

24. 15 mi. SE Magdalena (Bailey, 1931: 110).

25. Rio Alamosa, 15 mi. N Ojo Caliente (Howell, 1938: 127).

26. Ojo Caliente, NE Chloride (Howell, 1938: 127).

Torrance Co.:

27. On road, 6 mi. E Tajique (Clothier, 1957b: 63).

Guadalupe Co.:

28. Santa Rosa (Bailey, 1931: 112).

Grant Co.:

29. Silver City (Bailey, 1931: 110).

30. Mangas Valley (Bailey, 1931: 111).

31. Faywood (Bailey, 1931: 110).

32. Hachita (Bailey, 1931: 110).

33. Apache (Howell, 1938: 126).

Sierra Co.:

34. Lake Valley (Bailey, 1931: 110).

Lincoln Co.:

35. Carrizozo (Bailey, 1931: 112).

36. NW foothills Capitan Mts. (Howell, 1938: 127).

37. N base Capitan Mts. (Bailey, 1931: 112).

38. Fort Stanton (Baird, 1859: 39).

e Baca Co.:

39. 8 mi. N Fort Sumner (Howell, 1938: 127).

40. 50 mi. N Roswell (Howell, 1938: 127).

41. 30 mi. S Fort Sumner (Bailey, 1938: 112).

idalgo Co.:

42. Between Lordsburg and Alkali Flat (Mearns, 1907: 334).

43. Between Lordsburg and Steins Pass (Mearns, 1907: 334).

44. Corner Monument 40 (Bailey, 1931: 110).

45. 5 mi. N Walnut Wells (UNMCV).

46. Walnut Wells (UNMCV).

47. Upper Animas Valley, 36 mi. S and 3 mi. W Animas (UNMCV).

48. T34S-R19 W, Sec. 7 (UNMCV).

49. Deer Creek (Howell, 1938: 126).

50. S end Playas Valley (Bailey, 1931: 110).

51. Dog Spring, Dog Mts. (Bailey, 1931: 110).

una Co.:

52. Deming (Mearns, 1907: 334).

53. 8 mi. E Deming (Howell, 1938: 127).

54. Near Carrizalillo Springs and Monument 33 (Mearns, 907: 332, 10).

55. Near Monument 21, near Columbus (Mearns, 1907: 32, 10).

56. Monument 15 (Bailey, 1931: 110).

ona Ana Co.:

57. Jornada Range Reserve (Aldous, 1935: 131).

58. Mesilla Park (Bailey, 1931: 110); Mesilla (Stone nd Rehn, 1903: 20).

67. Fort Thorn (Baird, 1857: 322).

Otero Co.:

59. 14 mi. W Tularosa (Benson, 1933: 23).

60. Tularosa (Benson, 1933: 23).

61. Alamogordo (Bailey, 1931: 110).

62. 10 mi. W Alamogordo (Benson, 1933: 23).

63. White Sands, 18 mi. SW Alamogordo (Benson, 1933: 23).

Chaves Co.:

64. 20 mi. N Roswell (Bailey, 1931: 112).

65. Roswell (Howell, 1938: 127).

Eddy Co.:

66. Near Carlsbad in Pecos Valley (Bailey, 1931: 112).

Not Located:

Whitemire Pass, Playas Valley (Howell, 1938: 126).

Warren (Howell, 1938: 126).

CITELLUS VARIEGATUS (Exleben)

Rock Squirrel

Citellus variegatus grammurus (Say).

Citellus variegatus juglans Bailey.

General remarks.--The rock squirrel is widespread in New Mexico, ranging from the Lower Sonoran to the Upper Sonoran and Transition Life Zones.

Sight records are marked by asterisks.

Subspecies ascribed to New Mexico.--Citellus variega-

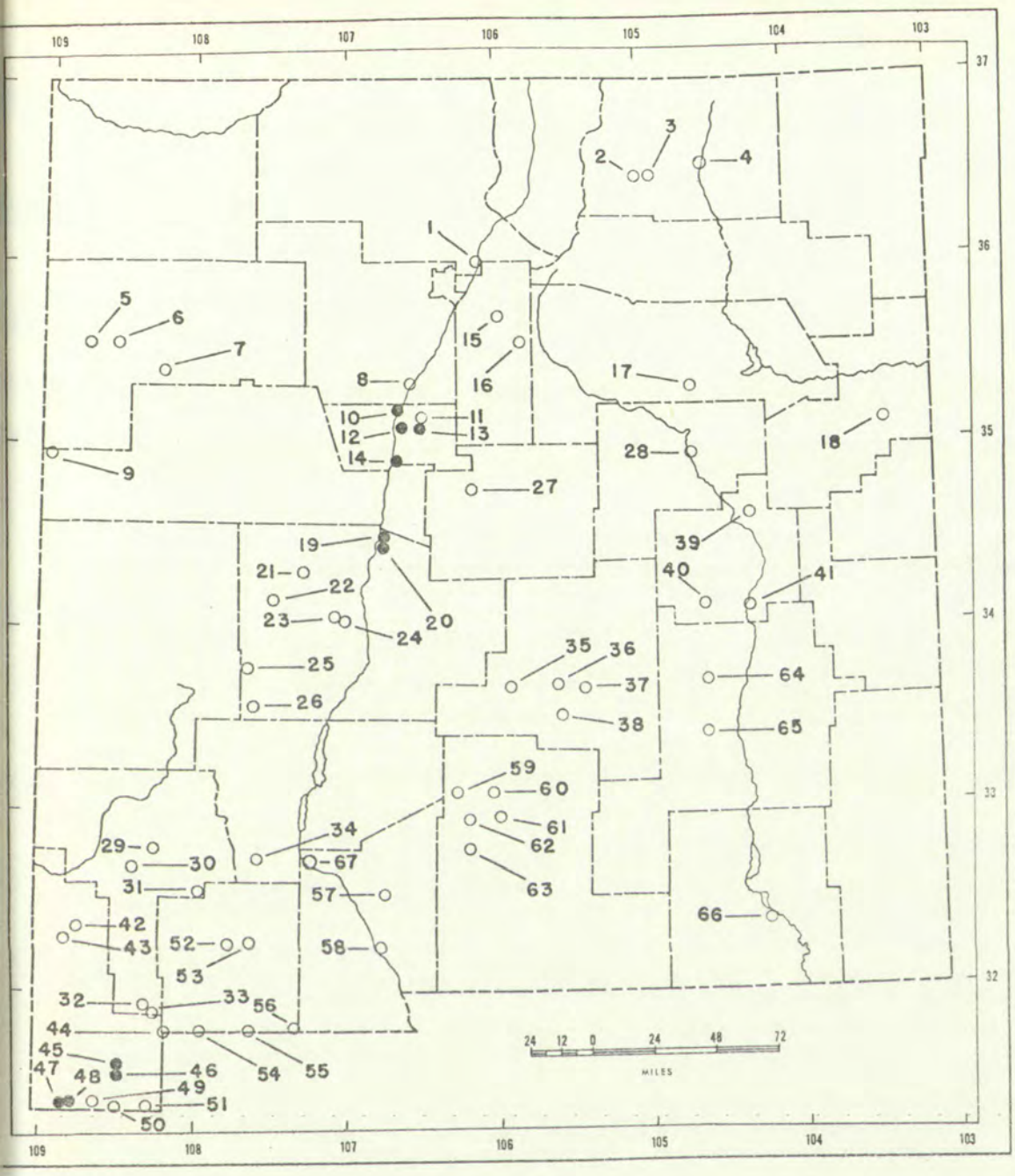

Fig. 34. Citellus spilosoma

us grammurus (Say); Citellus variegatus tularosae Benson.

Records of occurence (Fig. 35).--

an Juan Co.:

1. Junction San Juan and Los Pinos Rivers (UNMCV); os Pinos River, T30N-R7W, NE ¼ Sec. 7 (UNMCV); Los Pinos iver, T30N-R7W, NW ¼ Sec. 7 (UNMCV); Los Pinos River, 30N-R7W, NW ¼ Sec. 8 (UNMCV).

2. Chaco Canyon (Bailey, 1931: 107).

3. Chuska Mts. (Bailey, 1931: 107).

io Arriba Co.:

4. Chama River (Bailey, 1931: 107).

5. Rinconada (Howell, 1938: 145).

aos Co.:

6. Red River, 8200 ft. (Howell, 1938: 145).

7. Tres Piedras (Bailey, 1931: 105).

8. Hondo Canyon (Bailey, 1931: 105).

9. Arroyo Seco (Howell, 1938: 145).

10. Taos Creek (Bailey, 1931: 107).

11. Cienequilla (Bailey, 1931: 107).

olfax Co.:

12. Near Catskill (Bailey, 1931: 107).

13. Bear Canyon, 5 mi. NE Bell (Howell, 1938: 145).

14. Chico (Howell, 1938: 145).

15. Sweetwater, 15 mi. SW Springer (Howell, 1938: 45).

nion Co.:

16. Folsom (Howell, 1938: 145).

17. Sierra Grande (Howell, 1938: 145).

18. Apache Canyon, near Clayton (Bailey, 1931: 104).

cKinley Co.:

19. Gallup (Howell, 1938: 145).

20. Fort Wingate (Bailey, 1931: 106).

21. 1 mi. E McGaffey (UNMCV).

andoval Co.:

22. Capulin Ranger Station (Clothier, 1957b: 67); Chavez Springs, Sandia Mts. (Clothier, 1957b: 67); *Placias, Sandia Mts. (Clothier, 1957b: 67).

115. *Along hwy, San Pedro Valley (Clothier, 1957b: 7).

arding Co.:

23. Mosquero (Howell, 1938: 145).

alencia Co.:

24. Mirabal Spring, Mt. Taylor (Hooper, 1941a: 23).

25. Zuni Mts. (Howell, 1938: 145); Copperton (Howell, 938: 145).

26. Canyon Lobo Ranger Station (Hooper, 1941a: 23).

27. Near Cebolleta (Hooper, 1941a: 23).

28. Grants (Howell, 1938: 145).

29. Zuni Canyon (Hooper, 1941a: 23).

30. San Rafael (Bailey, 1931: 107).

31. 8 mi. SE Grants (Hooper, 1941a: 23).

32. 8 mi. SE Paxton (Hooper, 1941a: 23).

33. 11 mi. SSE Grants (Hooper, 1941a: 23).

34. Point of Malpais, T6N-R11W, Sec. 2 (Hooper, 1941a:).

35. Rio Puerco (Howell, 1938: 145).

rnalillo Co.:

36. Juan Tabo, Sandia Mts. (Clothier, 1957b: 66); aral Canyon, Sandia Mts. (Clothier, 1957b: 67).

37. 5½ mi. N Albuquerque on Rio Grande (UNMCV).

38. Albuquerque (UNMCV).

39. Tree Springs, 8 mi. N and ½ mi. W Tijeras (UNMCV); unction Cole Springs Rd. and road to Canoncito, Sandia s. (Clothier, 1957b: 67).

40. Along hwy, ½ mi. S San Antonio (Clothier, 1957b:).

41. 3 mi. S Tijeras (UNMCV); *Junction Hwy 10 and road Cedro Peak (Clothier, 1957b: 67).

42. Along hwy, 1 mi. S Escabosa, Manzano Mts. lothier, 1957b: 67).

110. *Embudo Canyon, Sandia Mts. (Clothier, 1957b:).

111. *Sabino Canyon, Manzano Mts. (Clothier, 1957b:); Juan Tomas Canyon, Manzano Mts. (Clothier, 1957b: 67).

anta Fe Co.:

43. Santa Fe area (Holdenried and Morlan, 1956: 375).

44. San Pedro (Bailey, 1931: 105).

an Miguel Co.:

45. Gallinas Creek, Sangre de Cristo Mts., T17N-R14E, Sec. 13 (Koster and Clothier, 1952: 251).

46. Pecos (Howell, 1938: 145).

Catron Co.:

47. East Datil Mts. (Bailey, 1931: 107).

48. West Datil Mts. (Bailey, 1931: 107).

49. Luna (Howell, 1938: 145).

50. Reserve (Bailey, 1931: 109).

51. Alma (Bailey, 1931: 109).

52. Mogollon Mts. (Bailey, 1931: 108).

53. East Fork Gila River at site of Old Fort Vincent (Bailey, 1931: 108).

54. Glenwood (Bailey, 1931: 108).

55. Diamond Creek Canyon (Bailey, 1931: 109).

Socorro Co.:

56. Riley (Howell, 1938: 145).

57. 11 mi. S and 4 mi. E Magdalena, 2 mi. E South Baldy, Magdalena Mts. (UNMCV).

58. Springtime Canyon, San Mateo Mts., 38 mi. S and 6 mi. W Magdalena (UNMCV).

Torrance Co.:

59. Red Canyon, 4 mi. W and 1 mi. S Manzano (UNMCV).

112. *Tajique Ranger Station, Manzano Mts. (Clothier, 1957b: 67); *Hwy 10, between Tijeras and New Canyon (Clothier, 1957b: 67).

113. *Jaramillo Canyon, Manzano Mts. (Clothier, 1957b: 67).

114. *Abo Canyon, Manzano Mts. (Clothier, 1957b: 67).

uadalupe Co.:

60. Between Cuervo and Montoya (Bailey, 1931: 106).

61. Santa Rosa (Bailey, 1931: 106).

rant Co.:

62. Gila (Bailey, 1931: 108); Cliff (Bailey, 1931: 109).

63. Head of Mimbres (Bailey, 1931: 108).

64. Burro Mts. (Bailey, 1931: 108).

65. Coppermines (Baird, 1859: 38).

66. 2 mi. S San Lorenzo (UNMCV).

67. Redrock (Bailey, 1931: 108).

68. Hachita (Howell, 1938: 145).

69. Apache (Howell, 1938: 145).

ierra Co.:

70. 6 mi. S Chloride (Bailey, 1931: 109).

71. Cuchillo (Bailey, 1931: 106).

72. Los Palomas (Bailey, 1931: 106).

73. Kingston (Bailey, 1931: 106).

74. Lake Valley (Bailey, 1931: 107).

ncoln Co.:

75. Red Cloud Canyon, Gallinas Mts., 3 mi. S and 10 . W Corona (UNMCV).

76. 14 mi. N Carrizozo (Howell, 1938: 145).

77. Foothills of Jicarilla Mts. (Bailey, 1931: 105).

78. French's Ranch, 5400 ft., 12 mi. NW Carrizozo (Benson, 1932: 335); About 12 mi. NW Carrizozo by road (Bradt, 1932: 325).

79. Malpais 3½ mi. W Carrizozo (Benson, 1932: 335).

80. Capitan Mts. (Bailey, 1931: 105).

81. About 5 mi. W Oscuro (Blair, 1941: 220).

82. Fort Stanton (Baird, 1857: 311).

83. Lincoln (Howell, 1938: 145).

84. Rio Ruidoso (Stone and Rehn, 1903: 21); Ruidoso (Howell, 1938: 145).

85. Hondo River, White Mts. (Howell, 1938: 145).

Hidalgo Co.:

86. Monument 40, US-Mex. Boundary (Mearns, 1907: 320).

87. Animas Mts., Indian Creek, T31S-R19W, Sec. 16 (UNMCV).

88. Summit of Hachita Grande (Mearns, 1907: 320).

89. Guadalupe Canyon, 31 mi. S Rodeo (UNMCV).

90. Cloverdale (Howell, 1938: 145).

91. Emory Peak, Dog Mts. (Mearns, 1907: 320).

92. San Luis Mts. (Howell, 1938: 145).

93. Whitewater Canyon, San Luis Mts., 12 mi. W Antelope Wells (UNMCV).

Luna Co.:

94. Florida Mts. (Howell, 1938: 145).

Dona Ana Co.:

95. Garfield (Bailey, 1931: 106).

96. San Andres Mts. (Benson, 1933: 23).

97. Organ Mts. E Mesilla Park (Bailey, 1931: 106).

98. Chamberino (J. A. Allen, 1903: 588).

Otero Co.:

99. Malpais Spring, 14 mi. W Three Rivers (Benson, 1932: 335).

100. Mescalero (Howell, 1938: 145).

101. Tularosa (Bailey, 1931: 105).

102. La Luz Canyon, Sacramento Mts. (Bradley, 1929: 169).

103. 1 mi. S Cloudcroft (UNMCV).

104. Highrolls (Howell, 1938: 145); About ½ mi. SW Highrolls (Dice, 1930: 17).

105. Near Alamogordo (Benson, 1933: 23).

Eddy Co.:

106. Carlsbad (Howell, 1938: 145).

107. Dark Canyon, W Carlsbad (Bailey, 1931: 105).

108. Carlsbad Cave (Howell, 1938: 145); Walnut Canyon (Bailey, 1928: 67).

109. Guadalupe Mts. (Bailey, 1931: 106).

CITELLUS LATERALIS (Say)

Golden-mantled Ground Squirrel

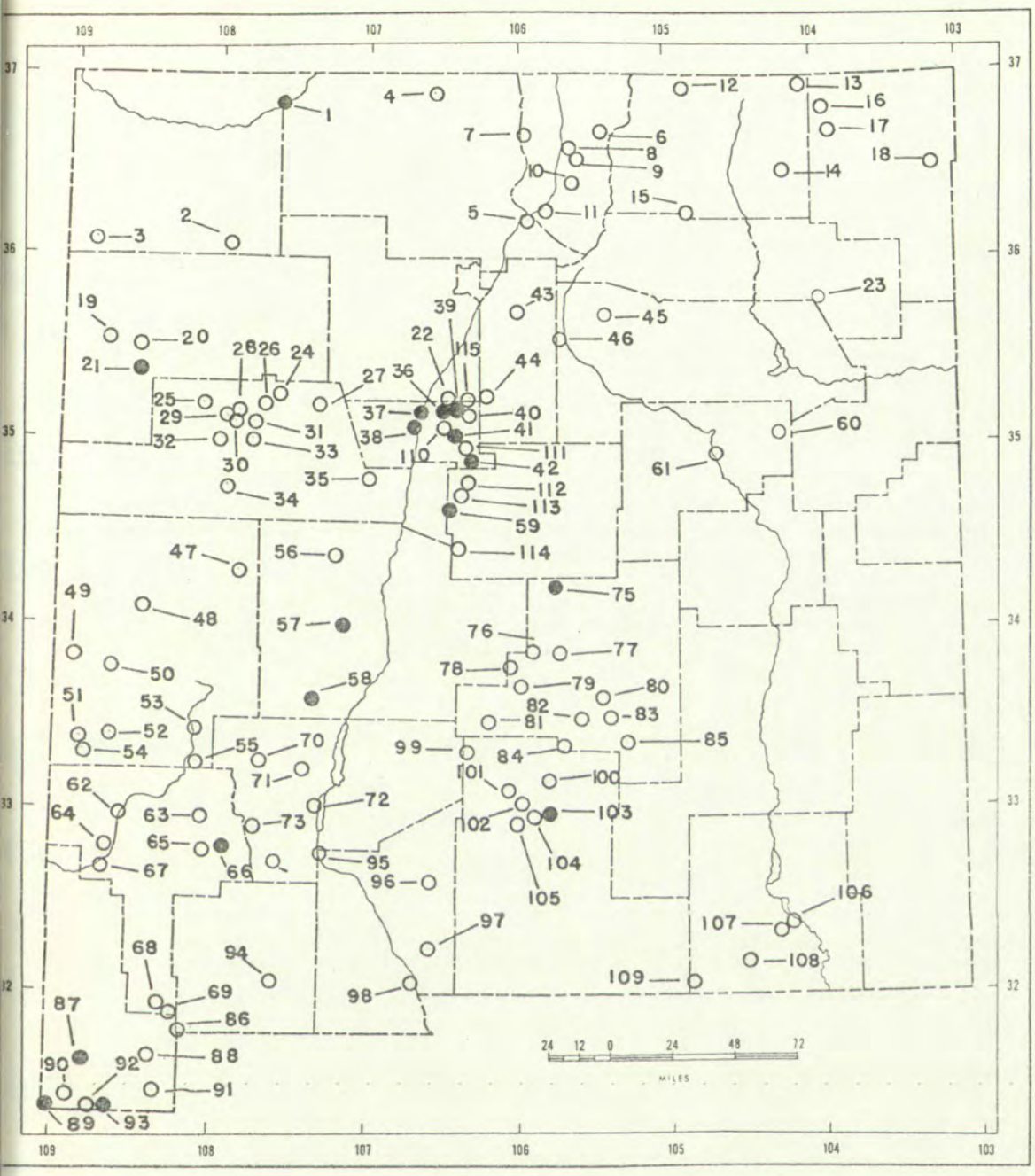

Fig. 35. Citellus variegatus

Callospermophilus lateralis lateralis (Say).

Callospermophilus lateralis arizonensis Bailey.

General remarks.--In New Mexico, the golden-mantled ground squirrel is a mammal of the Transition and Canadian Life Zones.

Subspecies ascribed to New Mexico.--Citellus lateralis lateralis (Say); Citellus lateralis arizonensis (Bailey).

Records of occurence (Fig. 36).--

San Juan Co.:

1. Washington Pass, Chuska Mts., 6 mi. E Crystal (UNMCV).

Rio Arriba Co.:

2. 10½ mi. E Chama, East Fork Rio Brazos, 10,400 ft. (UNMCV).

3. Tierra Amarilla (Howell, 1938: 194).

4. 8 mi. W Hopewell (Howell, 1938: 194).

5. Gallinas Mts. (Bailey, 1931: 99).

Taos Co.:

6. Costilla Pass (Bailey, 1931: 99); Costilla Mts. (Bailey, 1931: 99).

7. Red River (Howell, 1938: 194).

8. Goose Lake, 12,000 ft., 7 mi. S and 1 mi. W Red River (UNMCV).

9. Tres Piedras (Howell, 1938: 194).

10. Near Taos (Seton, 1929: 218).

11. 3 mi. below Tres Ritos (UNMCV).

12. 2 mi. NE Tres Ritos, Rio la Junta (UNMCV); 4 mi. NE Tres Ritos (UNMCV).

Colfax Co.:

13. Catskill (Howell, 1938: 194); Long Canyon, 3 mi. N Catskill (Howell, 1938: 194).

14. Baldy Mtn. (Howell, 1938: 194).

15. Cimarron (Howell, 1938: 194).

16. Rayado Canyon (Bailey, 1931: 101).

Sandoval Co.:

17. 15 mi. E and 7½ mi. S Cuba, Telephone Canyon (UNMCV).

18. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

Mora Co.:

19. Coyote Creek, 8400 ft. (Howell, 1938: 194).

20. Halls Peak (Bailey, 1931: 99).

21. Pecos Baldy (Bailey, 1931: 99).

Santa Fe Co.:

22. Santa Fe Canyon (Howell, 1938: 194); Santa Fe Ski Basin (Holdenried and Morlan, 1956: 375).

23. Hondo Canyon (Howell, 1938: 194).

San Miguel Co.:

24. Willis, near Cowles (Howell, 1938: 194); 1 mi. NW Cowles (UNMCV).

25. 10 mi. N Pecos (Howell, 1938: 194).

Catron Co.:

26. Luna (Howell, 1938: 197); Luna Valley (Bailey,

1931: 102).

27. Tularosa Mts. (Bailey, 1931: 103).

28. Willow Creek, Mogollon Mts., 10 mi. E Mogollon (UNMCV).

Grant Co.:

29. Big Rocky Creek, Mimbres Mts. (Howell, 1938: 197).

30. Head of Mimbres River (Howell, 1938: 197).

31. Iron Canyon, Black Range, 15 mi. E and 6 mi. N Santa Rita (UNMCV).

32. 23 mi. S Wall Lake, by road (UNMCV); 21 mi. S Wall Lake, by road (UNMCV); 31.2 mi. N San Lorenzo, by road (UNMCV); 20 mi. S Wall Lake, by road (UNMCV).

CYNOMYS LUDOVICIANUS (Ord)

Black-tailed Prairie Dog

Cynomys ludovicianus ludovicianus (Ord).

Cynomys ludovicianus arizonensis Mearns.

General remarks.--In writing of the black-tailed prairie dog, Bailey (1931: 120) says, "This species occupies mainly the Upper Sonoran Zone, but crowds it to the limits or slightly beyond, in places into the edges of both the Lower Sonoran and Transition Zones."

Sight records are marked with asterisks.

Subspecies ascribed to New Mexico.--Cynomys ludovicianus ludovicianus (Ord); Cynomys ludovicianus arizonensis Mearns.

Records of occurence (Fig. 37).--

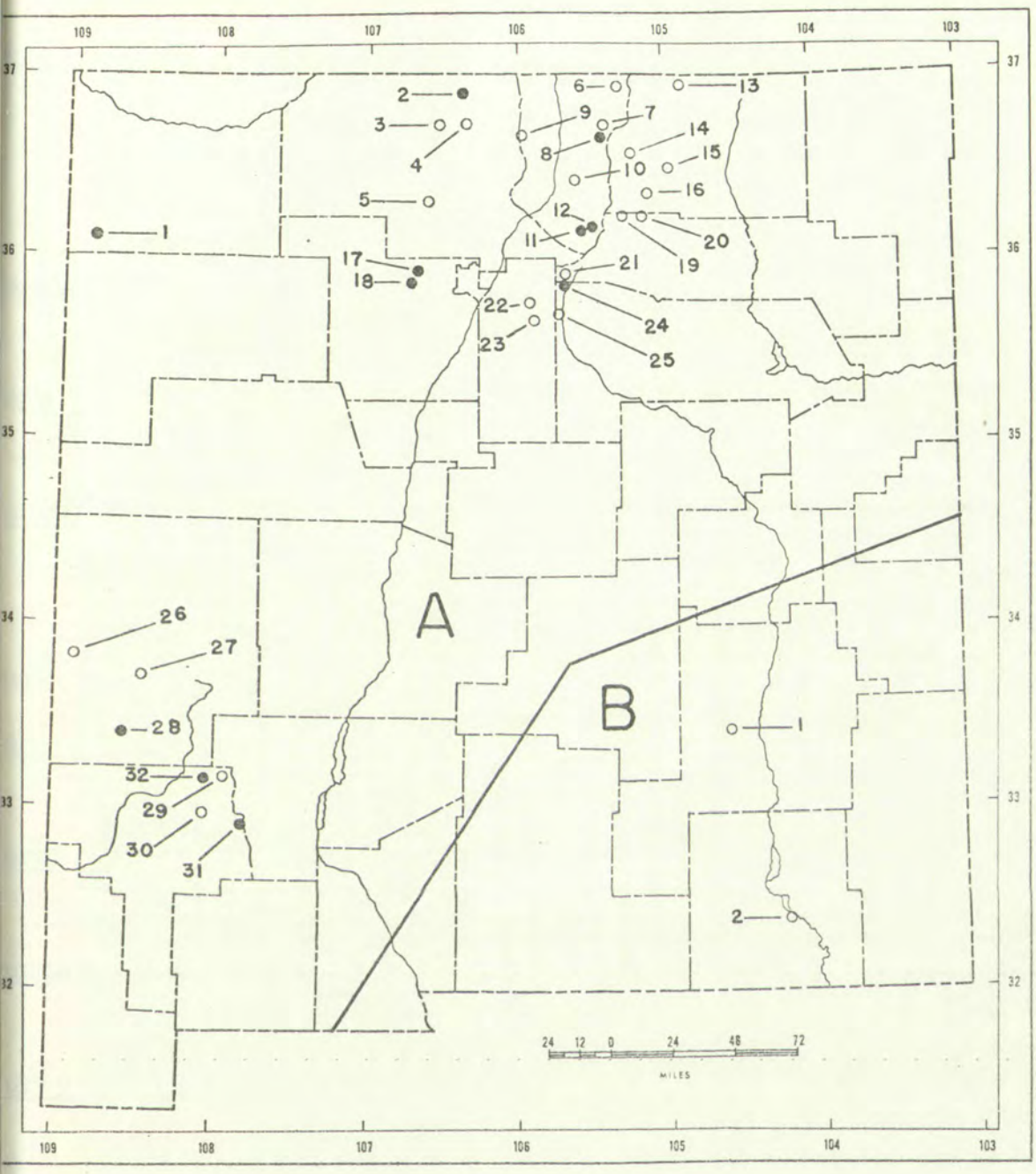

Fig. 36. A. Citellus lateralis

B. Citellus mexicanus

olfax Co.:

1. Koehler Junction (Hollister, 1916: 18).

2. Near Cimarron (Hill, 1942: 79).

3. Chico Springs (Hollister, 1916: 18).

nion Co.:

4. Near Clayton (Seton, 1929: 276).

ora Co.:

5. *Near Wagon Mound (Hill, 1942: 79).

anta Fe Co.:

6. San Pedro (Hollister, 1916: 20).

7. Estancia Valley, about 20 mi. E Sandia Park

Clothier, 1957b: 74).

an Miguel Co.:

8. Pecos (Hollister, 1916: 18).

orrance Co.:

9. E slopes Manzano Mts. (Bailey, 1931: 123).

uadalupe Co.:

10. Santa Rosa (Hollister, 1916: 20).

urry Co.:

11. 18 mi. NW Melrose, in sand hills (UNMCV).

rant Co.:

12. Cactus Flat, 20 mi. N Cliff (Hollister, 1916: 20).

13. Duck Creek Valley (Bailey, 1931: 124).

14. Gila (Hollister, 1916: 20); Cliff (Hollister,

916: 20).

15. Silver City (Hollister, 1916: 20); about 3 mi. S

Silver City (Bailey, 1931: 123); On the east, south, and west of Silver City (Bailey, 1931: 124).

16. Faywood (Hollister, 1916: 20).

17. Between Gage and Separ (Mearns, 1907: 344).

18. Hachita (Hollister, 1916: 20).

Sierra Co.:

19. 8 mi. N Lake Valley (Bailey, 1931: 124).

20. Lake Valley (Hollister, 1916: 20).

21. Aleman, Jornada del Muerto (Mearns, 1907: 344).

Lincoln Co.:

22. Capitan Mts. (Hollister, 1916: 20); Mesa S Capitan Mts. (Bailey, 1931: 123).

Roosevelt Co.:

23. Portales (Bailey, 1931: 123).

Hidalgo Co.:

24. Playas Valley (Hollister, 1916: 20).

25. Cloverdale (Hollister, 1916: 20).

26. Lang's Ranch, Animas Valley (Mearns, 1907: 342); Animas Valley near Monument 66 (Mearns, 1907: 341).

27. Dog Spring (Hollister, 1916: 20).

Dona Ana Co.:

28. Both slopes San Andres Mts. (Bailey, 1931: 123).

29. Organ City (Hollister, 1916: 20).

Otero Co.:

30. White Mts. (Bailey, 1931: 123).

31. 1 mi. NW Cerrito Tularosa (Benson, 1933: 24); 12

i. NW Alamogordo (Benson, 1933: 24).

32. About 1 mi. N Alamogordo (Dice, 1930: 22).

33. Sacramento Mts. (Bailey, 1931: 123).

naves Co.:

34. Roswell (Hollister, 1916: 20).

ddy Co.:

35. Carlsbad (Bailey, 1931: 123).

36. 8 mi. SW Carlsbad (Hall and Kelson, 1959: 365).

37. Queen (Hollister, 1916: 20).

38. Along Black River Valley, 2 mi. S Carlsbad Cavern Bailey, 1928: 68).

ea Co.:

39. 35 mi. E Carlsbad (Bailey, 1931: 124).

ot Located:

Lone Mtn. (Hollister, 1916: 20).

A few mi. E Tres Hermanos Buttes, Tularosa Valley Benson, 1933: 24).

CYNOMYS GUNNISONI (Baird)

Gunnison's Prairie Dog

Cynomys gunnisoni gunnisoni (Baird).

Cynomys gunnisoni zuniensis Hollister.

General remarks.--New Mexican members of this species ve been found in the Upper Sonoran, Transition, and nadian Life Zones. The extent of their range in the tter is apparently small, however.

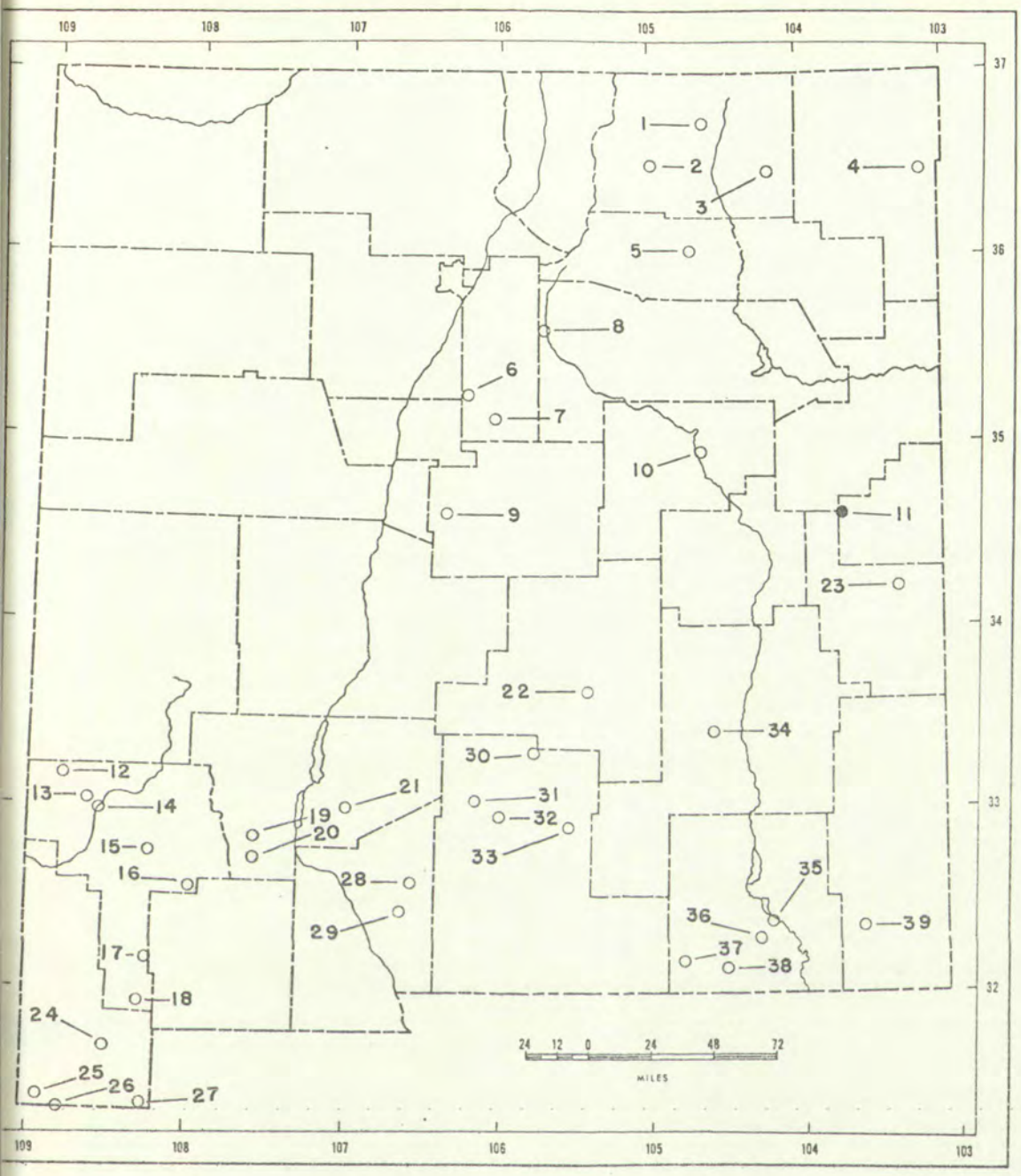

Fig. 37. Cynomys ludovicianus

Subspecies ascribed to New Mexico.--Cynomys gunnisoni unnisoni (Baird); Cynomys gunnisoni zuniensis Hollister.

Records of occurence (Fig. 38).--

an Juan Co.:

1. Laplata (Bailey, 1931: 130-131).
2. N side of valley at Fruitland (Bailey, 1931: 129).
3. Chuska Mts. (Hollister, 1916: 34).

io Arriba Co.:

4. Chama (Bailey, 1931: 126).
5. La Jara Lake (Hollister, 1916: 31).
6. Valley below Tierra Amarilla (Bailey, 1931: 126).
7. E slope San Juan Range (Bailey, 1931: 126).
8. Gallinas Mts. region (Bailey, 1931: 126).
9. 4 mi. N and 6 mi. E Coyote (UNMCV).
10. Coyote (Bailey, 1931: 126).
11. Near Espanola (Bailey, 1931: 126).

Taos Co.:

12. Lower Costilla Valley (Bailey, 1931: 125).
13. Summit of Costilla Pass (Bailey, 1931: 125); Upper Costilla River Valley (Bailey, 1931: 125).
14. Along Comanche Creek (Bailey, 1931: 125).
15. Tres Piedras (Bailey, 1931: 126).
16. Rio Grande Valley about Taos (Bailey, 1931: 126).

Colfax Co.:

17. Moreno Valley (Bailey, 1931: 125).
18. 16 mi. SW Cimarron (Hill, 1942: 79).

19. Around Black Lake (Bailey, 1931: 125).

McKinley Co.:

20. Wingate (Hollister, 1916: 34).

21. Thoreau (Hollister, 1916: 34).

22. Valley surrounding Zuni Pueblo (Bailey, 1931: 128).

Sandoval Co.:

23. Jemez Mts. (Bailey, 1931: 125).

24. Sandia Pueblo (UNMCV).

Mora Co.:

25. Down the Guadalupita on Coyote Creek (Bailey, 1931: 125).

Valencia Co.:

26. Zuni Mts. (Bailey, 1931: 128).

27. Horace Mesa, 1½ mi. S Canyon Lobo Ranger Station (Hooper, 1941a: 24).

28. Ojo Caliente (Hollister, 1916: 34).

29. Agua Fria, 15 mi. SW Grants (Hooper, 1941a: 24).

30. San Rafael (Hollister, 1916: 34).

31. Laguna (Bailey, 1931: 128).

32. Acoma (Hollister, 1916: 34).

33. Point of Malpais, T6N-R11W, Sec. 2 (Hooper, 1941a: 24).

34. Puerco Valley (Bailey, 1931: 128).

Bernalillo Co.:

35. 1 mi. N Albuquerque (UNMCV); Albuquerque (Hol-

ister, 1916: 34).

36. Foothills of Sandia E slope (Clothier, 1957b: 5).

anta Fe Co.:

37. Santa Fe (Holdenried and Morlan, 1956: 375).

38. 7 mi. S Santa Fe (Univ. Kansas Mus. Nat. Hist. pecimen).

39. Lamy-Glorieta region (Holdenried and Morlan, 956: 375).

40. San Pedro (Hollister, 1916: 34).

41. 12 mi. N Otto (UNMCV).

an Miguel Co.:

42. Near Pecos on Upper Pecos River (Bailey, 1931: 27).

atron Co.:

43. Quemado Valley (Bailey, 1931: 128).

44. Datil Mts. (Bailey, 1931: 128).

45. Near Reserve, 8000 ft. (Bailey, 1931: 128).

46. N part Mogollon Mts. (Bailey, 1931: 128).

ocorro Co.:

47. San Augustin Plain (Bailey, 1931: 128).

48. Magdalena (Hollister, 1916: 34).

49. San Mateo Mts. (Hollister, 1916: 34).

50. Rio Alamosa (Hollister, 1916: 34).

orrance Co.:

51. 9 mi. NW Estancia (UNMCV).

52. ½ mi. N Manzano (UNMCV).

ierra Co.:

53. Chloride (Hall and Kelson, 1959: 368); Fairview Hollister, 1916: 34).

ot Located:

Liberty (Hollister, 1916: 34).

Navajo (Bailey, 1931: 126).

SCIURUS ABERTI Woodhouse

Abert's Squirrel

Sciurus aberti aberti Woodhouse.

Sciurus aberti mimus Merriam.

General remarks.--Abert's squirrel is rather closely estricted to the ponderosa pine forests of the Transition one in New Mexico. In some areas, it is to be found also n the lower portions of the Canadian Life Zone.

This squirrel is said to have been introduced into he Sandia Mountains and has been considered to be absent rom the Manzano Mountains (Ivey, 1957: 495). However, wo specimens and several sight records now attest to the resence of this squirrel in the Manzano Mountains. hether these squirrels have always been present in this ange, have been introduced, or have traversed the pinyon-uniper barrier separating the Manzano Mountains from the andia Mountains to the north is unknown.

Localities which have been marked with an asterisk n the records of occurence are based on sight records.

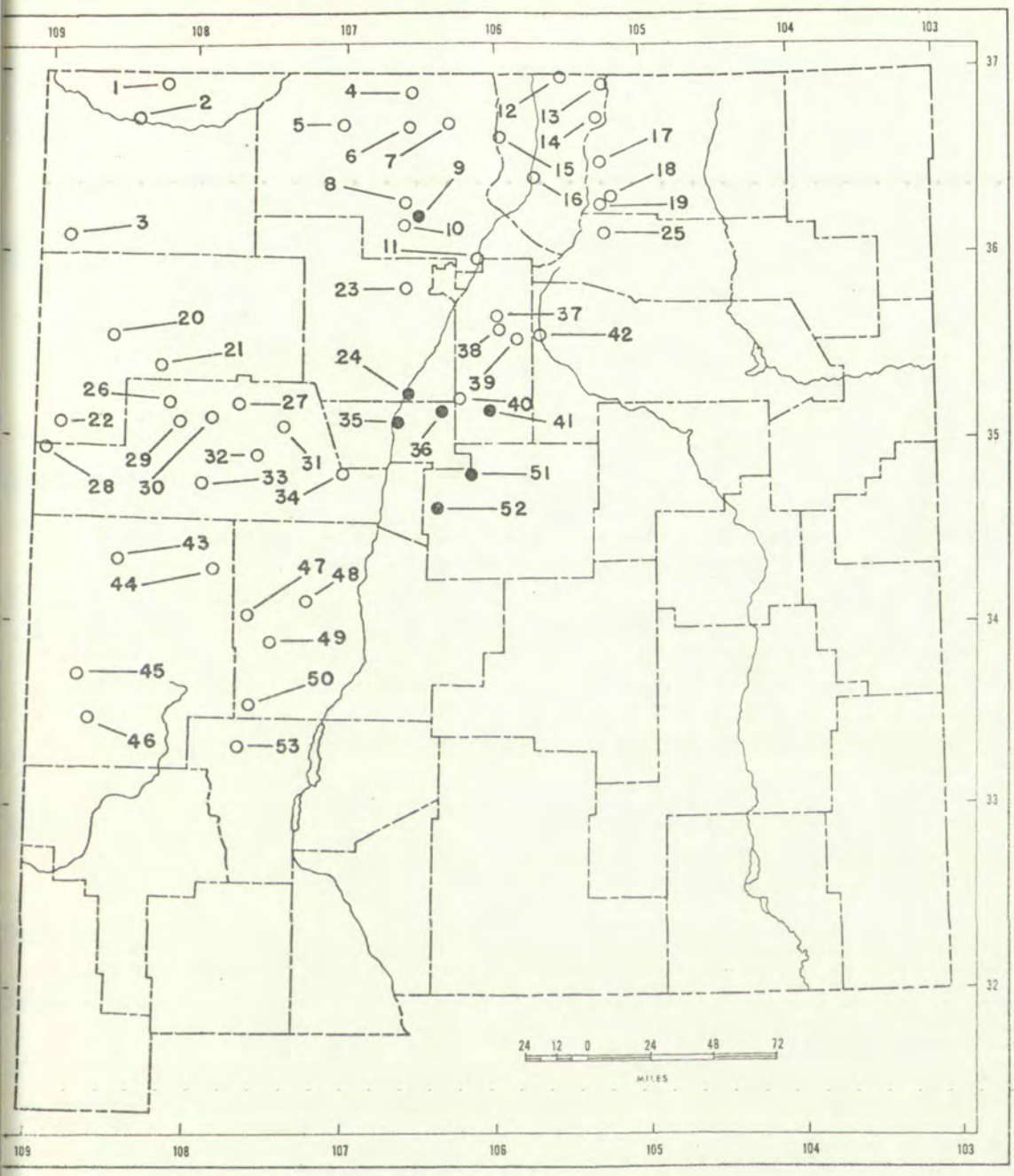

Fig. 38. Cynomys gunnisoni

Subspecies ascribed to New Mexico.--Sciurus aberti aberti Woodhouse; Sciurus aberti chuscensis Goldman; Sciurus aberti mimus Merriam.

Records of occurence (Fig. 39).--

Rio Arriba Co.:

2. Jicarilla Mts. (Bailey, 1931: 72).

3. San Juan Mts. (Bailey, 1931: 72).

4. Gallinas Range (Bailey, 1931: 72).

Taos Co.:

5. W side Taos Mts. (Bailey, 1931: 72).

Colfax Co.:

6. Moreno Valley (Bailey, 1931: 72).

7. Cimarroncito Camp, 14 mi. N Halls Peak (Hill, 1942: 78).

McKinley Co.:

8. Tohatchi Mtn. (Hall and Kelson, 1959: 385); Chuska Mts., 9000 ft. (Goldman, 1931: 133).

Sandoval Co.:

9. 6½ mi. E Cuba, 1.1 mi. S Hwy 126 (UNMCV).

10. 15 mi. N Jemez Springs (UNMCV).

11. 2 mi. S Seven-Springs Hatchery (UNMCV).

12. *Osha Spring, 9000 ft., Sandia Mts. (Clothier, 1957b: 85); *Above Las Huertas Picnic Ground, Sandia Mts. (Clothier, 1957b: 85); *Along ridge N Sandia Crest, Sandia Mts. (Clothier, 1957b: 85); *Capulin Ranger Station, Sandia Mts. (Clothier, 1957b: 85).

ora Co.:

13. Halls Peak (Bailey, 1931: 72).

14. Pecos Mts. (Bailey, 1931: 72).

alencia Co.:

15. Zuni Range (Bailey, 1931: 72).

16. Gooseberry Spring, Mt. Taylor (UNMCV); Mirabal pring, Mt. Taylor (Hooper, 1941a, 26); Ranchos Vallejos, mi. SE Mirabal Spring (Hooper, 1941a: 26).

17. 6 mi. NE summit Mt. Taylor (Hooper, 1941a: 26).

18. Flagpole Crater, 17 mi. SW Grants (Hooper, 1941a: 6).

19. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 6).

20. Cebolleta Mesa (Hooper, 1941a: 26).

ernalillo Co.:

21. *Sandia Crest (Clothier, 1957b: 85); *Tree Springs, andia Mts. (Clothier, 1957b: 85); *Doc Long Picnic Ground, andia Mts. (Clothier, 1957b: 85-86); *Bear Canyon, just elow crest rim, Sandia Mts. (Clothier, 1957b: 86); *Kiwanis oint, Sandia Mts. (Clothier, 1957b: 86); *Cienega Springs, andia Mts. (Clothier, 1957b: 86); *Sandia Park, Sandia ts. (Clothier, 1957b: 86); *Cole Springs, Sandia Mts. Clothier, 1957b: 86); *Road below Cole Springs, 7000 ft. Clothier, 1957b: 86).

22. Ski Run Hwy, 3 mi. N Tijeras, Sandia Mts. Clothier, 1957b: 85).

anta Fe Co.:

23. Santa Fe (Coues and Yarrow, 1875: 115).

an Miguel Co.:

24. Las Vegas (Hall and Kelson, 1959: 385).

atron Co.:

25. 10 mi. N and 5 mi. W Datil, Datil Mts. (UNMCV).

26. Datil Range (Bailey, 1931: 69).

27. Frisco Range (Bailey, 1931: 69); 7 mi. S and 4½ i. E Luna (UNMCV).

28. Willow Creek, Mogollon Mts., 10 mi. E Mogollon UNMCV).

29. E base Mogollon Peaks (Bailey, 1931: 69).

ocorro Co.:

30. Mill Canyon, Magdalena Mts., T3S-R4W, Sec. 36 UNMCV).

31. Baldy Crossing, Magdalena Mts. (UNMCV); 1¼ mi. W nd ½ mi. S Baldy Crossing, Magdalena Mts. (UNMCV).

32. Hardy Spring, Magdalena Mts. (UNMCV).

33. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 9 3/4 mi. S Magdalena (UNMCV); Bear Trap Canyon, San ateo Mts., 20 mi. W and 22 mi. S Magdalena (UNMCV).

34. Springtime Canyon, San Mateo Mts. (UNMCV).

orrance Co.:

35. Red Canyon, 4 mi. W and 1 mi. S Manzano (UNMCV).

rant Co.:

36. 24 mi. S Wall Lake, Black Range (UNMCV); 22 mi. S

Vall Lake, Black Range (UNMCV).

37. Head of Rio Mimbres (Bailey, 1931: 69).

38. Mts. just N Silver City (Bailey, 1931: 69); Head of Meadow Creek, about 8500 ft., Pinos Altos Mts. (Hall and Kelson, 1959: 384).

39. Coppermines (Bailey, 1931: 68).

40. Iron Canyon, Black Range, 15 mi. E and 6 mi. N Santa Rita (UNMCV).

Sierra Co.:

41. 5 mi. W Chloride, Black Range (UNMCV).

42. About 4 mi. SE Kingston, 9000 ft. (Hall and Kelson, 1959: 384).

Not Located:

3 mi. E Rockwall, State Rd. 3, Taos Co. (UNMCV).

SCIURUS NIGER Linnaeus

Fox Squirrel

General remarks.--At present, nothing is known about the fox squirrel in New Mexico beyond the fact of its occurence at Roswell. Subspecific determination has not been made nor is it known whether the population is natural or introduced.

Records of occurence (Not mapped).--

Chaves Co.:

Roswell (UNMCV).

SCIURUS ARIZONENSIS Coues

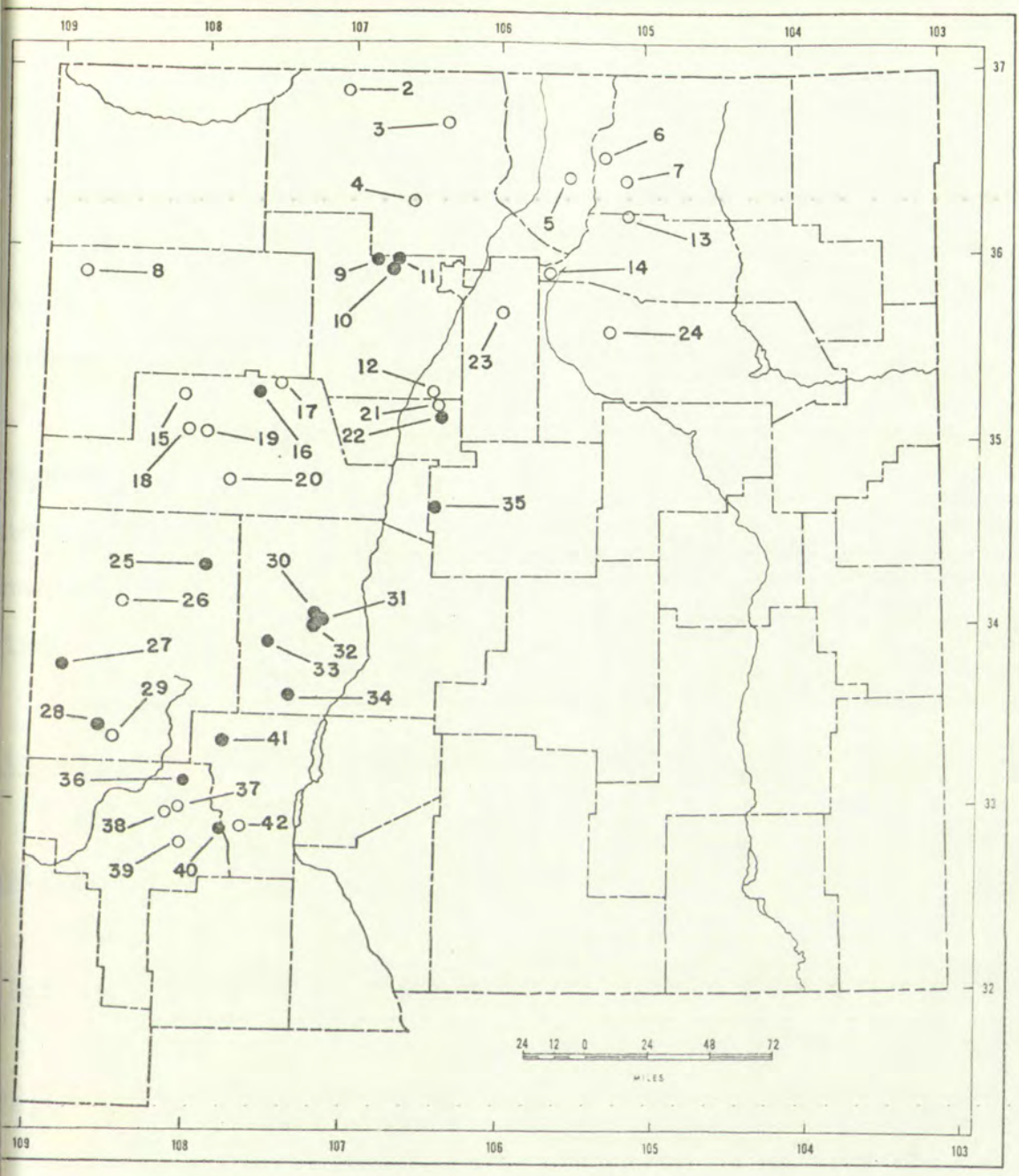

Fig. 39. Sciurus aberti

Arizona Gray Squirrel

Sciurus arizonensis arizonensis Coues.

General remarks.--The Arizona gray squirrel enters ew Mexico in the riparian canyon habitat of the south-estern portion of the state. According to Bailey (1931: 4), "Their range corresponds in part with that of the rizona black walnut (Juglans major), but stops short of he open valley country." Little has been added to our nowledge of the ecology or distribution in New Mexico ince Bailey's work on the mammals of the state.

Subspecies ascribed to New Mexico.--Sciurus arizonen-is arizonensis Coues.

Records of occurence (Fig. 40).--

atron Co.:

1. Headwaters of San Francisco River near Frisco Bailey, 1931: 74).

2. Negrito Creek, 10 mi. E Frisco (Bailey, 1931: 74).

3. Glenwood, near mouth Whitewater Creek (Bailey, 1931: 74).

TAMIASCIURUS HUDSONICUS (Erxleben)

Red Squirrel

Sciurus fremonti fremonti Audubon and Bachman.

Sciurus fremonti mogollonensis Mearns.

Sciurus fremonti lychnuchus Rehn.

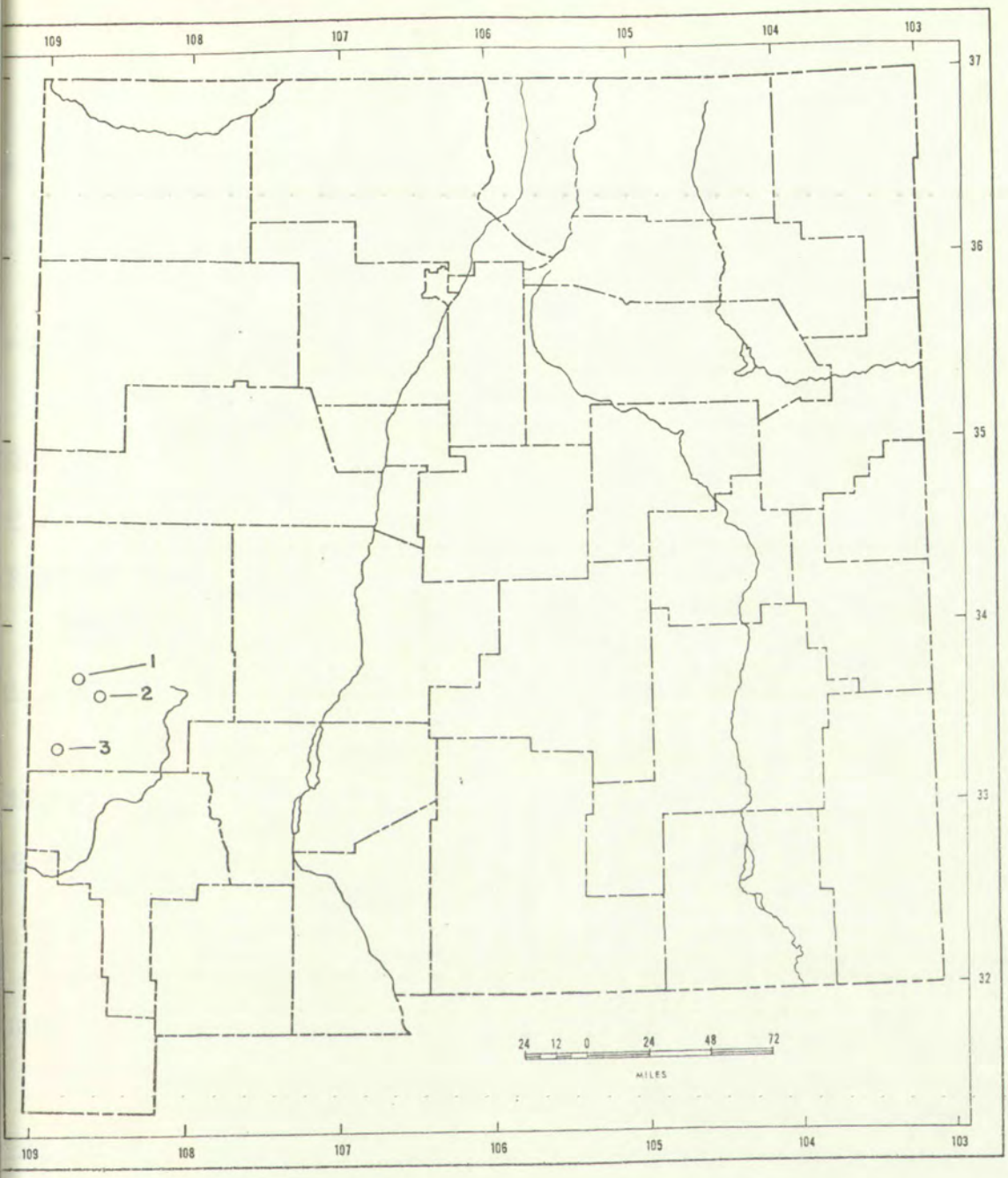

Fig. 40. Sciurus arizonensis

General remarks.--The red squirrel in New Mexico is sentially a boreal mammal of the spruce-fir forests of e Canadian and Hudsonian Life Zones.

Record stations that are based on sight records have en marked with asterisks.

Subspecies ascribed to New Mexico.--Tamiasciurus dsonicus mogollonensis (Mearns); Tamiasciurus hudsoni- s lychnuchus (Stone and Rehn); Tamiasciurus hudsonicus emonti (Audubon and Bachman).

Records of occurence (Fig. 41).--

n Juan Co.:

1. Washington Pass, Chuska Mts., 6 mi. E Crystal UNMCV).

o Arriba Co.:

2. Chama, San Juan Mts. (Bailey, 1931: 75).

3. 10½ mi. E Chama, East Fork Rio Brazos, 10,000 ft. UNMCV).

4. Gallinas Mts. (Bailey, 1931: 76).

aos Co.:

5. Costilla Pass (Warren, 1912: 7).

6. Bear Canyon, 6 mi. W Red River (UNMCV).

7. Goose Creek, 4 mi. S and 2 mi. W Red River (UNMCV).

8. Taos (Seton, 1929: 165).

9. 4 mi. NE Tres Ritos (UNMCV); 2 mi. NE Tres Ritos, io la Junta (UNMCV).

olfax Co.:

10. Bear Canyon (Warren, 1912: 7).

11. Rayado Canyon (J. A. Allen, 1898: 291).

andoval Co.:

12. 6½ mi. E Cuba, Blue Bird Camp Ground, 1 mi. S wy 126 (UNMCV); Bluebird Mesa, 5 mi. E and 3 mi. S Cuba, 500 ft. (UNMCV).

13. 11 mi. E Cuba, American Creek (UNMCV).

14. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

15. *Osha Spring, 9000 ft., Sandia Mts. (Clothier, 957b: 82); *Capulin Campground, 8900 ft., Sandia Mts. Clothier, 1957b: 82).

Iora Co.:

16. Halls Peak (J. A. Allen, 1898: 291).

alencia Co.:

17. El Moro, Zuni Mts. (Bailey, 1931: 76).

18. ½ mi. NE La Mosca Peak, Mt. Taylor (UNMCV); 1 mi. NE La Mosca Lookout, Mt. Taylor Range (UNMCV).

Bernalillo Co.:

19. *Along Sandia Crest, 10,000-10,600 ft. (Clothier, 957b: 81-82); Sandia Crest, 9 mi. N and 3 mi. W Tijeras (UNMCV).

20. *Bear Canyon, 8000 ft., Sandia Mts. (Clothier, 1957b: 82); *Cole Springs, Sandia Mts. (Clothier, 1957b: 82).

Santa Fe Co.:

21. Santa Fe Ski Basin (Holdenried and Morlan, 1956:

74).

an Miguel Co.:

22. 1 mi. NW Cowles (UNMCV).

atron Co.:

23. San Francisco Mts. (Bailey, 1931: 76).

24. Elk Mts. (Bailey, 1931: 76).

25. Willow Creek, Mogollon Mts., 10 mi. E Mogollon UNMCV); Mogollon Mts., 6 mi. E Mogollon (UNMCV); 8 mi. E ogollon (UNMCV); Gillito Creek, Mogollon Mts., 10 mi. E ogollon (UNMCV).

26. 10 mi. S Mogollon (Hall and Kelson, 1959: 402).

ocorro Co.:

27. 19 mi. W and 20 mi. S Magdalena, Bear Trap anyon, San Mateo Mts. (UNMCV).

28. Mt. Withington, San Mateo Mts. (UNMCV).

orrance Co.:

29. *Mosca Peak, 8400 ft., Manzano Mts. (Clothier, 957b: 82).

30. *Canyon Diablo, 8000 ft., Manzano Mts. (Clothier, 957b: 82); *Tajique Canyon, 7800 ft. and 7600 ft., Manzano Mts. (Clothier, 1957b: 82); *Capillo Peak, 9200 ft., anzano Mts. (Clothier, 1957b: 82).

31. *New Canyon Picnic Grounds, Manzano Mts. (Clothier, 957b: 82).

rant Co.:

41. Iron Canyon, Black Range, 15 mi. E and 6 mi. N

nta Rita (UNMCV).

erra Co.:

32. Mimbres Mts. (Bailey, 1931: 76).

incoln Co.:

33. Capitan Mts., 5 mi. N and 9 mi. E Capitan (UNMCV).

34. 4 mi. W Alto (UNMCV); 2 mi. W Alto (UNMCV).

35. Forks of Ruidoso Creek, White Mts. (Bailey, 1931: 0).

tero Co.:

36. Mescalero (Stone and Rehn, 1903: 18).

37. 1 mi. S Cloudcroft (UNMCV); Cloudcroft (Bailey, 1931: 80).

38. 4 mi. S Cloudcroft (UNMCV).

39. 10 mi. S and 1 mi. W Cloudcroft (UNMCV).

40. 5 or 6 mi. S Weed (Bailey, 1931: 80).

ot Located:

Martinez (J. A. Allen, 1898: 291).

THOMOMYS UMBRINUS (Richardson)

Southern Pocket Gopher

Thomomys fulvus intermedius Mearns.

General remarks.--These pocket gophers are known from ew Mexico only from the Transition Life Zone of the Animas ountains.

Subspecies ascribed to New Mexico.--Thomomys umbrinus motus Goldman.

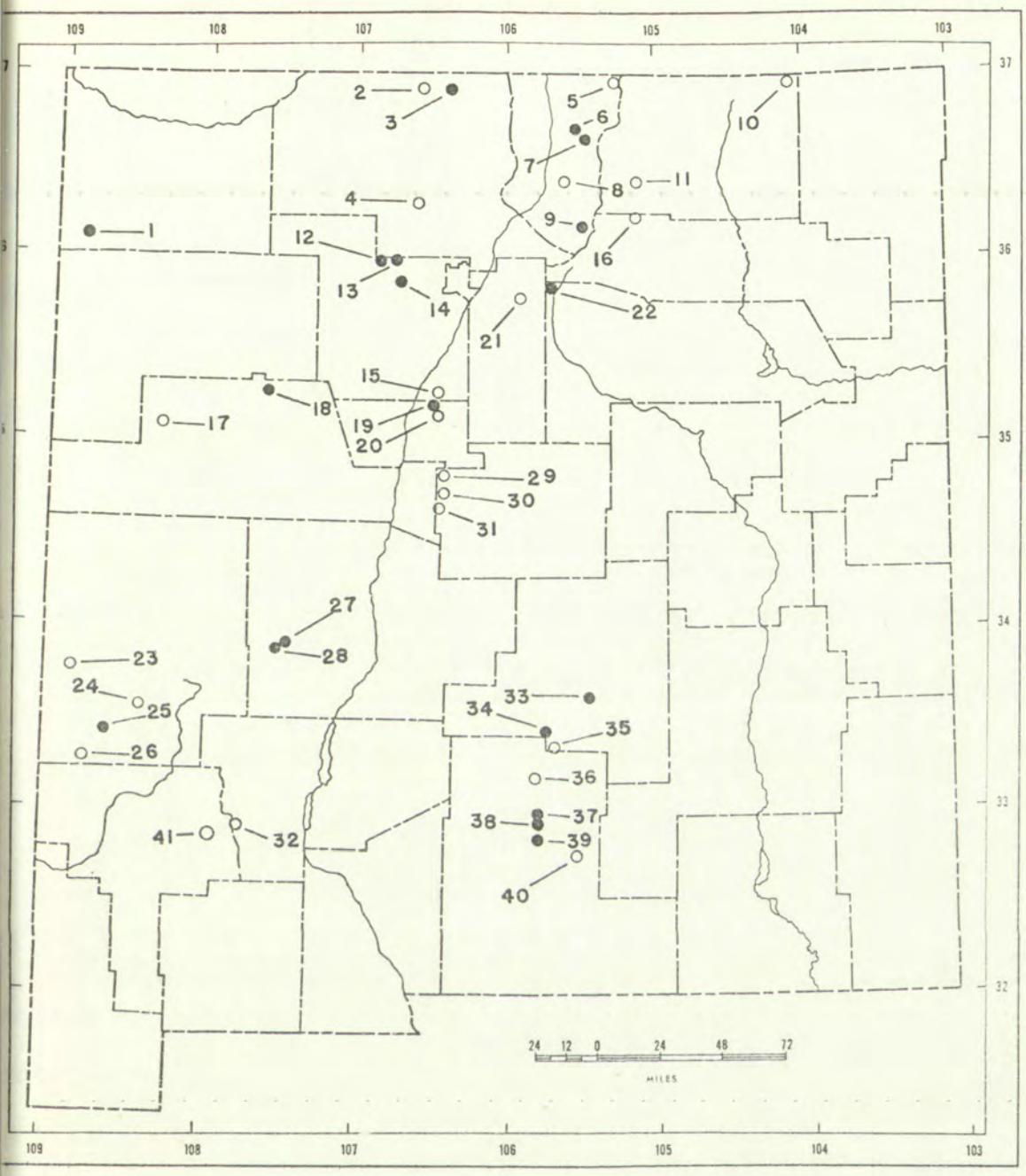

Fig. 41. Tamiasciurus hudsonicus

Records of occurence (Fig. 44).--

dalgo Co.:

1. Animas Peak, Animas Mts., 8000 ft. (Nelson and ldman, 1934: 116); Indian Creek Canyon, Aspen Spring, imas Mts. (UNMCV); 1 mi. SW Aspen Spring, Animas Mts. NMCV).

THOMOMYS BOTTAE (Eydoux and Gervais)

Botta's Pocket Gopher

Thomomys fulvus fulvus (Wooshouse).

Thomomys fulvus pervagus Merriam.

Thomomys fulvus toltecus Allen.

Thomomys lachuguilla Bailey.

Thomomys perpallidus aureus Allen.

Thomomys apache Bailey.

General remarks.--Botta's pocket gopher inhabits all e life zones of New Mexico with the exception of the ctic-alpine.

Identification to this species of specimens from the imas Valley region should be considered as tentative see remarks under Thomomys baileyi).

Although Hall and Kelson (1959: 416) have considered e correct name of this species to be Thomomys umbrinus, e present author prefers to use the name Thomomys bottae ntil such time as further proof of the specific identity f T. bottae and T. umbrinus is forthcoming.

Subspecies ascribed to New Mexico.--Thomomys bottae lienus Goldman; Thomomys bottae fulvus (Woodhouse); homomys bottae peramplus Goldman; Thomomys bottae aureus llen; Thomomys bottae internatus Goldman; Thomomys bottae pache Bailey; Thomomys bottae pervagus Merriam; Thomomys ottae connectens Hall; Thomomys bottae planorum Hooper; homomys bottae paguatae Hooper; Thomomys bottae collis ooper; Thomomys bottae morulus Hooper; Thomomys bottae ultellus Kelson; Thomomys bottae actuosus Kelson; Thomomys ottae ruidosae Hall; Thomomys bottae opulentus Goldman; homomys bottae lachuguilla Bailey; Thomomys bottae uadalupensis Goldman; Thomomys bottae toltecus Allen; homomys bottae pectoralis Goldman.

Records of occurence (Fig. 42).--

an Juan Co.:

1. Shiprock (Bailey, 1915: 75).
2. Fruitland (Bailey, 1915: 75).
3. 4 mi. W and 5 mi. S Sheep Spring (UNMCV).

io Arriba Co.:

5. Horse Lake, Jicarilla Indian Reservation (Bailey, 931: 242).
6. Lake La Jara (Bailey, 1915: 76).
7. Boulder Lake (Bailey, 1915: 76).
8. Stinking Spring Lake (Bailey, 1931: 241-242).
9. El Vado, Chama River Valley (Bailey, 1915: 75).
10. Gallina, Chama River Valley (Bailey, 1915: 75).

11. Chama Canyon, 6100 ft. (Kelson, 1951: 70).

12. 5 mi. E Abiquiu, 6100 ft. (Kelson, 1951: 70).

13. Abiquiu (Bailey, 1915: 83).

14. Rinconada (Bailey, 1915: 83).

15. Oso Creek, 12 mi. S Abiquiu (UNMCV).

16. Pine Springs, near Espanola (UNMCV); Espanola

ailey, 1915: 83).

os Co.:

17. Questa (Bailey, 1915: 83).

18. Arroyo Hondo (Bailey, 1915: 83); Hondo River near

nction with Rio Grande (Bailey, 1931: 234).

19. Cantonment Burgwyn (Bailey, 1915: 83).

lfax Co.:

20. Long Canyon, 3 mi. N Catskill (Bailey, 1915: 82).

21. Raton Mts. (Bailey, 1931: 232); Oak Canyon (Kel-

on, 1951: 70); Mouth of Trinchera Pass (Kelson, 1951: 70).

22. Cimarron (Hill, 1942: 80).

23. Philmont Ranch, Cimarroncito, 8100 ft. (Youngman,

958: 376).

nion Co.:

24. Folsom (Bailey, 1915: 82).

25. Sierra Grande (Bailey, 1915: 82).

cKinley Co.:

26. S end Chuska Mts., on the Apache Reservation

Bailey, 1931: 242).

27. Gallup (Bailey, 1915: 75).

28. Fort Wingate (Bailey, 1915: 82); Wingate (Bailey, 1915: 75).

29. 1 mi. E McGaffey (UNMCV).

30. Zuni River (Bailey, 1915: 82); Near Zuni Pueblo (Bailey, 1931: 241).

Sandoval Co.:

31. Santa Clara Canyon (Bailey, 1915: 83).

32. Juan Tafoya (Bailey, 1915: 75).

33. 2 mi. W Bernalillo, W Rio Grande (UNMCV); Bernalillo (Sands, 1956: 26).

34. Placitas, Sandia Mts. (Clothier, 1957b: 89); 5 mi. SSE Placitas, Las Huertas Canyon (UNMCV); Las Huertas Picnic Grounds (Clothier, 1957b: 89); Capulin Ranger Station, Sandia Mts., T12N-R5E, Sec. 33 (Clothier, 1957a: 256); Las Huertas Canyon, ½ mi. E and 4.2 mi. S Placitas, Sandia Mts. (UNMCV).

35. San Pedro Grant (UNMCV); San Pedro Valley, 6000 ft., E Sandia Mts. (Clothier, 1957b: 89).

Mora Co.:

36. Halls Peak (Bailey, 1915: 82).

37. Mora (Sands, 1956: 16).

38. Fort Union (Bailey, 1915: 82).

39. 10 mi. S Mora (Kelson, 1951: 70).

Valencia Co.:

40. 1½ mi. SW San Mateo (Hooper, 1940: 5).

41. Bear Ridge, Zuni Mts. (Kelson, 1951: 70).

42. Mt. Sedgewick (Kelson, 1951: 70); Copperton Bailey, 1915: 82).

43. Horace Mesa, 1½ mi. S Canyon Lobo Ranger Station Hooper, 1940: 5).

44. ½ mi. N Cebolleta (Hooper, 1940: 4).

45. Agua Fria, 15 mi. SW Grants (Hooper, 1940: 11); side Flagpole Crater, 16 mi. SW Grants (Hooper, 1940: 1).

46. Bill Porter's Ranch, 8 mi. SE Paxton (Hooper, 940: 9).

47. 9 mi. SSE Grants (Hooper, 1940: 7); 11 mi. SSE rants (Hooper, 1940: 7).

48. Laguna (Bailey, 1915: 75).

49. 12 mi. NE Trechado, Point of Malpais (Hooper, 940: 9).

50. Shuman's Ranch, 30 mi. S Grants, T6N-R7W, Sec. (Hooper, 1940: 7).

51. Acoma (Bailey, 1915: 75).

52. Rio San Jose, 1 mi. E Suwanee (UNMCV).

53. Belen (Sands, 1956: 26).

54. Isleta, ¼ mi. S county line in Valencia Co. NMCV).

55. 2 mi. E and 10 mi. S Belen (UNMCV).

rnalillo Co.:

56. 9¼ mi. E and 8½ mi. N Albuquerque (Sands, 1956:); 9¼ mi. E and 7½ mi. N Albuquerque (Sands, 1956: 26);

andia Crest (Sands, 1956: 21); 12½ mi. E and 5 3/4 mi. Albuquerque (Sands, 1956: 22); 3¼ mi. W and 9 mi. N ijeras (Sands, 1956: 22); Tree Springs, 8400 ft., Sandia ts. (Clothier, 1957b: 89); East Mesa, T11N-R4E, Sec. 31 UNMCV); La Cueva Recreation Area, Sandia Mts. (UNMCV); ast Mesa, T11N-R4E, NE corner Sec. 11 (UNMCV); East Mesa, 11N-R4E, middle Sec. 11 (UNMCV); East Mesa, T11N-R4E, NW Sec. 14 (UNMCV); T11N-R5E, Sec. 4, Sandia Mts. (UNMCV); 11N-R5E, Sec. 6, Sandia Mts. (UNMCV); Doc Long Camp round, T11N-R5E, Sec. 14, NW ¼, Sandia Mts. (UNMCV); andia Crest Rd., T11N-R5E, Sec. 10, S ½, Sandia Mts. JNMCV); La Cienega Canyon, Sandia Mts. (UNMCV).

57. 5 mi. N Albuquerque, Clawson Dairy (Hooper, 941b: 20); ½ mi. W and 7 mi. N Albuquerque (Sands, 1956: 5); 8½ mi. N Albuquerque (Sands, 1956: 26); 7 mi. N Lbuquerque (Sands, 1956: 26); 8.2 mi. NNE Albuquerque, 00 yds. E State Rd. 422 (UNMCV); 3 mi. N Univ. N. Mex. n river-bottomland (UNMCV); 1 mi. N Alameda Bridge (UNMCV).

58. 1 mi. E and 6½ mi. N Tijeras (Sands, 1956: 22).

59. 5 mi. W and 2½ mi. N Albuquerque (Sands, 1956: 5); 8 mi. W and 4 mi. N Albuquerque (Clothier, 1957b:); 8 mi. W and 2 mi. N Albuquerque (Clothier, 1957b:).

60. 8 mi. W Albuquerque (UNMCV).

61. 4½ mi. S Albuquerque, 4943 ft. (Hall, 1936: 298).

62. Tijeras (Sands, 1956: 16); Los Alamos, Tijeras

anyon (Sands, 1956: 16); San Antonio, T10N-R5E, SW ¼ Sec. 1, Sandia Mts. (UNMCV); 1 mi. E and 1½ mi. N Tijeras Sands, 1956: 22); Sandia Park, T11N-R5E, SW corner Sec. 5, Sandia Mts. (UNMCV); Sulphur Canyon Camp Ground, T11N-5E, SW corner Sec. 26 (UNMCV).

63. 3¼ mi. N Albuquerque (Sands, 1956: 26); W bank o Grande, 5 mi. N Albuquerque (UNMCV).

64. 2 mi. N Albuquerque (Clothier, 1957b: 91); buquerque, N Girade Ave. (UNMCV); Mesa N Univ. N. Mex. NMCV).

65. 8½ mi. E and 2 mi. S Albuquerque (Sands, 1956:); 8 3/4 mi. E and 1 mi. N Albuquerque (Sands, 1956:); 9½ mi. E and 1 mi. N Albuquerque (Sands, 1956: 22); ½ mi. E and 2 mi. S Albuquerque (Sands, 1956: 22).

66. 8¼ mi. E and 5½ mi. N Albuquerque (Sands, 1956:); 9 3/4 mi. E and 5½ mi. N Albuquerque (Sands, 1956:); 9½ mi. E and 4 mi. N Albuquerque (Sands, 1956: 26); mi. E and 3 mi. N Albuquerque (Sands, 1956: 26); 7½ mi. and 2 mi. N Albuquerque (Sands, 1956: 26); ½ mi. W Juan o Rd., opposite mouth Bear Canyon, W Sandia Mts. othier, 1957b: 91); East Mesa, 3/4 mi. W base Sandia s., Las Lomas Rd., E Albuquerque (Clothier, 1957b: 91); ni. E and 3½ mi. N Albuquerque (Sands, 1956: 18); 8 3/4 E and 3¼ mi. N Albuquerque (Sands, 1956: 22); Bear yon, 7000 ft., Sandia Mts. (Clothier, 1957b: 89); udo Canyon, 6500 ft., Sandia Mts. (Clothier, 1957b: 89).

ast Mesa, T10N-R4E, Sec. 14 (UNMCV); East Mesa, T10N-R4E, ½ Sec. 2 (UNMCV); East Mesa, T10N-R3E, Sec. 1, Albuquerque (UNMCV); 6 mi. E Juan Tabo Rd., Pino Canyon (UNMCV); mi N and 10 mi. E Albuquerque (UNMCV); East Mesa, T10N-4E, NE corner Sec. 9 (UNMCV); Embudito Canyon tributary, 11N-R4E, SE corner Sec. 35 (UNMCV).

67. Sabino Canyon, 7000 ft., Manzano Mts. (Clothier, 957b: 89); Juan Tomas Canyon, 7000 ft., Manzano Mts. lothier, 1957b: 89).

nta Fe Co.:

68. 10 mi. N Santa Fe (Bailey, 1915: 83).

69. Tesuque (UNMCV).

70. Santa Fe (Bailey, 1915: 83).

71. San Pedro (Kelson, 1951: 70).

72. Glorieta (Bailey, 1931: 234).

n Miguel Co.:

73. Gallinas Creek, Sangre de Cristo Mts., T17N-R14E, c. 13 (Koster and Clothier, 1952: 250).

74. Las Vegas (Stone and Rehn, 1903: 55).

75. Pecos, 6800 ft. (Kelson, 1951: 70).

ron Co.:

76. Datil Mts. (Bailey, 1915: 82).

77. Largo Canyon, 10 mi. SW Quemado (Kelson, 1951: .

78. Greens Gap (UNMCV).

79. Luna (Bailey, 1915: 82).

80. 6 mi. SW Luna (Bailey, 1915: 82).

81. Willow Creek, Mogollon Mts. (UNMCV); near head illow Creek (Kelson, 1951: 70).

82. 15 mi. E Mogollon (Kelson, 1951: 70-71).

83. Glenwood (UNMCV); Pleasanton (Bailey, 1915: 82).

ocorro Co.:

84. Riley (Bailey, 1915: 75).

85. Base of Bear Spring Mts. (Bailey, 1931: 240).

86. San Augustin Plain, 12 mi. NW Monica Springs Bailey, 1915: 75).

87. Hardy Spring, Magdalena Mts. (UNMCV).

88. Socorro (Bailey, 1915: 75).

89. Copper Canyon, 8200 ft., Magdalena Mts. (Kelson, 51: 70); Water Canyon, 6500 ft., Magdalena Mts. (Kelson, 51: 70).

90. Monica Canyon, 8000 and 9500 ft., San Mateo Mts. elson, 1951: 70).

91. Bear Trap Canyon, San Mateo Mts., 19 mi. W and mi. S Magdalena (UNMCV).

92. Rio Alamosa, 15 mi. N Ojo Caliente (Bailey, 1915:).

93. San Marcial (Bailey, 1915: 75).

rance Co.:

94. Mosca Peak, 8400 ft., Manzano Mts. (Clothier, 57b: 89).

95. Canyon Diablo, 8000 ft., Manzano Mts. (Clothier,

957b: 89); Tajique Canyon, 7600 ft., Manzano Mts. Clothier, 1957b: 89); Tajique (Kelson, 1951: 70).

96. Red Canyon, 4 mi. W and 1 mi. S Manzano (UNMCV); ew Canyon, 9000 ft., Manzano Mts. (UNMCV); New Canyon amp Ground, 5 mi. W Manzano (UNMCV); Top of Capillo Peak, 200 ft., Manzano Mts. (UNMCV).

97. Manzano Peak, 9000 ft., Manzano Mts. (Clothier, 957b: 89).

98. Abo Canyon, Manzano Mts. (Clothier, 1957b: 89).

rant Co.:

99. Cliff (Bailey, 1915: 82); Gila (Bailey, 1915: 2).

100. Head of Rio Mimbres (Kelson, 1951: 70).

101. Burro Mts. (Bailey, 1915: 82).

102. Coppermines (Bailey, 1915: 82).

103. Silver City (Bailey, 1915: 82).

104. Iron Canyon, Black Range, 15 mi. E and 6 mi. N anta Rita (UNMCV).

105. 1 mi. E Redrock (UNMCV); Redrock (Bailey, 1931: 86).

106. Hachita (Bailey, 1915: 86).

erra Co.:

107. Chloride (Bailey, 1915: 82); Fairview (Bailey, 15: 82).

108. 10 mi. E Chloride (Kelson, 1951: 70).

109. Cuchillo (Bailey, 1915: 86).

110. Las Palomas (Bailey, 1915: 86).

111. 4 mi. W Kingston (Bailey, 1915: 82).

112. Lake Valley (Bailey, 1915: 86).

Lincoln Co.:

113. Corona (Sands, 1956: 16).

114. Jicarilla Mts. (Kelson, 1951: 70).

115. 5 mi. S and 5 mi. E Glencoe, 6000 ft. (Kelson, 1951: 70).

116. NW foothills Capitan Mts. (Kelson, 1951: 70); Near W end summit of ridge, Capitan Mts. (Kelson, 1951: 70); NW slope near Raspberry Patch Spring, Capitan Mts. (Kelson, 1951: 70).

117. E base Mt. Capitan (Bailey, 1915: 82); SE slopes Capitan Mts. (Kelson, 1951: 70).

118. Fort Stanton (Bailey, 1915: 82).

119. Rio Bonito, 4 mi. NW Lincoln (Dice, 1942: 203).

120. Near Alto (UNMCV).

121. Hale's Ranch (Stone and Rehn, 1903: 55); Ruidoso, 5700 ft. (Hall, 1932a: 96).

Hidalgo Co.:

122. Adobe Ranch, N Animas Mts. (Bailey, 1915: 86).

123. Clanton Canyon, Peloncillo Mts., 22 mi. S and 2 mi. E Rodeo, 5500 ft. (UNMCV).

124. 36 mi. S and 9 mi. W Animas, 5300 ft. (UNMCV); 36 mi. S and 10 mi. W Animas, 5300 ft. (UNMCV); 36 mi. S and 10½ mi. W Animas, 5300 ft. (UNMCV).

125. Guadalupe Canyon, 31 mi. S Rodeo (UNMCV).

una Co.:

126. Deming (Bailey, 1915: 86).

ona Ana Co.:

127. Garfield (Bailey, 1915: 86).

128. Hatch (Aldous, 1935: 130).

129. Bear Canyon, San Andres Mts. (Kelson, 1951: 70); slope San Andres Mts. (Kelson, 1951: 70).

130. Organ (Bailey, 1915: 89).

131. Las Cruces (Goldman, 1935: 150).

132. Cox' Ranch, E side Organ Mts. (Bailey, 1931: 38).

tero Co.:

133. 10 mi. N Cloudcroft (Bailey, 1915: 82); Mescalero (Kelson, 1951: 71).

134. 8 mi. NW Cloudcroft, 7000 ft. (Kelson, 1951: 71).

135. 1 mi. N Cloudcroft, Sacramento Mts. (UNMCV); Cloudcroft, 9000 ft. (Kelson, 1951: 71).

136. James Canyon, 7 mi. E Cloudcroft (UNMCV).

137. Alamogordo (Benson, 1933: 25).

138. 10 mi. S Cloudcroft (UNMCV).

139. Dog Canyon, Guadalupe Mts., 6800 ft. (Goldman, 1936: 118).

dy Co.:

140. About Carlsbad Cavern (Bailey, 1928: 90).

t Located:

Carasal (Bailey, 1915: 82).

Hoskins Ranch (Bailey, 1915: 82).

Summit of divide, San Marcial Rd., San Andres Mts. Kelson, 1951: 70).

THOMOMYS BAILEYI Merriam

Bailey's Pocket Gopher

Thomomys mearnsi Bailey.

Thomomys baileyi Merriam.

General remarks.--In New Mexico, Bailey's pocket opher is known only from two restricted areas in the ower and Upper Sonoran Life Zones.

Attempts by the author to distinguish between speciens of Thomomys bottae and Thomomys baileyi from the nimas Valley have not been entirely successful. There ppears to be no definite separation of characters. imitations of time and material have prevented the workng out of relationships, but it is considered quite posible that T. bottae and T. baileyi are not distinct pecies. Localities based on specimens in the University f New Mexico Collection of Vertebrates from this region hould be considered as only tentatively associated with . bottae or T. baileyi--final differentiation was based n an arbitrary point of division.

Subspecies ascribed to New Mexico.--Thomomys baileyi earnsi Bailey; Thomomys baileyi tularosae Hall.

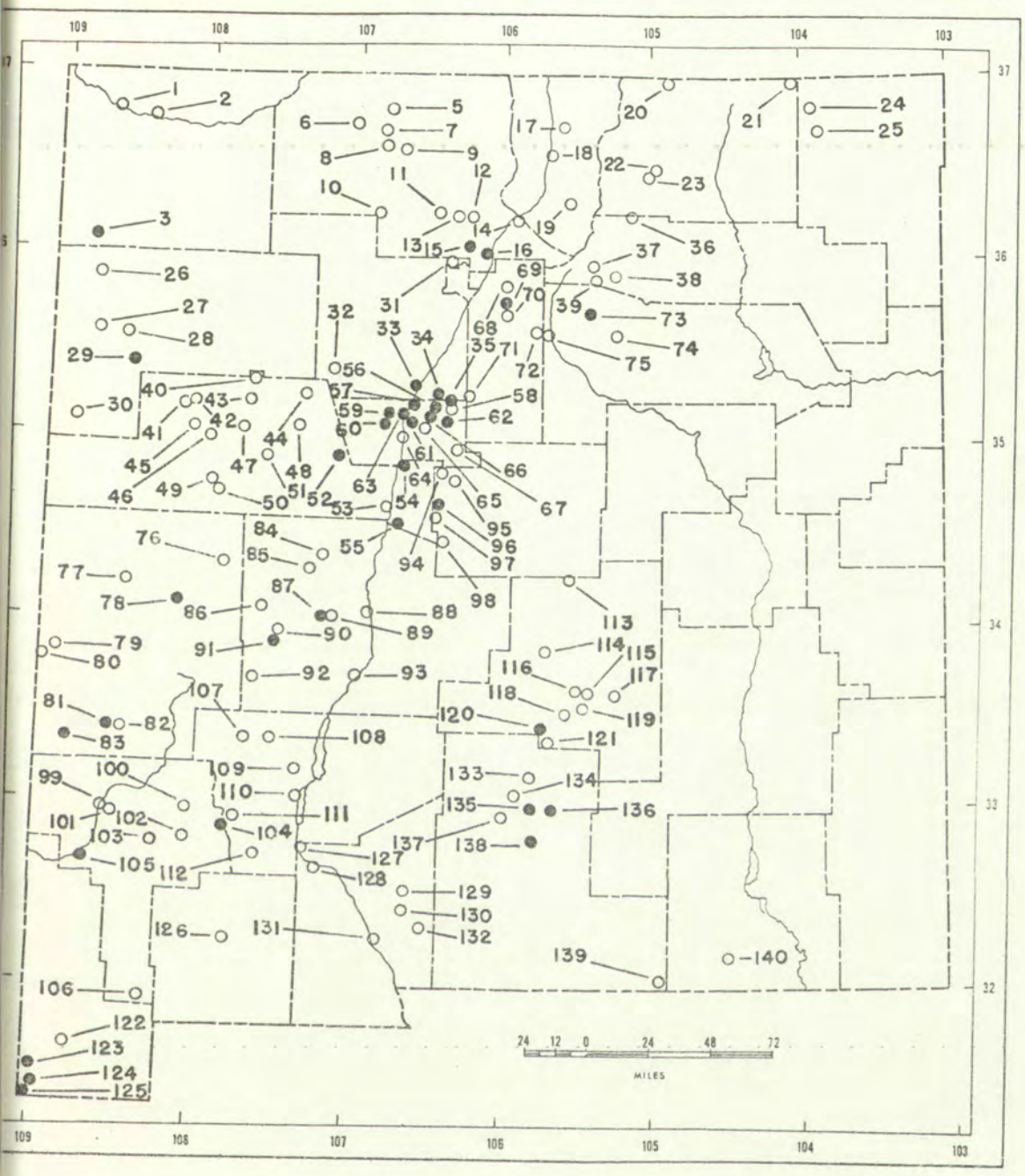

Fig. 42. Thomomys bottae

Records of occurence (Fig. 43).--

Hidalgo Co.:

1. 8.4 mi. S Animas (UNMCV).

2. 21.7 mi. S Animas (UNMCV).

3. 25.4 mi. S Animas (UNMCV).

4. Gray's Ranch, Animas Valley (Bailey, 1931: 237).

5. 37½ mi. S and 8 mi. W Animas, 5500 ft. (UNMCV).

6. Upper Animas Valley, 36 mi. S and 3 mi. W Animas (UNMCV).

7. 3 mi. W and 1 mi. N San Luis Pass (UNMCV).

8. Mouth of Whitewater Canyon, 11½ mi. W Antelope Wells, San Luis Mts. (UNMCV).

Dona Ana Co.:

9. Near Tularosa (Bailey, 1931: 238); Cook's Ranch, ½ mi. W Tularosa (Hall, 1932b: 411).

10. Alamogordo (Blair, 1941: 221); About 2 mi. N Alamogordo (Blair, 1941: 221).

11. About 3 mi. SW Alamogordo (Blair, 1941: 221).

12. About 11 mi. SW Alamogordo (Blair, 1941: 221).

THOMOMYS TALPOIDES (Richardson)

Northern Pocket Gopher

Thomomys fossor Allen.

General remarks.--In New Mexico, the northern pocket gopher is essentially a mountain dweller of the Transition, Canadian, Hudsonian, and Arctic-alpine Life Zones.

Subspecies ascribed to New Mexico.--Thomomys talpoides ossor Allen; Thomomys talpoides taylori Hooper.

Records of occurence (Fig. 43).--

an Juan Co.:

1. Washington Pass, Chuska Mts., 6 mi. E Crystal UNMCV).

io Arriba Co.:

2. 10½ mi. E Chama, East Fork Rio Brazos, 10,000 ft. UNMCV).

3. Horse Lake (Bailey, 1915: 112).

4. Hopewell (Bailey, 1915: 112).

5. Tusas River (Bailey, 1915: 112).

6. Gallinas Mts. (Bailey, 1915: 112).

7. Jemez Mts., head Santa Clara Creek (Bailey, 1915: 12).

aos Co.:

8. Culebra Peak (Bailey, 1931: 229).

9. Tres Piedras (Bailey, 1915: 112).

22. Red River (Bailey, 1915: 112).

10. 4½ mi. S Red River (UNMCV).

11. Wheeler Peak (Bailey, 1931: 229); Hondo Canyon Bailey, 1931: 229).

12. 2 mi. NE Tres Ritos, Rio la Junta (UNMCV); 4 mi. E Tres Ritos (UNMCV).

olfax Co.:

13. Moreno Valley (Bailey, 1915: 112).

14. Agua Fria Park (Stone and Rehn, 1903: 24).

Sandoval Co.:

15. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

Mora Co.:

16. Halls Peak (Bailey, 1915: 112).

17. Pecos Baldy (Bailey, 1931: 230); Truchas Peaks (Bailey, 1931: 230).

Valencia Co.:

18. Mirabal Spring, SW slope Mt. Taylor (Hooper, 1940: 13).

19. Near Fernandez Summer Camp, 6 mi. NE summit Mt. Taylor (Hooper, 1940: 11).

Santa Fe Co.:

20. Santa Fe area (Holdenried and Morlan, 1956: 376).

San Miguel Co.:

21. Willis (Bailey, 1915: 112).

Not Located:

White's Peak (Bailey, 1915: 112).

GEOMYS BURSARIUS (Shaw)

Plains Pocket Gopher

Geomys breviceps llanensis Bailey.

General remarks.--New Mexican records indicate a distribution in the Upper Sonoran Life Zone of the state.

Subspecies ascribed to New Mexico.--Geomys bursarius major Davis.

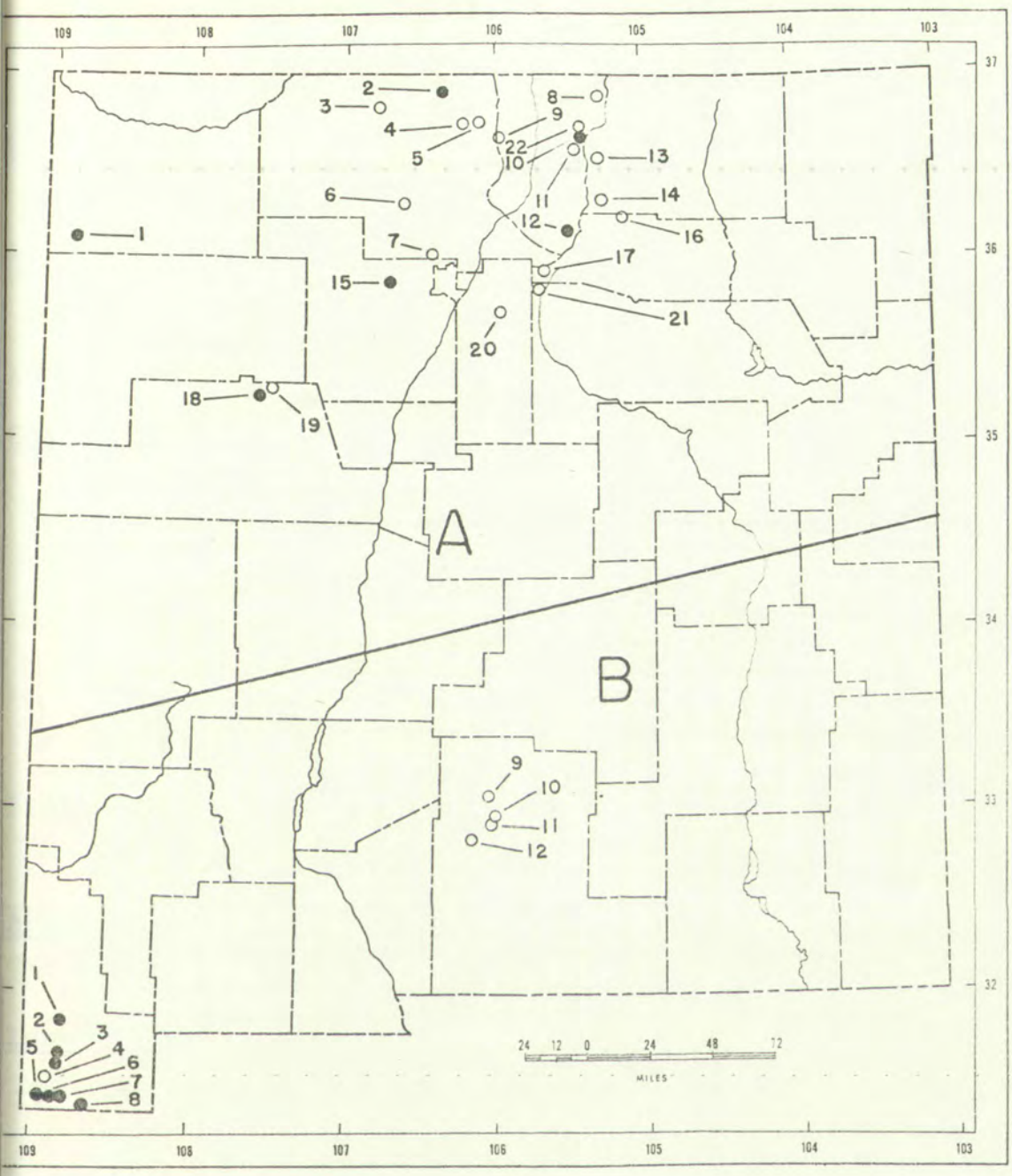

Fig. 43. A. Thomomys talpoides

B. Thomomys baileyi

Records of occurence (Fig. 44).--

San Miguel Co.:

1. Bell Ranch (UNMCV).

Torrance Co.:

2. N end Mesa Jumanes, vicinity of Progresso (Bailey, 1931: 247).

Guadalupe Co.:

3. Santa Rosa (Bailey, 1931: 247).

GEOMYS ARENARIUS Merriam

Desert Pocket Gopher

Geomys arenarius Merriam.

General remarks.--The desert pocket gopher is mainly limited to the Lower Sonoran Life Zone in New Mexico.

Subspecies ascribed to New Mexico.--Geomys arenarius arenarius Merriam; Geomys arenarius brevirostris Hall.

Records of occurence (Fig. 44).--

Luna Co.:

1. Deming, along the Rio Mimbres (Bailey, 1931: 245).

2. 13 mi. E Columbus (UNMCV).

Dona Ana Co.:

3. 2 mi. N Las Cruces (Bailey, 1931: 245); 3 or 4 mi. E Las Cruces (Bailey, 1931: 245); Mesilla Park (Bailey, 1931: 246).

Otero Co.:

4. About 9 mi. W Tularosa (Benson, 1933: 25); About 10 mi. W Tularosa (Blair, 1941: 221).

5. White Sands, about 10 mi. SW Tularosa (Benson, 1933: 25).

6. 12 mi. W Alamogordo (Benson, 1933: 25).

CRATOGEOMYS CASTANOPS (Baird)

Yellow-faced Pocket Gopher

Cratogeomys castanops (Baird).

General remarks.--Cratogeomys castanops inhabits the Lower and Upper Sonoran Life Zones in New Mexico, with the greater portion of its range in the Lower Sonoran.

The UNMCV specimen from Bernalillo Co. consists of identifiable skull fragments removed from a gopher hole.

Subspecies ascribed to New Mexico.--Cratogeomys castanops castanops (Baird); Cratogeomys castanops lacrimalis Nelson and Goldman; Cratogeomys castanops hirtus Nelson and Goldman; Cratogeomys castanops perplanus Nelson and Goldman.

Records of occurence (Fig. 45).--

Colfax Co.:

1. Near Chico (Bailey, 1931: 243).

Bernalillo Co.:

2. T11N-R4E, NW ¼ Sec. 14, Elena Gallegos Grant (UNMCV).

3. Albuquerque (Nelson and Goldman, 1934: 138).

San Miguel Co.:

4. Bell Ranch (UNMCV).

5. Valley of the Red River (Bailey, 1931: 243).

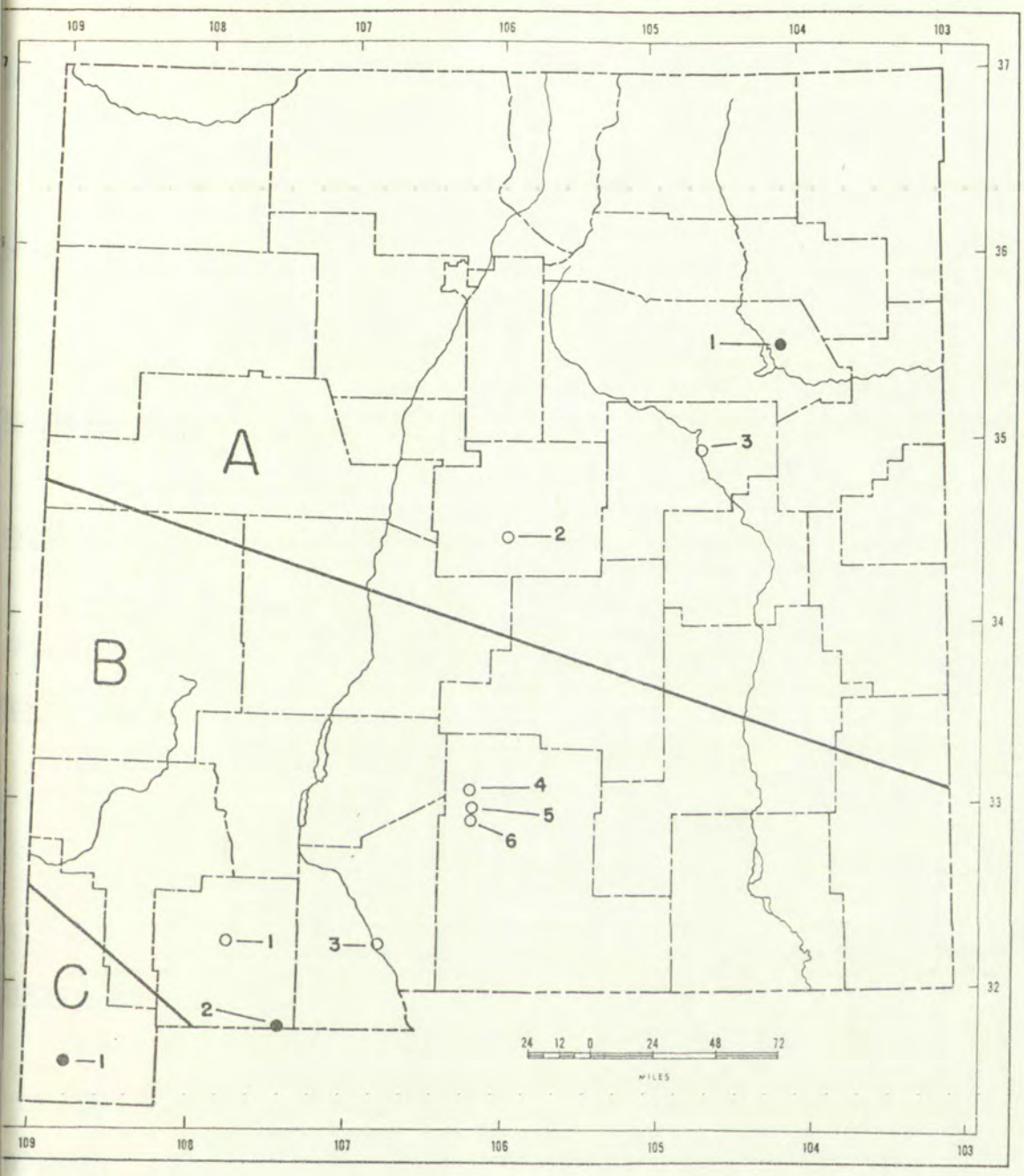

Fig. 44. A. Geomys bursarius

B. Geomys arenarius

C. Thomomys umbrinus

uadalupe Co.:

6. Cuervo (Nelson and Goldman, 1934: 137).

7. Santa Rosa (Nelson and Goldman, 1934: 138).

incoln Co.:

8. Ancho (Nelson and Goldman, 1934: 138).

9. W base Jicarilla Mts. (Bailey, 1931: 243).

e Baca Co.:

10. Fort Sumner (Nelson and Goldman, 1934: 138).

ona Ana Co.:

11. Parker Lake, E Organ Mts. (Nelson and Goldman, 934: 138).

tero Co.:

13. Tularosa (Nelson and Goldman, 1934: 138).

14. 9 mi. S Tularosa (Bailey, 1931: 243).

15. Near Weed (Bailey, 1931: 243).

16. 18 mi. SW Alamogordo (Benson, 1933: 26).

haves Co.:

17. 35 mi. N Roswell (Nelson and Goldman, 1934: 138).

18. 2 mi. E Roswell (UNMCV); Roswell (Nelson and oldman, 1934: 137).

ddy Co.:

19. Carlsbad (Nelson and Goldman, 1934: 138); 2 mi. Carlsbad (Hall and Kelson, 1959: 466).

ot Located:

Piedras Negras Creek Valley (Bailey, 1931: 244).

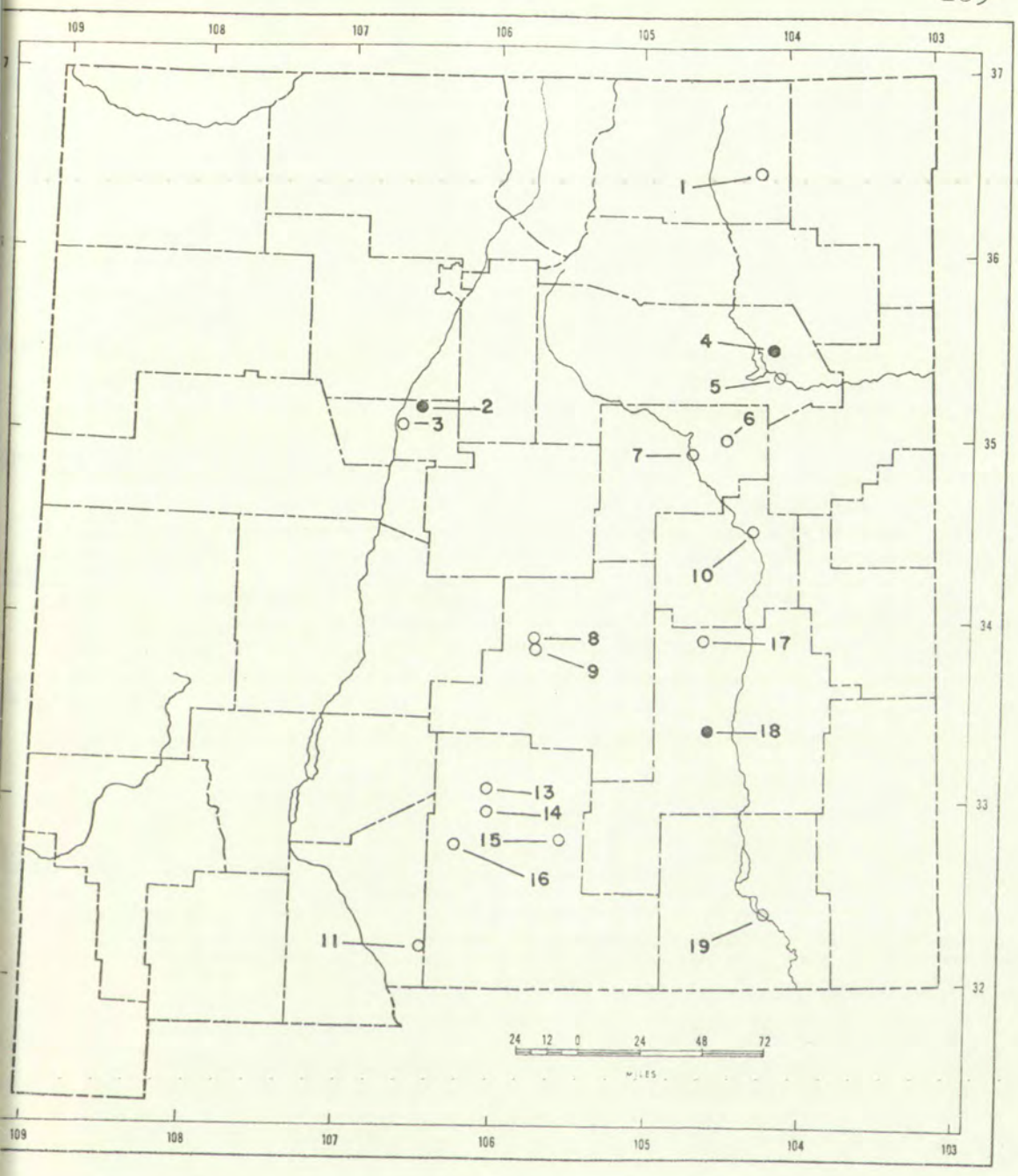

Fig. 45. Cratogeomys castanops

FAMILY HETEROMYIDAE

PEROGNATHUS MERRIAMI Allen

Merriam's Pocket Mouse

Perognathus merriami gilvus Osgood.

General remarks.--In New Mexico, Perognathus merriami is predominantly a mouse of the Lower Sonoran Life Zone.

Subspecies ascribed to New Mexico.--Perognathus merriami gilvus Osgood.

Records of occurence (Fig. 47).--

Quay Co.:

1. 25 mi. W Tucumcari (Bailey, 1931: 279).

Lincoln Co.:

2. 44 mi. NW Roswell (Borell and Bryant, 1942: 23).
3. 40 mi. W Roswell (Bailey, 1931: 279).

Eddy Co.:

4. Carlsbad (Bailey, 1931: 279).

PEROGNATHUS FLAVUS Baird

Silky Pocket Mouse

Perognathus flavus flavus Baird.

Perognathus flavus bimaculatus Merriam.

General remarks.--Perognathus flavus occupies the Lower and Upper Sonoran Life Zones in New Mexico.

Subspecies ascribed to New Mexico.--Perognathus flavus flavus Baird; Perognathus flavus hopiensis Goldman.

Records of occurence (Fig. 46).--

San Juan Co.:

1. Shiprock (Goldman, 1932b: 90).

2. Fruitland (Goldman, 1932b: 90).

3. 5 mi. N and 5 mi. E Newcomb (UNMCV).

Rio Arriba Co.:

4. 1 mi. SE El Rito (Hall and Kelson, 1959: 479).

Taos Co.:

5. Taos (Bailey, 1931: 274).

Colfax Co.:

6. Raton (Bailey, 1931: 274).

7. Near Cimarron (Hill, 1942b: 1).

8. Chico Springs (Bailey, 1931: 274).

Union Co.:

9. Clayton (Bailey, 1931: 274).

McKinley Co.:

10. 3 mi. N Crownpoint (UNMCV).

11. Fort Wingate (Bailey, 1931: 276); Wingate (Goldman, 1932b: 90).

12. Gallup (Goldman, 1932b: 90).

13. 12 mi. N Grants (Aldous, 1930: 80).

Valencia Co.:

14. Grants (Bailey, 1931: 274).

15. 1½ mi. E Cebolleta (Hooper, 1941a: 27).

16. Zuni Canyon, between 3 and 5 mi. WSW Grants (Hooper, 1941a: 27).

17. 8 mi. SE Grants (Hooper, 1941a: 27); 4 mi. W

cCartys (Hooper, 1941a: 27).

18. 9 mi. SSE Grants (Hooper, 1941a: 27).

19. Laguna (Bailey, 1931: 274).

20. 1 mi. E Suwanee (UNMCV).

21. Rio Puerco (Bailey, 1931: 274).

ernalillo Co.:

22. Rio Puerco-Rio Grande divide W volcanoes (UNMCV).

23. 5½ mi. N Albuquerque (UNMCV); 4 mi. N Albuquerque UNMCV).

24. 18 mi. W Albuquerque, Puerco Valley (UNMCV).

25. Jara Canyon, 6250 ft., Sandia Mts. (Clothier, 957b: 93); East Mesa, 2 mi. N Las Lomas Rd., 1 mi. W mts. Clothier, 1957b: 94); 6 mi. E Alameda (UNMCV); Juan Tabo anyon, Sandia Mts. (UNMCV); Juan Tabo, Sandia Mts. Clothier, 1957b: 94).

26. 5 mi. E and 4 mi. N Univ. N. Mex., on Juan Tabo d. (Clothier, 1957b: 93-94); Mesa E Albuquerque, 3/4 mi. mts. (Clothier, 1957b: 94); Canyon bottom, Embudo Canyon, 200 ft. (Clothier, 1957b: 94); Between Juan Tabo Canyon nd S fence Elena Gallegos Grant (UNMCV); Between Simm's ence and Embudo Canyon (UNMCV); Arroyo on Simm's place, ust E Louisiana St., Albuquerque (UNMCV).

27. 5 mi. W Albuquerque (UNMCV); 5 7/8 mi. W and 2 /8 mi. N Albuquerque (UNMCV); Lava beds, 5 mi. W and 2½ i. N Albuquerque (UNMCV); 3 mi. W and 4 mi. N Albuquer- ue, ½ mi. S volcanoes (UNMCV).

28. Base of mts., 1 mi. N US Hwy 66, E Albuquerque (Clothier, 1957b: 94); 10 mi. E Albuquerque (UNMCV); East Mesa, 50 yds. S "U" on hill, 1 mi. N US 66 (UNMCV).

29. 10 mi. S Albuquerque city limits on E side Rio Grande (Blakely, 1936: 8).

30. Hell Canyon, 6000 ft., Manzano Mts. (Clothier, 1957b: 94).

Santa Fe Co.:

31. Santa Fe Municipal Airport (Holdenried and Morlan, 1956: 376).

32. Lamy-Glorieta region (Holdenried and Morlan, 1956: 376).

Mora Co.:

33. Bell Ranch (UNMCV).

34. Ribera (Bailey, 1931: 274).

Catron Co.:

35. Quemado (Bailey, 1931: 274); Canyon Largo (Bailey, 1931: 275).

36. Datil Mts. (Bailey, 1931: 274).

37. Glenwood (Bailey, 1931: 274).

38. Diamond Creek (Bailey, 1931: 274).

Socorro Co.:

39. T3N-R3W, Sec. 26, 17½ mi. W Bernardo (UNMCV).

40. Riley (Bailey, 1931: 274).

41. San Augustin Plain, 14 mi. W and 5 mi. S Magdalena (UNMCV).

42. 15 mi. E and 14 mi. S Belen (UNMCV).

Torrance Co.:

43. Jaramillo Canyon, 6240 ft., Manzano Mts. (Clothier, 1957b: 94).

44. 5 mi. S and 1½ mi. E Estancia (UNMCV).

45. 10 mi. E and 2 mi. S Willard (UNMCV).

46. 15 mi. NE Corona (UNMCV).

47. Mesa Jumanes (Bailey, 1931: 274).

Guadalupe Co.:

48. Santa Rosa (Bailey, 1931: 274).

Grant Co.:

49. Hachita (Bailey, 1931: 274).

Sierra Co.:

50. Fairview (Bailey, 1931: 274).

Lincoln Co.:

51. 12 mi. NW Carrizozo by road (Bradt, 1932: 325); About 10 mi. from Carrizozo by road, Socorro-Carrizozo Hwy (Bradt, 1932: 325).

52. 4 mi. NW Carrizozo by road (Bradt, 1932: 324).

53. Near Carrizozo (Benson, 1933: 26).

54. Near Mesa Ranger Station, 5 mi. SW Capitan (Dice, 1942: 203).

Hidalgo Co.:

55. Doubtful Canyon, Peloncillo Mts., 8 mi. N and 2 mi. W Steins (UNMCV).

56. Playas Valley (Bailey, 1931: 274).

57. 25½ mi. S Animas, 6200 ft., Black Bill Canyon, Animas Mts. (UNMCV).

58. 36 mi. S and 10 mi. W Animas, 5300 ft. (UNMCV); 36 mi. S and 9 mi. W Animas (UNMCV).

59. T33S-R20W, Sec. 19 (UNMCV).

60. T33S-R19W, Sec. 29 (UNMCV).

Luna Co.:

61. Deming (Bailey, 1931: 274).

Dona Ana Co.:

62. S of Fort Fillmore, just W Santa Fe right of way (Aldous, 1930: 80).

Otero Co.:

63. Salinas (Blair, 1941: 222).

64. Tularosa (Bailey, 1931: 274).

65. 10 mi. SW Tularosa (Benson, 1933: 26).

66. Near Alamogordo (Benson, 1933: 26).

67. White Sands, 18 mi. SW Alamogordo (Benson, 1933: 26).

Eddy Co.:

68. Carlsbad (Bailey, 1931: 274).

Not Located:

Cimarron River at Sand Creek (Baird, 1857: 425).

Liberty (Bailey, 1931: 274).

PEROGNATHUS APACHE Merriam

Apache Pocket Mouse

Perognathus apache apache Merriam.

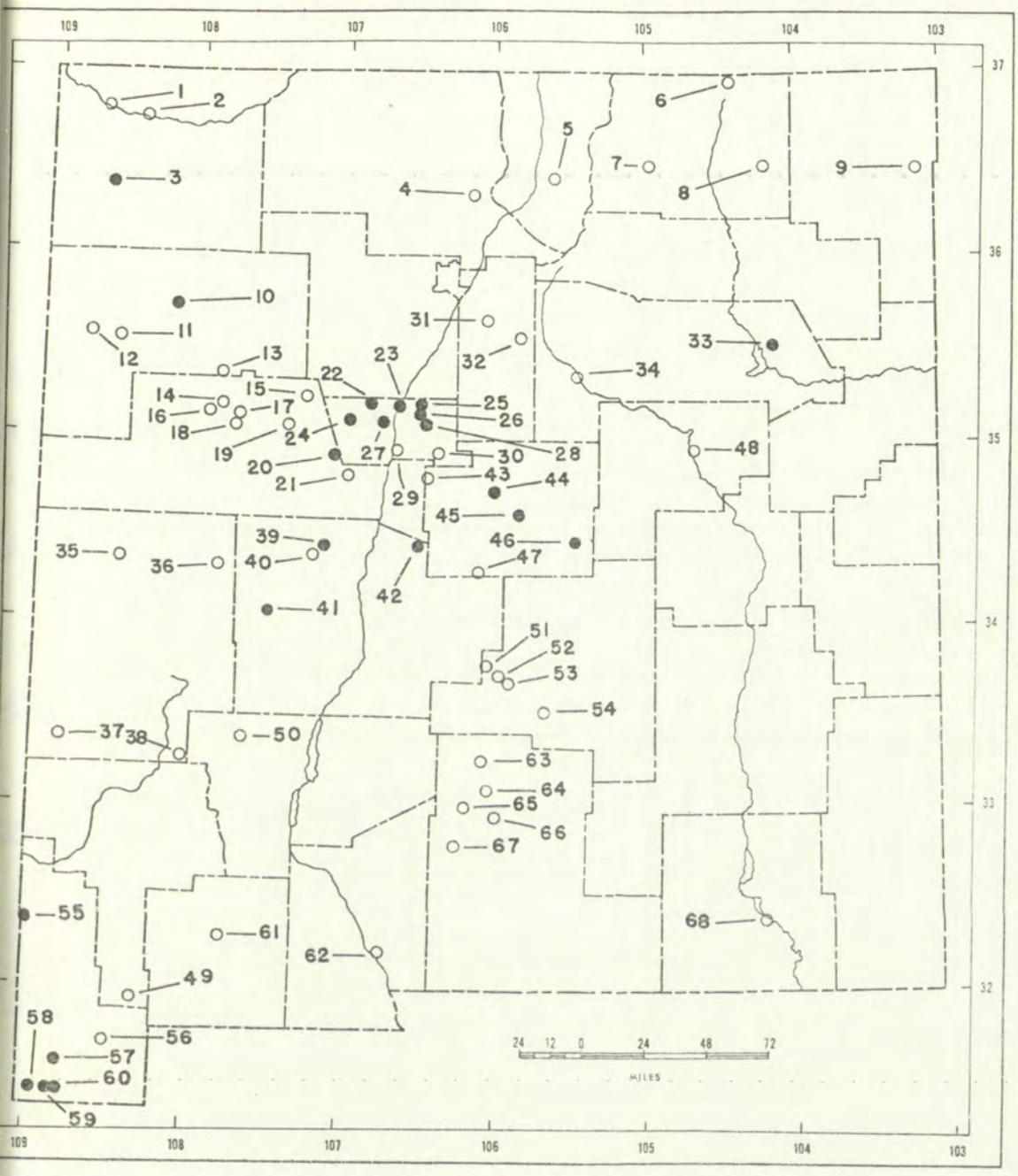

Fig. 46. Perognathus flavus

Perognathus apache melanotis Osgood.

General remarks.--Distribution in New Mexico of the pache pocket mouse is mainly through the Upper Sonoran ife Zone with a few specimens known from the Lower Sonoran nd the Transition.

Subspecies ascribed to New Mexico.--Perognathus apache pache Merriam; Perognathus apache relictus Goldman; Perog-athus apache gypsi Dice.

Records of occurence (Fig. 47).--

io Arriba Co.:

1. Lake Burford (Goldman, 1938: 496).

2. Chama River Valley near Abiquiu (Bailey, 1931: 78).

3. Near Espanola (Bailey, 1931: 278).

cKinley Co.:

4. 3 mi. N Crownpoint (UNMCV).

5. Wingate (Bailey, 1931: 278).

andoval Co.:

6. River valley a few mi. above Jemez Pueblo Bailey, 1931: 278).

alencia Co.:

7. Near Laguna (Bailey, 1931: 278).

ernalillo Co.:

8. 18 mi. W Albuquerque, Puerco Valley (UNMCV).

anta Fe Co.:

9. Santa Fe (Goldman, 1938: 496).

10. Glorieta (Goldman, 1938: 496).

11. San Pedro (Bailey, 1931: 277).

n Miguel Co.:

12. 3 mi. S Pecos (Goldman, 1938: 496); Pecos (Bailey, 31: 278).

tron Co.:

13. Gallina Mts. (Bailey, 1931: 277).

rrance Co.:

14. Gran Quivera (Goldman, 1938: 496).

na Co.:

15. Deming (Bailey, 1931: 277).

ero Co.:

16. 14 mi. W Tularosa (Benson, 1933: 26).

17. 10 mi. SW Tularosa (Benson, 1933: 26).

18. 12 mi. SW Alamogordo (Benson, 1933: 26).

19. 18 mi. SW Alamogordo (Benson, 1933: 26).

PEROGNATHUS BAILEYI Merriam

Bailey's Pocket Mouse

General remarks.--Perognathus baileyi apparently ters New Mexico in the Upper and Lower Sonoran Life nes.

The record for Skeleton Canyon is based on bone re- ins taken from owl pellets.

Subspecies ascribed to New Mexico.--Perognathus ileyi baileyi Merriam.

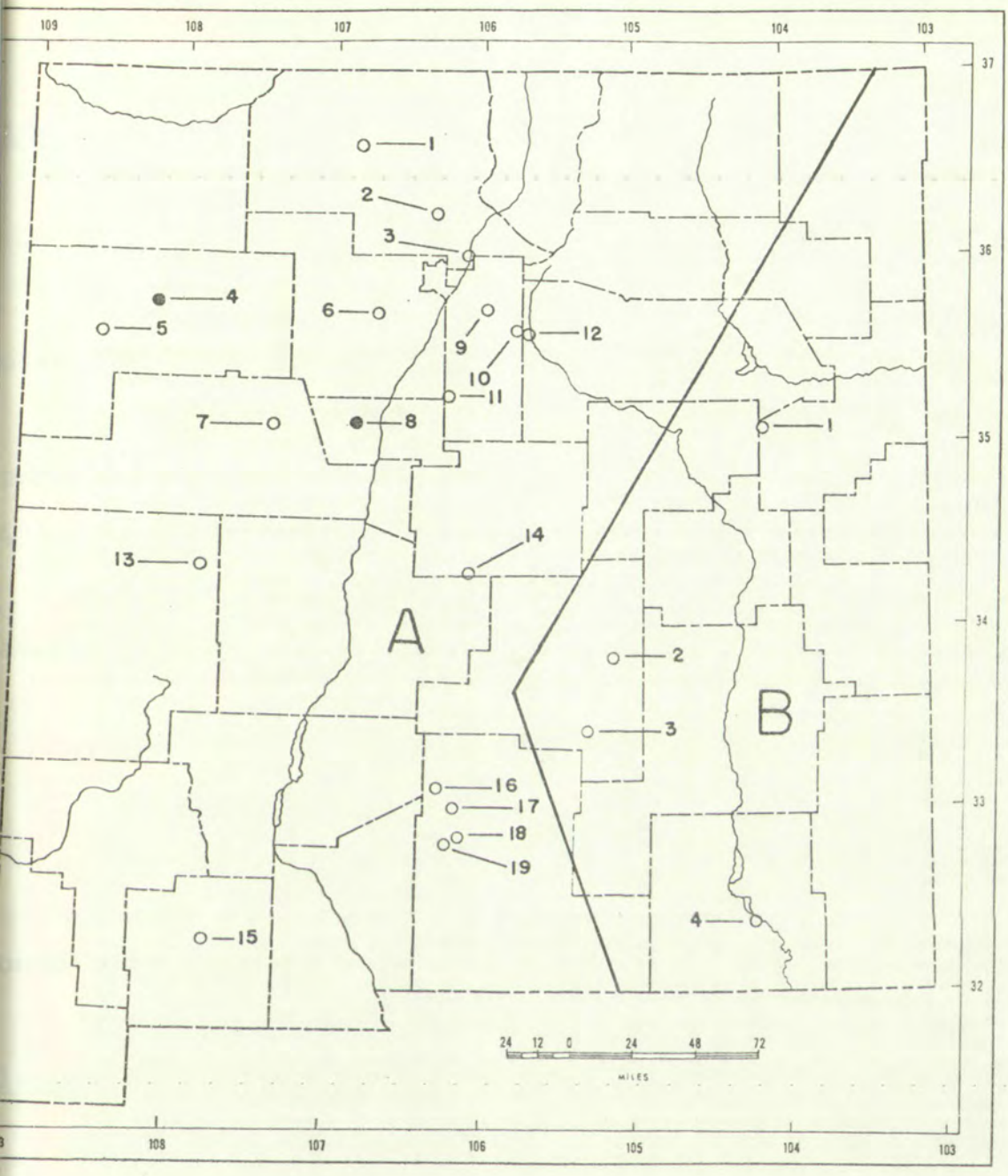

Fig. 47. A. Perognathus apache

B. Perognathus merriami

Records of occurence (Fig. 48).--

idalgo Co.:

1. Doubtful Canyon, Peloncillo Mts., 8 mi. N and mi. W Steins (UNMCV).

2. Skeleton Canyon, approximately 4900 ft., 10 mi. S odeo (Findley, 1959: 145).

3. Crest of Peloncillo Mts. on the Geronimo Trail at pproximately 5900 ft., 21 mi. S Rodeo (Findley, 1959: 45).

4. Guadalupe Canyon, Peloncillo Mts., at approxiately 4500 ft., 31 mi. S Rodeo (Findley, 1959: 145).

PEROGNATHUS HISPIDUS Baird

Hispid Pocket Mouse

Perognathus hispidus paradoxus Merriam.

General remarks.--Perognathus hispidus inhabits the ower and Upper Sonoran Life Zones in New Mexico.

Subspecies ascribed to New Mexico.--Perognathus ispidus paradoxus Merriam.

Records of occurence (Fig. 49).--

olfax Co.:

1. 3 mi. SE Cimarron (Glass, 1947: 179); 3 or 4 mi. rom Cimarron (Hill, 1942a: 80).

andoval Co.:

2. Hwy 422, ½ mi. E Algodones (UNMCV).

an Miguel Co.:

3. Las Vegas (Bailey, 1931: 280).

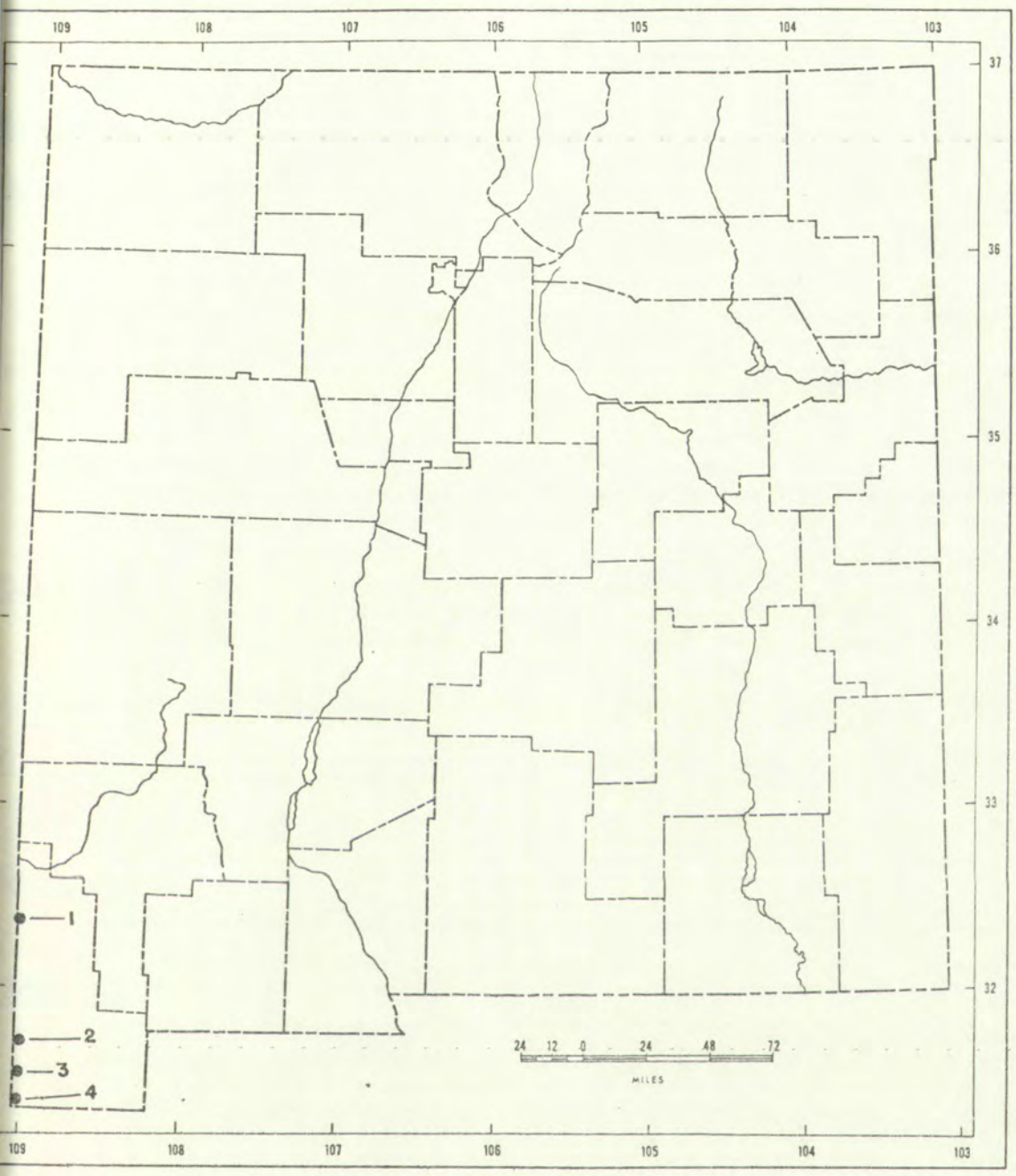

Fig. 48. Perognathus baileyi

Catron Co.:

4. On Dry Creek between the Gila and San Francisco Rivers (Bailey, 1931: 280).

Grant Co.:

5. Gila (Bailey, 1931: 280).

6. Near Redrock (Bailey, 1931: 280).

Hidalgo Co.:

7. 19.4 mi. S Animas (UNMCV).

8. 36 mi. S and 10 mi. W Animas, 5300 ft. (UNMCV).

9. Guadalupe Canyon, 31 mi. S Rodeo (UNMCV).

Dona Ana Co.:

10. Near Mesilla Park (Bailey, 1931: 280); Mesilla (Stone and Rehn, 1903: 25).

Otero Co.:

11. Tularosa (Bailey, 1931: 280).

Chaves Co.:

12. Near Roswell (Bailey, 1931: 280).

Eddy Co.:

13. Near Carlsbad (Bailey, 1931: 280).

PEROGNATHUS PENICILLATUS Woodhouse

Desert Pocket Mouse

Perognathus penicillatus eremicus Mearns.

General remarks.--Perognathus penicillatus is rather strictly limited to the Lower Sonoran Life Zone in New Mexico.

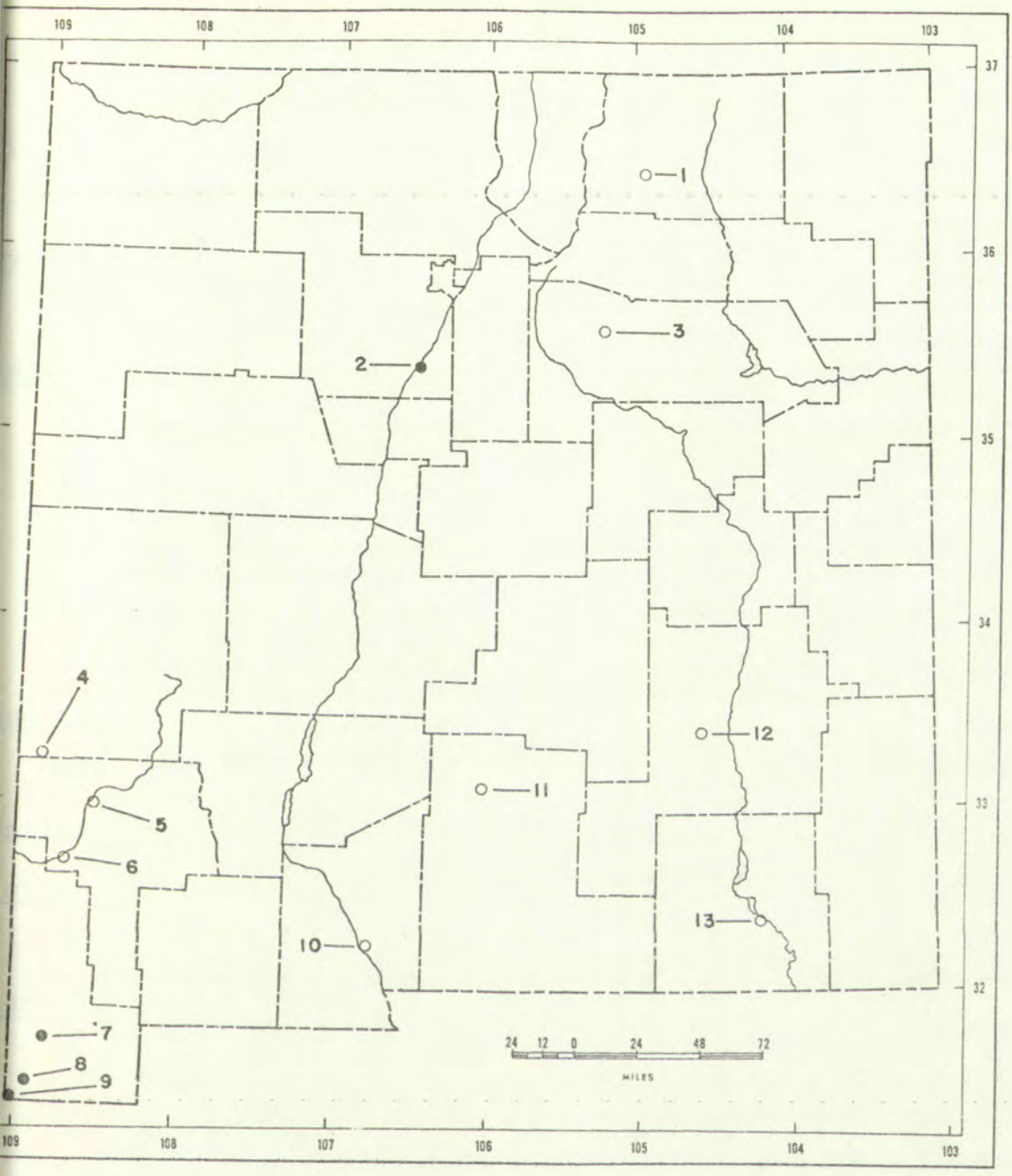

Fig. 49. Perognathus hispidus

Subspecies ascribed to New Mexico.--Perognathus
enicillatus eremicus Mearns.

Records of occurence (Fig. 50).--

rant Co.:

1. 1 mi. E Redrock (UNMCV).

dalgo Co.:

2. Doyle's Well, 10 mi. S and 5 mi. E Hachita (UNMCV).

3. T30S-R15W, Sec. 12, near Hatchet Ranch (UNMCV).

4. Cienega Ranch, Playas Valley (Bailey, 1931: 281).

5. Guadalupe Canyon, 31 mi. S Rodeo (UNMCV).

6. Horse Canyon, Alamo Hueco Mts. (UNMCV).

na Co.:

7. Near Deming, bordering sink of the Mimbres
ailey, 1931: 281).

na Ana Co.:

8. Garfield (Bailey, 1931: 281).

ero Co.:

9. Salinas (Blair, 1941: 223).

10. 14 mi. W Tularosa (Benson, 1933: 30).

11. Tularosa (Bailey, 1931: 281).

12. Slopes of Cerrito Tularosa (Benson, 1933: 30).

13. 10 mi. SW Tularosa (Benson, 1933: 30).

14. About 4 mi. N Alamogordo (Dice, 1930: 14).

15. Near Alamogordo (Benson, 1933: 30).

16. White Sands, 18 mi. SW Alamogordo (Benson, 1933:
).

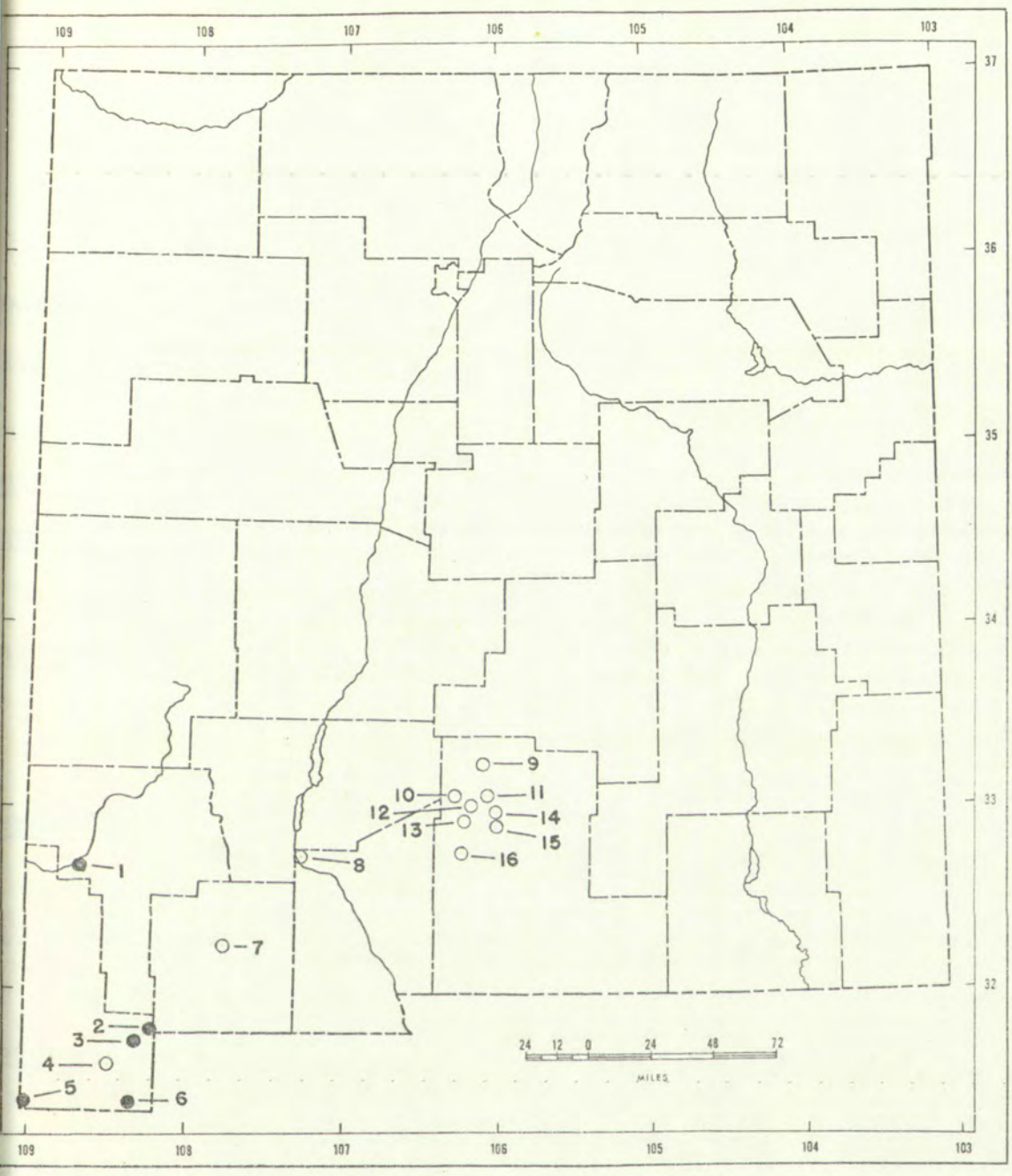

Fig. 50. Perognathus penicillatus

PEROGNATHUS INTERMEDIUS Merriam

Rock Pocket Mouse

Perognathus intermedius Merriam.

General remarks.--In New Mexico, the rock pocket ouse inhabits the Lower Sonoran Life Zone with only a light overlap into the Upper Sonoran.

Subspecies ascribed to New Mexico.--Perognathus ntermedius intermedius Merriam; Perognathus intermedius upestris Benson; Perognathus intermedius ater Dice.

Records of occurence (Fig. 51).--

alencia Co.:

1. 1 mi. E Suwanee (UNMCV).

2. Rio Puerco (Bailey, 1931: 282).

ernalillo Co.:

3. 7 7/8 mi. W and 2½ mi. N Albuquerque (UNMCV); 5 i. W Albuquerque (UNMCV).

4. Isleta (Bailey, 1931: 282).

ocorro Co.:

5. 17 mi. W Bernardo, Ladron Mts., 7000 ft. (UNMCV); 6 mi. W and 1 mi. N Bernardo, Ladron Mts., 7500 ft. UNMCV).

6. 7½ mi. W Bernardo, 5200 ft. (UNMCV).

7. 5 mi. E and 18 mi. S Belen (UNMCV).

8. 17 mi. E and 15 mi. S Belen (UNMCV).

9. Socorro (Bailey, 1931: 282).

rant Co.:

10. 1 mi. E Redrock (UNMCV).

20. Apache Mine, 6 mi. S Hachita (Benson, 1932: 337).

ierra Co.:

11. 1 mi. E Elephant Butte (UNMCV).

12. Las Palomas (Bailey, 1931: 282).

13. Lake Valley (Bailey, 1931: 282).

incoln Co.:

14. French's Ranch, 12 mi. NW Carrizozo (Benson, 933: 30); About 12 mi. NW Carrizozo by road (Bradt, 1932: 24); Lava, 10 mi. from Carrizozo, S Carrizozo-Socorro Hwy Bradt, 1932: 325).

15. 4 mi. NW Carrizozo by road (Bradt, 1932: 324).

16. Malpais 4 mi. W Carrizozo (Dice, 1942: 204).

17. Malpais W Oscuro (Blair, 1941: 223).

idalgo Co.:

18. Doubtful Canyon, Peloncillo Mts., 8 mi. N and 2 i. W Steins (UNMCV).

19. T24S-R21W, Sec. 10 (UNMCV).

21. Pass on Geronimo Trail at top of Peloncillo Mts., 2 mi. S and 2 mi. E Rodeo (UNMCV); Clanton Canyon, Pelon-illo Mts., 5700 ft., 22 mi. S and 2 mi. E Rodeo (UNMCV).

22. 18 mi. S and 3.2 mi. W Animas (UNMCV).

23. Animas Mts., Indian Creek, T31S-R19W, Sec. 16 UNMCV).

24. Occidental Mines, Sierra Rica, T29S-R14W, Sec. 25 UNMCV).

25. Sierra Rica between Hatchet Ranch and Doyle's Well (UNMCV).

26. Big Hatchet Mts., T31S-R15W, Sec. 36, 5250 ft. (UNMCV).

27. Black Bill Canyon, Animas Mts. (UNMCV).

28. 37½ mi. S and 8 mi. W Animas, 5500 ft. (UNMCV).

29. Emory Canyon, Alamo Hueco Mts. (UNMCV).

30. E edge Guadalupe Mts., Pascoe's Ranch, 9½ mi. W and 42 mi. S Animas (Harris, Southwestern Nat., in press).

31. Guadalupe Canyon (UNMCV).

32. Whitewater Canyon, San Luis Mts., 13 mi. W Antelope Wells (UNMCV).

33. Horse Canyon, Alamo Hueco Mts. (UNMCV).

Dona Ana Co.:

34. San Andres Mts. (Bailey, 1931: 282).

35. Mesilla (Stone and Rehn, 1903: 25).

36. Lava beds nearest Kenzin (Benson, 1932: 377).

Otero Co.:

37. Malpais Spring, 14 mi. W Three Rivers (Benson, 1932: 342).

38. Bottom of Dry Canyon (Dice, 1930: 23).

39. About 4 mi. N Alamogordo (Dice, 1930: 14).

40. Lower slopes Sacramento Mts. near Alamogordo (Dice, 1930: 13).

41. Slopes of Cerrito Tularosa, 7 mi. SW Tularosa (Benson, 1933: 30).

42. Highrolls (Dice, 1930: 23).

ot Located:

Box Canyon, 6500 ft., Sacramento Mts. (Dice, 1930: 3).

PEROGNATHUS NELSONI Merriam

Nelson's Pocket Mouse

General remarks.--At present, only one specimen of his pocket mouse is known from New Mexico.

Subspecies ascribed to New Mexico.--Perognathus elsoni canescens Merriam.

Records of occurence (Not mapped).--

ddy Co.:

4 mi. W White City, 3700 ft. (Webb, 1954: 453).

DIPODOMYS ORDII Woodhouse

Ord's Kangaroo Rat

Perodipus ordii ordii (Woodhouse).

Perodipus montanus montanus (Baird).

Perodipus montanus richardsoni (Allen).

Perodipus longipes (Merriam).

General remarks.--Ord's kangaroo rat is an animal of e Sonoran Life Zones, Upper and Lower.

Several of Setzer's records appear to be misplaced to county. The most probable correct locality is ven in such cases.

Subspecies ascribed to New Mexico.--Dipodomys ordii

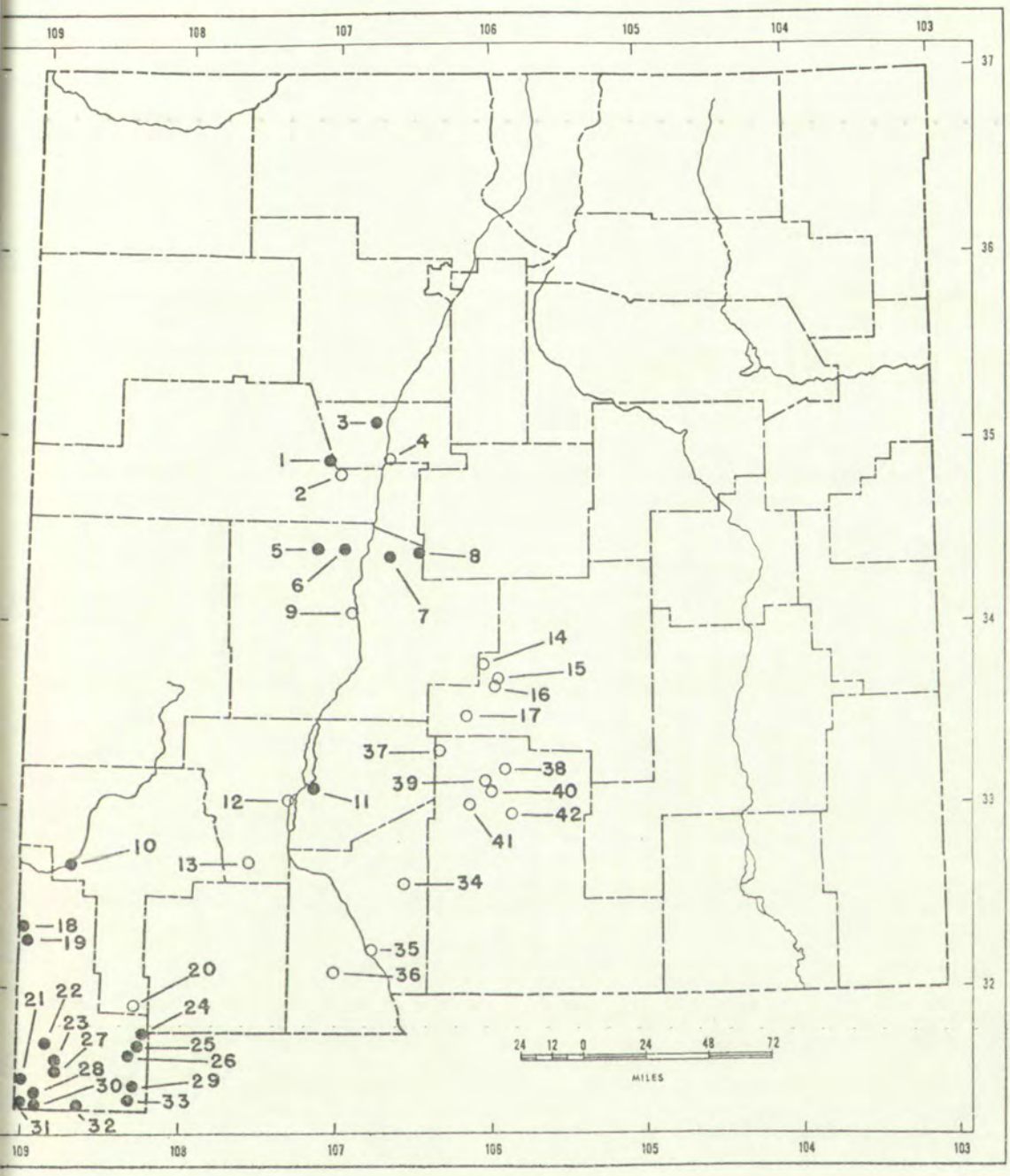

Fig. 51. Perognathus intermedius

rdii Woodhouse; Dipodomys ordii medius Setzer; Dipodomys rdii richardsoni (Allen); Dipodomys ordii montanus Baird; ipodomys ordii longipes (Merriam).

Records of occurence (Fig. 52).--

an Juan Co.:

1. Shiprock (Setzer, 1949: 558).
2. Fruitland (Setzer, 1949: 558).
3. Blanco (Setzer, 1949: 558).
4. 5 mi. N and 5 mi. E Newcomb (UNMCV).
5. Chaco Canyon Nat'l Monument (Setzer, 1949: 558).

io Arriba Co.:

6. Stinking Springs Lake (Setzer, 1949: 520).
7. 2 mi. SE El Rito (Setzer, 1949: 520).
8. 5 mi. E Abiquiu (Setzer, 1949: 520).
9. Rinconada (Setzer, 1949: 520).
10. Espanola (Bailey, 1931: 269).

aos Co.:

11. Vicinity of Taos (Bailey, 1931: 269).

olfax Co.:

12. Raton (Bailey, 1931: 270).
13. 4 mi. SW Cimarron (Setzer, 1949: 540); 1½ mi. W hilmont Ranch Headquarters (Setzer, 1949: 540).
14. 3 mi. SE Cimarron (Setzer, 1949: 540).

nion Co.:

15. Clayton, Apache Canyon (Setzer, 1949: 513).

cKinley Co.:

16. Gallup (Setzer, 1949: 558).

17. Wingate (Setzer, 1949: 558); Fort Wingate (Bailey, 931: 272).

18. 2 mi. W Mariano Lake (Setzer, 1949: 558).

19. Thoreau (Setzer, 1949: 558).

20. Zuni River (Setzer, 1949: 558); Zuni (Bailey, 931: 272).

ndoval Co.:

21. Espiritu Santo Grant (UNMCV).

22. Juan Tafoya (Setzer, 1949: 558).

23. W Rio Grande, opposite Bernalillo (Williams, 49: 25).

24. 12 mi. NW Alameda, 5500 ft. (Setzer, 1949: 520).

25. Alameda Grant, Bernalillo and Sandoval Counties, mi. N Albuquerque (Compton and Hedges, 1943: 306); 7½ . N Albuquerque (UNMCV).

26. Juan Tabo Canyon, 5900 ft. (Clothier, 1957b: 99).

s Alamos Co.:

27. Pajarito (Setzer, 1949: 520); Pajarito Canyon, mon Virgil Grant (UNMCV).

lencia Co.:

28. 1½ mi. W San Mateo (Hooper, 1941a: 28).

29. 8 mi. SE Grants (Setzer, 1949: 558); 4 mi. W Cartys (Hooper, 1941a: 28).

30. Laguna (Setzer, 1949: 558).

31. 2½ mi. E El Moro P. O., Zuni Mts. (Setzer, 1949: 8).

32. 9 mi. SSE Grants (Setzer, 1949: 558).

33. Just below Isleta (UNMCV).

34. ¼ mi. S county line, Hwy 85 (UNMCV).

35. 1.7 mi. W Los Lunas (UNMCV); 2 mi. W Los Lunas
NMCV).

36. Jaramillo Canyon, 6300 ft., Manzano Mts. (Clothier,
57b: 99).

37. Shuman's Ranch, T6N-R10W, Sec. 30 (Hooper, 1941a:
).

38. 30 mi. S Albuquerque (UNMCV).

39. Abo Arroyo (UNMCV).

rnalillo Co.:

40. 5½ mi. N Albuquerque (UNMCV); 2 mi. W and 5 mi.
Albuquerque (UNMCV); 3 mi. W and 4 mi. N Albuquerque
NMCV).

41. Mesa 4 mi. E Alameda (UNMCV).

42. La Cueva Recreation Area (UNMCV); Jaral Canyon
lothier, 1957b: 99).

43. Bear Canyon, 6200 ft. (Clothier, 1957b: 99); On
an Tabo Rd., 5 mi. E and 4 mi. N Albuquerque (Clothier,
57b: 99); East Mesa, E Albuquerque, 4 mi. N Las Lomas
., 2 mi. W base Sandia Mts. (Clothier, 1957b: 99); East
sa, 2 mi. N Las Lomas Rd., 1 mi. W base Sandia Mts.
lothier, 1957b: 99); Embudito Canyon, 6000 ft., Sandia
s. (Clothier, 1957b: 99); Embudo Canyon, 6200 ft., Sandia
s. (Clothier, 1957b: 99); Bear Canyon, Sandia Mts.

Setzer, 1949: 520); Mouth of Embudo Canyon, Sandia Mts. UNMCV); Embudo Canyon, T10N-R4E, Sec. 14 (UNMCV); T11N-4E, Sec. 26 (UNMCV); 4 mi. N and 10 mi. E Albuquerque UNMCV).

44. 18 mi. W Albuquerque (UNMCV); 17 mi. W Albuquerue, Rio Puerco (UNMCV).

45. 5 mi. E US 66 bridge over Rio Puerco (Williams, 949: 25).

46. Rio Puerco-Rio Grande divide, W volcanoes (UNMCV); mi. W and 2 mi. N Albuquerque (UNMCV); 5 7/8 mi. W and 1/8 mi. N Albuquerque (UNMCV).

47. 5 mi. W Albuquerque, 1 mi. S US 66 (UNMCV); 8 i. W Albuquerque (UNMCV).

48. Mesa S Univ. N. Mex., Albuquerque (UNMCV); Albuquerque (UNMCV).

49. 1 mi. W Tijeras Canyon (UNMCV); East Mesa, 50 yds. "U" on hill (UNMCV); East Mesa approximately ½ mi. N "U" cn. (UNMCV); Top N bluff overlooking mouth Tijeras Canyon, E Sandia Base (Clothier, 1957b: 99); Tijeras Canyon, 500 ft. (Clothier, 1957b: 99).

50. Hell Canyon, 6400 ft., Manzano Mts. (Clothier, 957b: 99).

nta Fe Co.:

51. Around Santa Fe (Holdenried, 1957: 333).

52. Seton's Ranch, near Santa Fe (Setzer, 1949: 520).

53. 8 mi. SW Santa Fe (Setzer, 1949: 520).

54. San Pedro (Setzer, 1949: 520); Near Golden, 6500 t., NE edge San Pedro Valley (Clothier, 1957b: 98).

an Miguel Co.:

55. Pecos (Setzer, 1949: 520); 3 mi. S Pecos (Setzer, 949: 520).

56. Rowe (Setzer, 1949: 520).

57. Bell Ranch (UNMCV).

58. 2 mi. W and 1 mi. S Conchas (Hall and Kelson, 959: 516).

uay Co.:

59. Glenrio (Setzer, 1949: 513).

atron Co.:

60. Cougar Ranch, NE Adams Diggings (Setzer, 1949: 58).

61. N base Datil Mts. (Bailey, 1931: 271).

62. Quemado (Bailey, 1931: 272).

63. 10 mi. SW Quemado (Setzer, 1949: 558).

64. Mangas Valley (Setzer, 1949: 530).

65. Alma (Setzer, 1949: 532).

66. Glenwood (Bailey, 1931: 268).

67. Pleasanton (Setzer, 1949: 532).

156. Dry Creek (Setzer, 1949: 532).

ocorro Co.:

68. 4 mi. E and 10 mi. S Belen (UNMCV).

69. Abo Arroyo, 15 mi. E and 14 mi. S Belen (UNMCV).

70. Riley (Setzer, 1949: 558).

71. 7½ mi. W Bernardo (UNMCV).

72. 1 mi. S Bernardo (Setzer, 1949: 558).

73. Contreras (UNMCV).

74. Gallinas Mts. (Setzer, 1949: 532).

75. San Augustin Plains, 12 mi. N Monica Springs
etzer, 1949: 532).

76. Valley of Ojo de la Parida, 10 mi. NE Socorro
ailey, 1931: 266).

77. Range, 2 mi. SW Socorro, 4700 ft. (Setzer, 1949:
2).

78. Big Rosa Canyon, San Mateo Mts. (UNMCV).

79. W of Rio Grande, ½ mi. E San Antonio (UNMCV).

80. Sand dunes 7.1 mi. W Bingham (UNMCV).

81. Rio Alamosa, 15 mi. N Ojo Caliente (Setzer, 1949:
0).

rrance Co.:

82. Comanche Canyon, 6250 ft., Manzano Mts. (Clothier,
57b: 99).

83. 5 mi. S and 1½ mi. E Estancia (UNMCV).

84. Negra, or 4 mi. W Encino (UNMCV).

85. 10 mi. E and 2 mi. S Willard (UNMCV).

86. 15 mi. NE Corona (UNMCV).

87. Gran Quivera (Bailey, 1931: 269).

adalupe Co.:

88. Santa Rosa (Setzer, 1949: 520).

rry Co.:

89. 4 mi. W and 2 3/4 mi. N Clovis (Setzer, 1949: 520).

Grant Co.:

90. Cactus Flat, 20 mi. N Cliff (Setzer, 1949: 532).

91. Gila (Setzer, 1949: 532); Cliff (Setzer, 1949: 532).

92. Silver City (Setzer, 1949: 532).

93. Redrock (Setzer, 1949: 532).

94. 9 mi. N Faywood (Setzer, 1949: 532).

95. Hachita (Setzer, 1949: 532).

Sierra Co.:

96. Fairview (Setzer, 1949: 532).

97. Rhoads Pass, San Andres Mts. (UNMCV).

98. Cuchillo (Setzer, 1949: 532).

99. 8½ mi. E Engle, Jornada del Muerto (UNMCV).

100. Hwy 52, 4 mi. W and 3 mi. S Engle (UNMCV).

101. 1 mi. E Elephant Butte (UNMCV).

102. Las Palomas (UNMCV).

103. Lake Valley (Setzer, 1949: 532).

Lincoln Co.:

104. Guyo Canyon, 40 mi. SE Corona (Setzer, 1949: 532).

105. Jicarilla Mts. (Bailey, 1931: 269).

106. 12 mi. NW Carrizozo by road (Bradt, 1941: 324).

107. 44 mi. NW Roswell (Setzer, 1949: 520).

108. 4 mi. NW Carrizozo by road (Bradt, 1941: 324).

de Baca Co.:

110. 8 mi. N Fort Sumner (Setzer, 1949: 520).

111. Fort Sumner (Bailey, 1931: 270).

oosevelt Co.:

112. Milnesand Restoration Area (UNMCV).

157. Kenna (Setzer, 1949: 520).

idalgo Co.:

113. 10 mi. NW Lordsburg (Setzer, 1949: 532).

114. 6.2 mi. S Animas (UNMCV).

115. 13.4 mi. S Animas (UNMCV).

116. 17 mi. S Animas (UNMCV).

117. Junction N. Mex. Hwy 81 and Robertson Ranch Rd., 31S-R16W, Sec. 29 (UNMCV).

118. Clanton Canyon, Peloncillo Mts., 5500 ft., 22 i. S and 2 mi. E Rodeo (UNMCV).

119. 37½ mi. S and 8 mi. W Animas (UNMCV).

120. Upper Animas Valley, 36 mi. S and 3 mi. W Animas UNMCV).

121. 4 mi. NW San Luis Pass, Animas Valley (Setzer, 949: 532); 3 mi. W and 1 mi. N San Luis Pass (UNMCV).

122. Deer Creek, Culberson Ranch (Setzer, 1949: 532).

123. Dog Spring (Setzer, 1949: 532).

una Co.:

124. Deming (Setzer, 1949: 532); US Hwy 70-80, 1 mi. Deming (UNMCV).

ona Ana Co.:

125. Garfield (Setzer, 1949: 532).

126. College Ranch, 25 mi. N Las Cruces (UNMCV).

158. Fort Thorn (Baird, 1857: 412).

127. Jornada Range Reserve (Aldous, 1935: 131).

128. 6 to 8 mi. NE Las Cruces (Setzer, 1949: 532).

129. 11 mi. W Las Cruces (Setzer, 1949: 532).

130. 15 mi. W Las Cruces (Setzer, 1949: 532).

131. Organ Mts., near Globe Springs (Setzer, 1949: 32).

132. Coe's Ranch, El Paso Rd., 35 mi. N El Paso, ex. (Setzer, 1949: 532).

133. ¼ mi. N Strauss (Setzer, 1949: 532); 1 mi. E trauss (Setzer, 1949: 532).

134. 20 mi. W El Paso, Tex. (Setzer, 1949: 532).

135. 35 mi. W El Paso, Tex. (Setzer, 1949: 532).

136. 10 mi. W El Paso, Tex. (Setzer, 1949: 532); Mex. oundary near Monument 5, Lat 31° 47' and Long. 30° 15' Setzer, 1949: 532).

tero Co.:

137. Near Salina (Blair, 1941: 224).

138. Tularosa (Setzer, 1949: 532).

139. Quartz Sands, SW Tularosa (Setzer, 1949: 532).

140. 10 mi. SW Tularosa (Setzer, 1949: 532).

141. About 9 mi. W Alamogordo (Dice, 1930: 10); White ands, 12 mi. W Alamogordo (Setzer, 1949: 532).

142. 2 mi. S Alamogordo (Setzer, 1949: 532); 3 mi. S lamogordo (Setzer, 1949: 532); 5 mi. S Alamogordo (Setzer, 949: 532).

143. 9 mi. SW Alamogordo (Setzer, 1949: 532).

144. 12 mi. SW Alamogordo (Setzer, 1949: 532); 15 mi. V Alamogordo (Setzer, 1949: 532).

145. White Sands, 18 mi. SW Alamogordo (Setzer, 1949: 32).

146. ½ mi. SW Escondido (Setzer, 1949: 532); Escon-ida (Benson, 1933: 35).

147. Jarilla (Setzer, 1949: 532).

naves Co.:

148. 40 mi. N Roswell (Setzer, 1949: 520).

149. 35 mi. N Roswell (Setzer, 1949: 520).

150. 15 mi. NE Roswell (Setzer, 1949: 520).

151. Region about Roswell (Bailey, 1931: 270).

152. 6.4 mi. E and 2 mi. S Roswell (UNMCV); 7 mi. E oswell (UNMCV).

153. 9.3 mi. E and 8.2 mi. S Roswell (UNMCV).

ddy Co.:

154. 3 mi. NW Carlsbad (Setzer, 1949: 532).

155. Carlsbad (Bailey, 1931: 266).

ot Located:

Lava Mesa, Socorro Co. (Setzer, 1949: 532).

S Clyde, 4300 ft., Socorro Co. (Setzer, 1949: 532).

Waco Tanks (Baird, 1857: 412).

Huerfano River (Baird, 1857: 412).

DIPODOMYS SPECTABILIS Merriam

Banner-tailed Kangaroo Rat

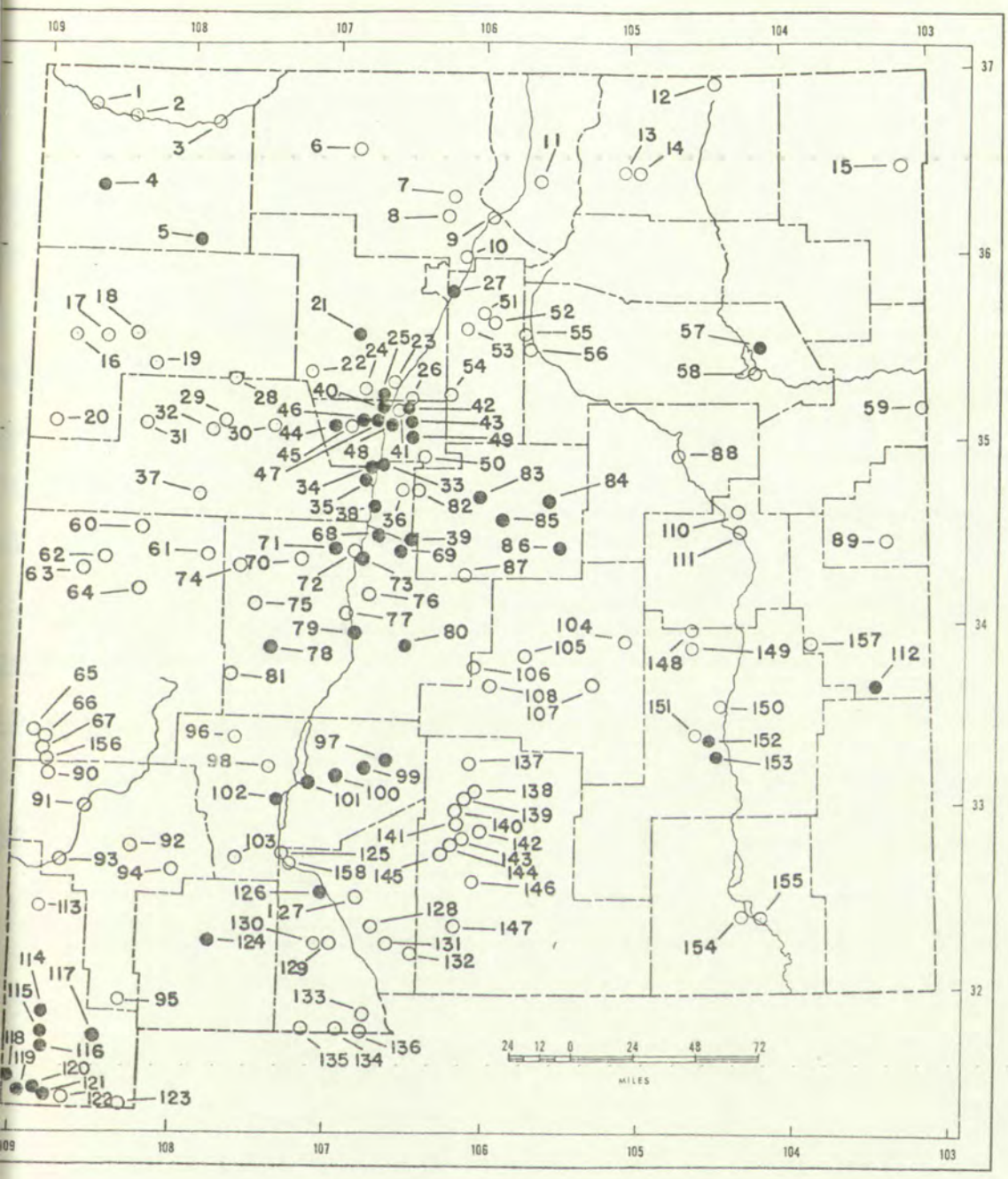

Fig. 52. Dipodomys ordii

Dipodomys spectabilis spectabilis Merriam.

Dipodomys spectabilis baileyi Goldman.

General remarks.--The banner-tailed kangaroo rat in-
bits the Lower and Upper Sonoran Life Zones in New Mex-
co.

Bailey (1931: 260) records the presence of these
nimals "...in the valley of Salado Creek both east and
outh of Cabezon..." It is assumed here that he was
riting of two creeks--the Rio Salado to the east and
alado Creek to the south.

Subspecies ascribed to New Mexico.--Dipodomys
pectabilis spectabilis Merriam; Dipodomys spectabilis
larencei Goldman; Dipodomys spectabilis baileyi Goldman.

Records of occurence (Fig. 53).--

an Juan Co.:

1. Near Fruitland (Bailey, 1931: 260).

2. Near Bloomfield, N side San Juan River (Bailey,
931: 260).

3. Blanco Canyon (Bailey, 1931: 260).

4. Largo Canyon (Bailey, 1931: 260).

5. Escavada Valley (Bailey, 1931: 260).

6. Kimbetoh Valley (Bailey, 1931: 260).

7. Chaco Canyon (Bailey, 1931: 260).

cKinley Co.:

8. E base Chuska Mts. (Bailey, 1931: 260).

9. 15 mi. NW Gallup (Goldman, 1933b: 468).

10. N Hosta Butte Mts. (Bailey, 1931: 260).

11. A little W Gallup (Bailey, 1931: 260).

Sandoval Co.:

12. Valley of Salado Creek E Cabezon (Bailey, 1931: 260).

13. Juan Tafoya, E base Mt. Taylor Range (Bailey, 1931: 260).

14. 6 mi. E Algodones (Bailey, 1931: 260).

76. Valley of Salado Creek S Cabezon (Bailey, 1931: 260).

15. Alameda Grant, Bernalillo and Sandoval Counties, 10 mi. N Albuquerque (Compton and Hedges, 1943: 306).

Valencia Co.:

16. Cubero (Bailey, 1931: 260).

17. Near Laguna (Bailey, 1931: 260).

18. 15 mi. SW Acoma (Bailey, 1931: 260).

Bernalillo Co.:

19. Juan Tabo Rd., 2 mi. W Recreation Area (UNMCV); 5 mi. E and 1 mi. N Alameda (UNMCV); Near Juan Tabo (Clothier, 1957b: 96).

20. 5 mi. W Albuquerque (UNMCV).

21. 4 mi. E Albuquerque (Clothier, 1957b: 96); 3 mi. E Albuquerque (Bailey, 1931: 260).

Santa Fe Co.:

22. About 2 mi. N Santa Fe (Holdenried and Morlan, 1956: 376).

23. Santa Fe Municipal Airport, 7 mi. SW Santa Fe (Holdenried, 1957: 331); 1 mi. W Santa Fe Municipal Airport (353, Santa Fe Field Station, US Publ. Health Surv.).

24. Lamy (Holdenried and Morlan, 1956: 376).

atron Co.:

25. Foothills Datil Mts. (Bailey, 1931: 260).

ocorro Co.:

26. 10½ mi. W and 4.7 mi. N Bernardo (UNMCV).

27. Below Ladron Camp, T3N-R3W, Sec. 36 (UNMCV).

28. Around base Jara Peak, Bear Spring Mts. (Bailey, 931: 260).

29. Foothills Gallina Mts. (Bailey, 1931: 260).

30. Near Magdalena (Bailey, 1931: 260).

31. 3 or 4 mi. NW Socorro (Bailey, 1931: 260).

32. 15 mi. W and 11 mi. S Magdalena, San Augustin lains (UNMCV).

33. Big Rosa Canyon, San Mateo Mts. (UNMCV).

34. Upper part Alamosa River (Bailey, 1931: 260).

orrance Co.:

35. 10 mi. E and 2 mi. S Willard (UNMCV).

36. Mesa Jumanes (Corhies and Taylor, 1922: 9).

adalupe Co.:

37. 8 or 10 mi. N Santa Rosa (Bailey, 1931: 260).

38. Santa Rosa (Bailey, 1931: 260).

ant Co.:

39. Near Burro Mts. (Bailey, 1931: 261).

40. Silver City (Bailey, 1931: 249).

41. Lordsburg Plains, vicinity Redrock (Monson and essler, 1940: 37).

42. Hachita (Bailey, 1931: 249).

ierra Co.:

43. Mesas about Cuchillo (Bailey, 1931: 260).

44. Near Las Palomas (Bailey, 1931: 260).

45. Jornado Valley (Bailey, 1931: 260).

46. Lake Valley (Bailey, 1931: 260).

ncoln Co.:

47. NW base Jicarilla Mts. (Bailey, 1931: 260).

48. About 50 mi. NW Roswell (Bailey, 1931: 260).

49. French's Ranch, 12 mi. NW Carrizozo (Benson, 1933:).

50. 40 mi. NW Roswell (Bailey, 1931: 259).

51. About 7 mi. W Carrizozo (Blair, 1941: 223).

52. 40 mi. W Roswell (Goldman, 1923: 140).

Baca Co.:

53. N Fort Sumner (Bailey, 1931: 260).

dalgo Co.:

54. Lordsburg (Bailey, 1931: 249).

55. Doyle's Well, 10 mi. S and 5 mi. E Hachita, T33S-9W, Sec. 29 (UNMCV).

56. 18 mi. S and 3.2 mi. W Animas (UNMCV).

57. Playas Valley (Bailey, 1931: 249).

58. Upper Animas Valley, 36 mi. S and 3 mi. W Animas

NMCV); T33S-R20W, Sec. 19 (UNMCV).

59. 36 mi. S and 8 mi. W Animas (UNMCV).

60. 3 mi. W and 1 mi. N San Luis Pass (UNMCV).

na Co.:

61. Deming (Bailey, 1931:249).

na Ana Co.:

62. On road between Garfield and Rincon (Bailey, 31: 260).

63. College Range, 25 mi. N Las Cruces (UNMCV).

64. 8 mi. E Mesilla Park (Bailey, 1931: 260).

ero Co.:

65. Vicinity of Alamogordo (Stone and Rehn, 1903:).

66. Near Jarilla (Bailey, 1931: 260).

67. E base Franklin Mts. (Bailey, 1931: 260).

aves Co.:

68. 15 mi. N Roswell (Bailey, 1931: 260).

69. About 12 mi. NW Roswell (Bailey, 1931: 260).

70. About 15 mi. NE Roswell (Bailey, 1931: 260).

71. 9.3 mi. E and 8.2 mi. S Roswell (UNMCV).

dy Co.:

72. Foot of Gudalupe Mts., 30 mi. W Carlsbad (Bailey, 31: 259).

73. Carlsbad (Bailey, 1931: 260).

74. About Carlsbad Cavern (Bailey, 1928: 83).

a Co.:

75. 30 mi. E Carlsbad (Bailey, 1931: 259).

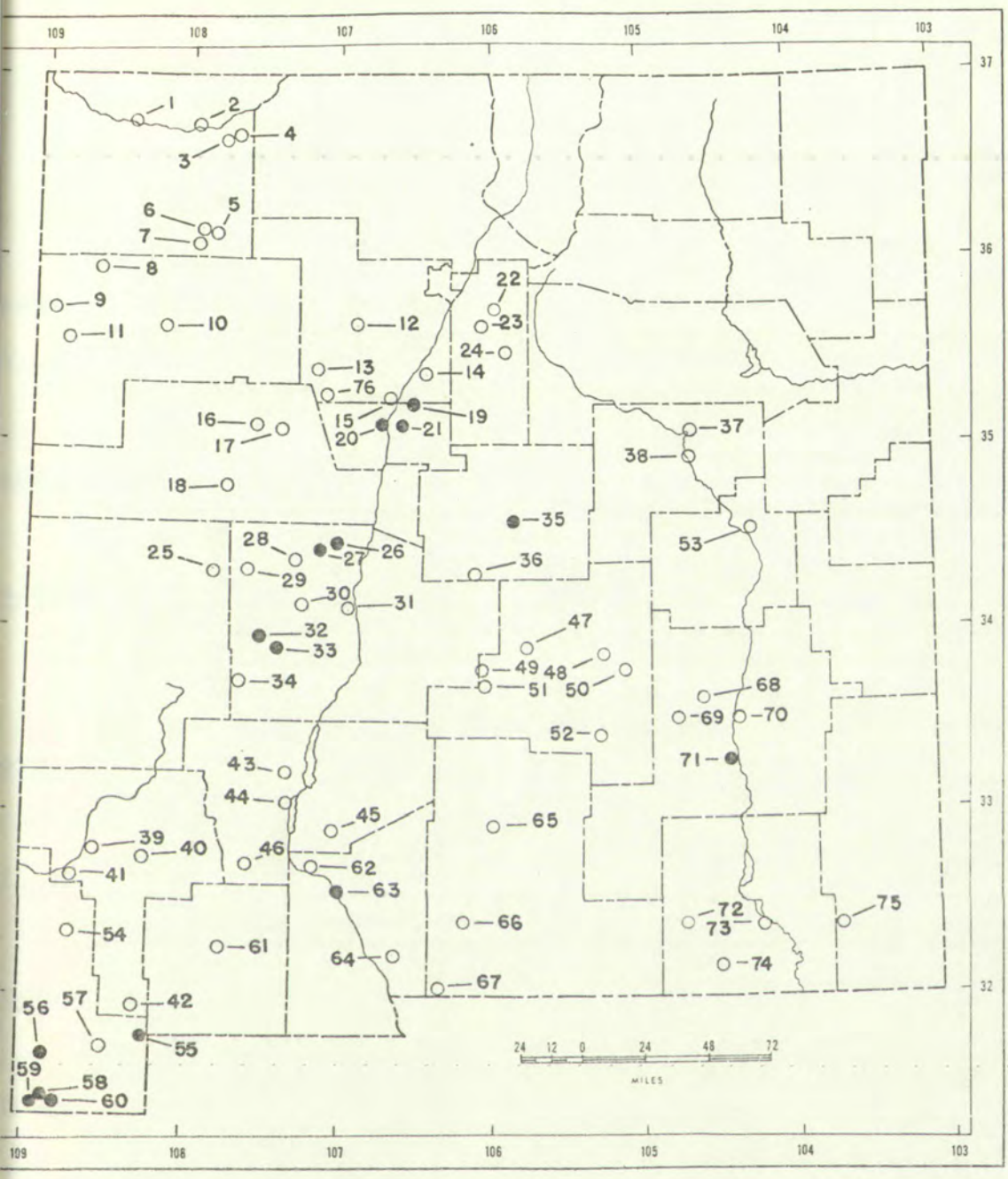

Fig. 53. Dipodomys spectabilis

DIPODOMYS MERRIAMI Mearns

Merriam's Kangaroo Rat

Dipodomys merriami merriami Mearns.

General remarks.--Although Merriam's kangaroo rat is sually found in the Lower Sonoran Life Zone in New Mexi-o, it is occasionally taken in the Upper Sonoran.

Subspecies ascribed to New Mexico.--Dipodomys erriami merriami Mearns.

Records of occurence (Fig. 54).--

alencia Co.:

3. 1 mi. E Suwanee (UNMCV).

4. 30 mi. S Albuquerque (UNMCV).

ernalillo Co.:

1. 5 mi. W Albuquerque (UNMCV); 5 7/8 mi. W and 2 1/8 i. N Albuquerque (UNMCV).

2. 3 mi. S Albuquerque (UNMCV).

ocorro Co.:

5. 2 mi. E and 10 mi. S Belen (UNMCV); 4 mi. E and 0 mi. S Belen (UNMCV).

6. 11¼ mi. W and 5 mi. N Bernardo (UNMCV).

7. Below Ladron Camp, T3N-R3W, Sec. 36 (UNMCV).

8. 7½ mi. W Bernardo (UNMCV).

9. Contreras (UNMCV).

10. Socorro (Bailey, 1931: 264).

11. Big Rosa Canyon, San Mateo Mts. (UNMCV).

rant Co.:

12. Redrock (Bailey, 1931: 264); 1 mi. E Redrock UNMCV).

ierra Co.:

13. Rhoads Pass, San Andres Mts. (UNMCV).

14. Cuchillo (Bailey, 1931: 264).

15. 8½ mi. E Engle, Jornada del Muerto (UNMCV).

16. Las Palomas (Bailey, 1931: 265).

idalgo Co.:

17. Doubtful Canyon, Peloncillo Mts., 8 mi. N and mi. W Steins (UNMCV).

18. Doyle's Well, 10 mi. S and 5 mi. E Hachita (UNMCV).

19. 18 mi. S and 3.2 mi. W Animas (UNMCV).

20. 19.4 mi. S Animas (UNMCV).

21. Junction N. Mex. Hwy 81 and Robertson Ranch Rd., 31S-R16W, Sec. 29 (UNMCV).

22. Clanton Canyon, 5500 ft., Peloncillo Mts., 22 mi. and 2 mi. E Rodeo (UNMCV).

23. T33S-R19W, Sec. 29 (UNMCV); 3 mi. W and 1 mi. N an Luis Pass (UNMCV).

24. Horse Canyon, Alamo Hueco Mts. (UNMCV).

una Co.:

25. About Deming (Bailey, 1931: 264).

ona Ana Co.:

26. College Ranch, 25 mi. N Las Cruces (UNMCV).

27. Las Cruces (Bailey, 1931: 264).

28. 1 mi. E Strauss (Borell and Bryant, 1942: 35).

ddy Co.:

29. Near Salinas (Blair, 1941: 223).

30. Near Tularosa (Blair, 1941: 223); Tularosa Bailey, 1931: 264).

31. About 4 mi. N Alamogordo (Dice, 1930: 14).

32. Near Alamogordo (Blair, 1941: 223); About 3 mi. Alamogordo (Blair, 1940: 461).

33. About 9 mi. E Alamogordo (Dice, 1930: 10).

34. White Sands (Blair, 1941: 223).

35. ½ mi. SW Escondida (Benson, 1933: 35).

36. Jarilla (Bailey, 1931: 264).

naves Co.:

37. 7 mi. E Roswell (UNMCV).

38. 9.3 mi. E and 8.2 mi. S Roswell (UNMCV).

ddy Co.:

39. Carlbad (Bailey, 1931: 264).

40. About Carlsbad Cavern (Bailey, 1928: 86).

FAMILY CASTORIDAE

CASTOR CANADENSIS Kuhl

Beaver

Castor canadensis frondator Mearns.

Castor canadensis mexicanus Bailey.

General remarks.--In view of widespread transplantings, introductions, etc., a listing of localities from which the beaver has been taken would be of little value.

At present, the beaver inhabits most of the permanent

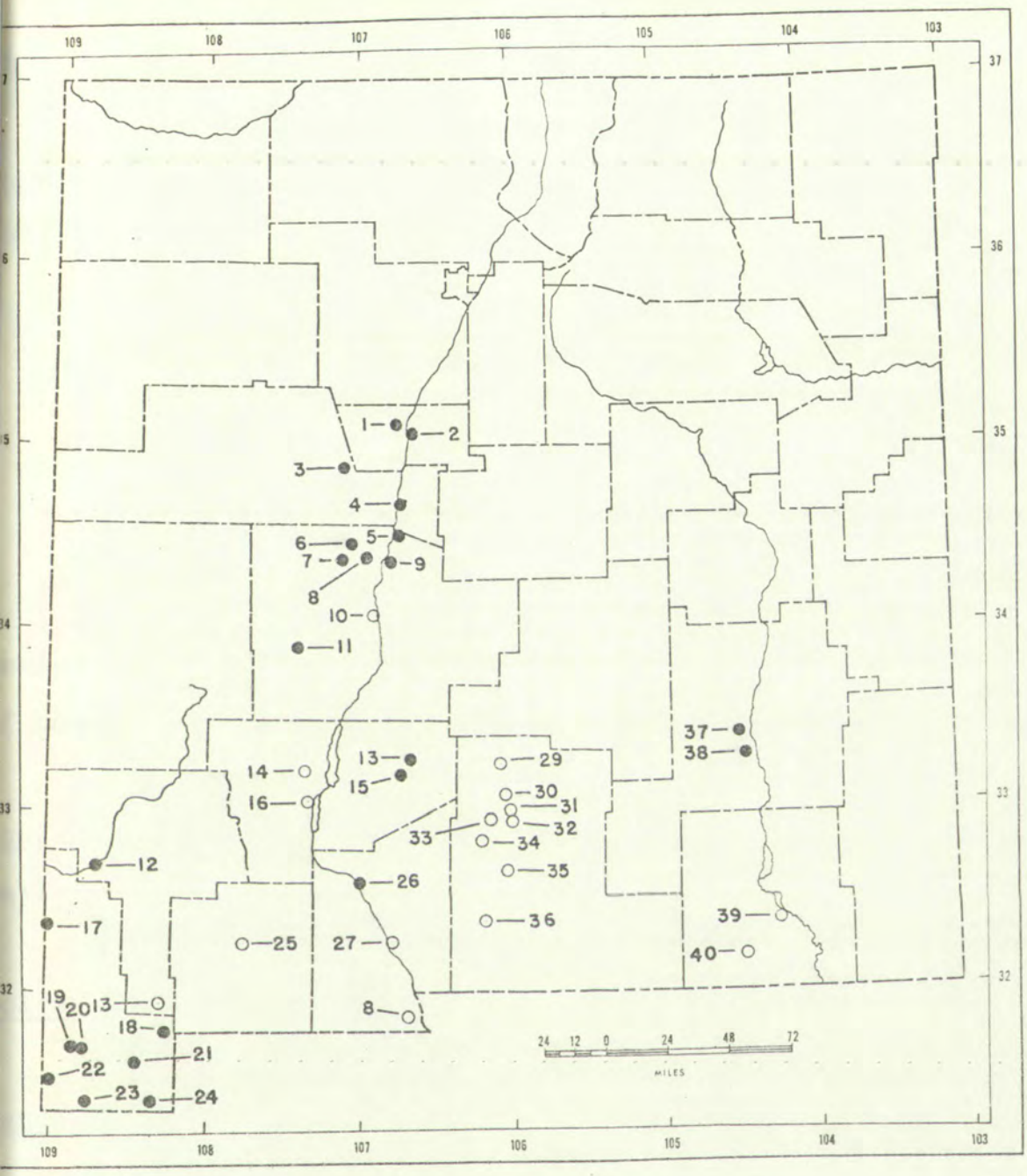

Fig. 54. Dipodomys merriami

treams of the state.

Subspecies ascribed to New Mexico.--Castor canadensis oncisor Warren and Hall; Castor canadensis mexicanus ailey; Castor canadensis frondator Mearns.

FAMILY CRICETIDAE

REITHRODONTOMYS MONTANUS (Baird)

Plains Harvest Mouse

Reithrodontomys albescens griseus Bailey.

Reithrodontomys montanus (Baird).

General remarks.--The plains harvest mouse in New exico seems primarily to inhabit the grassland portion f the Upper Sonoran Life Zone.

Subspecies ascribed to New Mexico.--Reithrodontomys ontanus montanus (Baird); Reithrodontomys montanus griseus ailey.

Records of occurence (Fig. 55).--

olfax Co.:

1. 3 mi. S Raton (Bailey, 1931: 166).

andoval Co.:

2. Sandoval (Hooper, 1952: 40).

an Miguel Co.:

3. Bell Ranch (UNMCV).

ocorro Co.:

4. 3 mi. N Socorro (Hooper, 1952: 40).

orrance Co.:

5. 10 mi. E and 2 mi. S Willard (UNMCV).

Guadalupe Co.:

6. Santa Rosa (Howell, 1914: 24).

Lincoln Co.:

7. 44 mi. NW Roswell (Benson, 1935: 141).

Hidalgo Co.:

8. 17 mi. S Animas (UNMCV).

REITHRODONTOMYS MEGALOTIS (Baird)

Western Harvest Mouse

Reithrodontomys megalotis megalotis (Baird).

Reithrodontomys megalotis aztecus Allen.

General remarks.--Bailey (1931: 162, 164) gives the habitat of these mice as in the Upper and Lower Sonoran Life Zones. However, specimens from New Mexico are available which were captured in grassy areas closely associated with spruce and fir at elevations in excell of 10,000 feet.

Subspecies ascribed to New Mexico.--Reithrodontomys megalotis megalotis (Baird); Reithrodontomys megalotis aztecus Allen.

Records of occurence (Fig. 56).--

San Juan Co.:

1. Laplata (Howell, 1914: 30).

2. Aztec (Howell, 1914: 30).

3. Los Pinos River, T30N-R7W, NW ¼ Sec. 7 (UNMCV); Los Pinos River, T30N-R7W, NE ¼ Sec. 7 (UNMCV); Los Pinos River, T30N-R7W, SW ¼ Sec. 8 (UNMCV).

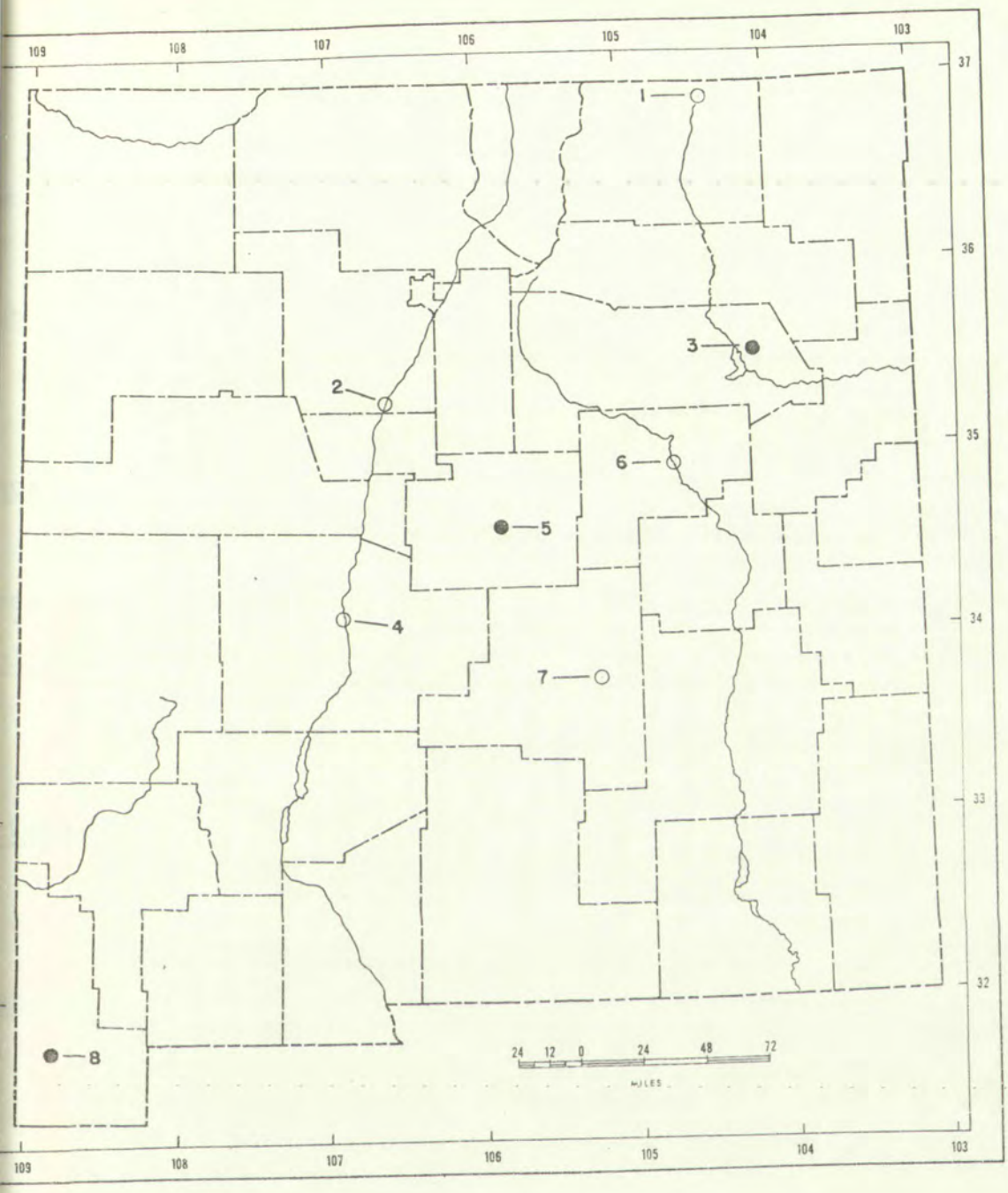

Fig. 55. Reithrodontomys montanus

4. Fruitland (Howell, 1914: 30).

5. Farmington (Howell, 1914: 30); 1½ mi. W Farming-
on (UNMCV).

6. 1½ mi. W Bloomfield (UNMCV).

o Arriba Co.:

7. Rinconada (Howell, 1914: 30).

8. Espanola (Howell, 1914: 30).

aos Co.:

9. Mouth of Duran Canyon, Rio la Junta, 2 mi. NE
res Ritos (UNMCV).

olfax Co.:

10. 4 mi. SW Cimarron (Hill, 1942a: 81).

11. 3 mi. SE Cimarron (Hill, 1942a: 81).

cKinley Co.:

12. Gallup (Howell, 1914: 30).

13. Wingate (Howell, 1914: 30).

andoval Co.:

14. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

15. Hwy 422, ½ mi. N and ½ mi. E Algodones (UNMCV).

16. 5 mi. S and 2 mi. W Bernalillo (UNMCV); Hwy 85,
mi. S and ½ mi. W Bernalillo (UNMCV).

17. Capulin Ranger Station, 9000 ft., Sandia Mts.
Clothier, 1957b: 105).

18. San Pedro Valley, 6000 ft. (Clothier, 1957b:
05); San Pedro Creek, ½ mi. N Bernalillo-Sandoval Co.
ine (Clothier, 1957b: 105).

ora Co.:

20. Guadalupita (Howell, 1914: 30).

alencia Co.:

23. 1½ mi. SW San Mateo (Hooper, 1941a: 28).

24. 1 mi. NE La Mosca Lookout, Mt. Taylor Range UNMCV).

25. Zuni Canyon, between 3 and 5 mi. WSW Grants Hooper, 1941a: 28).

26. 1 mi. E Suwanee (UNMCV).

27. ¼ mi. S county line between Bernalillo and Valen-ia Counties, in Valencia Co. (UNMCV).

ernalillo Co.:

28. Sandia Crest, 9½ mi. E Alameda (UNMCV); Tree prings, Sandia Mts. (UNMCV).

29. Embudo Canyon, near national forest boundary, andia Mts. (Clothier, 1957b: 105); Embudo Canyon, 6200 t., Sandia Mts. (Clothier, 1957b: 105); T11N-R4E, Sec. 6 (UNMCV); Pino Canyon, Sandia Mts. (UNMCV).

30. Mesa N Riv. N. Mex., Albuquerque (UNMCV).

31. 5 7/8 mi. W and 2 1/8 mi. N Albuquerque (UNMCV); mi. W Albuquerque (UNMCV); 2 mi. W and 5 mi. N Albuquer-ue (UNMCV).

32. Mouth of Tijeras Canyon, E Albuquerque (Clothier, 957b: 105); East Mesa, 50 yds. S "U" on hill, 1 mi. N S 66, Albuquerque (UNMCV); Tijeras Canyon (UNMCV).

33. Cedro Peak, 7700 ft. (Clothier, 1957b: 105).

34. Sabino Canyon, 7000 ft., Manzano Mts. (Clothier, 957b: 105); Juan Tomas Canyon, 7000 ft., Manzano Mts. Clothier, 1957b: 105).

35. Mouth of Rio San Jose (Bailey, 1931: 164).

36. Isleta (UNMCV).

37. Hell Canyon, 6400 ft., Manzano Mts. (Clothier, 957b: 105).

anta Fe Co.:

19. Near Lamy (Holdenried and Morlan, 1956: 377).

an Miguel Co.:

21. Las Vegas (Howell, 1914: 30).

22. Bell Ranch (UNMCV).

atron Co.:

38. Datil (Bailey, 1931: 164).

39. Greens Gap (UNMCV).

40. San Francisco River Valley near Alma (Bailey, 931: 162).

41. Glenwood (Howell, 1914: 29).

42. Dry Creek (Howell, 1914: 29).

corro Co.:

43. Abeytas (UNMCV).

44. 5 mi. E and 18 mi. S Belen (UNMCV).

45. 17 mi. E and 15 mi. S Belen (UNMCV).

46. Mill Canyon, Magdalena Mts., T3S-R4W, Sec. 35 NMCV).

47. San Augustin Plains, 14 mi. W and 5 mi. S Mag-

lena (UNMCV).

48. Hall's Ranch, Copper Canyon, Magdalena Mts. (UNMCV).

49. 3 mi. N Socorro (Benson, 1935: 140-141).

50. Near Monica Spring on the San Augustin Plains Bailey, 1931: 165).

51. Bear Trap Canyon, San Mateo Mts., 19 mi. W and) mi. S Magdalena (UNMCV).

52. Baldy Crossing, Magdalena Mts. (UNMCV).

53. S end Mesa Jumanes (Bailey, 1931: 162).

54. 4 mi. E Carthage (UNMCV).

55. North Cerro Prieto, 18 mi. NW Carrizozo (Benson, 933: 37).

56. Springtime Canyon, San Mateo Mts. (UNMCV).

57. N end San Andres Mts., just W divide on road to n Marcial (Bailey, 1931: 162).

<u>orrance Co.</u>:

58. Tajique Canyon, 7800 ft., Manzano Mts. (Clothier, 957b: 105); Jaramillo Canyon, 6300 ft., Manzano Mts. Clothier, 1957b: 105).

59. Capillo Peak, 9200 ft., Manzano Mts. (Clothier, 957b: 105).

60. New Canyon, 8400 ft., Manzano Mts. (Clothier, 957b: 105); Manzano, 6800 ft., Manzano Mts. (Clothier, 957b: 105); Red Canyon, 4 mi. W and 1 mi. S Manzano UNMCV).

61. 10 mi. E and 2 mi. S Willard (UNMCV).

rant Co.:

62. Gila (Howell, 1914: 29); Cliff (Bailey, 1931: 62).

63. Silver City (Howell, 1914: 29).

64. Redrock (Howell, 1914: 29).

65. Separ (UNMCV).

ierra Co.:

66. Near Fairview (Bailey, 1931: 163).

67. Rhoads Pass, San Andres Mts. (UNMCV).

68. Jornada del Muerto, 8½ mi. E Engle (UNMCV).

69. 5 mi. W and 3 mi. S Engle (UNMCV).

70. Las Palomas (Howell, 1914: 29).

71. Kingston (Howell, 1914: 29).

incoln Co.:

72. Gallo Canyon, 35 mi. SE Corona (Howell, 1914: 29).

73. Near base Jicarilla Mts. (Howell, 1914: 29).

74. French's Ranch, 12 mi. NW Carrizozo (Benson, 1933: 7).

75. Carrizozo (R. Svihla, 1931: 363).

76. Capitan Mts. (UNMCV).

e Baca Co.:

77. US Hwy 285, 3 mi. N and 3 mi. W Mesa (UNMCV).

idalgo Co.:

78. 17 mi. S Animas (UNMCV).

79. Pass at top of Peloncillo Mts. on Geronimo Trail, 900 ft., 22 mi. S and 2 mi. E Rodeo (UNMCV); Clanton

yon, Pelocillo Mts., 5500 ft., 22 mi. S and 2 mi. E
leo (UNMCV).

80. Black Bill Canyon, Animas Mts. (UNMCV); Aspen
ring, Indian Creek Canyon, Animas Mts. (UNMCV); 1 mi.
Aspen Spring, Animas Mts. (UNMCV).

81. 36 mi. S and 10 mi. W Animas (UNMCV).

82. Upper Animas Valley, 36 mi. S and 3 mi. W Animas
MCV).

83. 3 mi. W and 1 mi. N San Luis Pass (UNMCV).

84. Lang's Ranch, Animas Valley (Bailey, 1931: 163).

85. Monument 40, about 100 mi. W El Paso (Mearns,
07: 461).

na Co.:

86. Hwy 70-80, 11 mi. W and 2 mi. S Deming (UNMCV).

87. Deming (Howell, 1914: 29).

88. 1 mi. E Columbus (UNMCV).

89. E of Mimbres River near Monument 15 (Mearns,
07: 461).

na Ana Co.:

90. San Andres Mts. (Howell, 1914: 29).

91. Organ Mts. (Howell, 1914: 29).

92. Las Cruces (Howell, 1914: 29).

93. Lava beds near Kenzin (Benson, 1933: 17).

ero Co.:

94. Malpais Spring (Benson, 1933: 37).

95. Near Salinas (Blair, 1941: 224).

96. Tularosa (Howell, 1914: 29).

97. About 4 mi. N Alamogordo (Dice, 1930: 14).

98. James Canyon, 7 mi. E Cloudcroft (UNMCV).

99. About 6 mi. SW Alamogordo (Dice, 1930: 10).

100. White Sands (Benson, 1933: 37).

Chaves Co.:

101. Mesa (UNMCV).

102. Roswell (Howell, 1914: 29).

103. 6.4 mi. E and 2 mi. S Roswell (UNMCV); 8 mi. E and 2 mi. S Roswell (UNMCV).

Eddy Co.:

104. Guadalupe Mts., near Tex.-N. Mex. line (Bailey, 1931: 163).

REITHRODONTOMYS FULVESCENS J. A. Allen

Fulvous Harvest Mouse

General remarks.--The fulvous harvest mouse is known from a single locality in New Mexico. This locality may be considered as in the Upper Sonoran Life Zone.

Subspecies ascribed to New Mexico.--Reithrodontomys fulvescens canus Benson.

Records of occurence (Not mapped).--

Hidalgo Co.:

22 mi. S and 2 mi. E Rodeo (Findley and Pullen, 1958: 306-307).

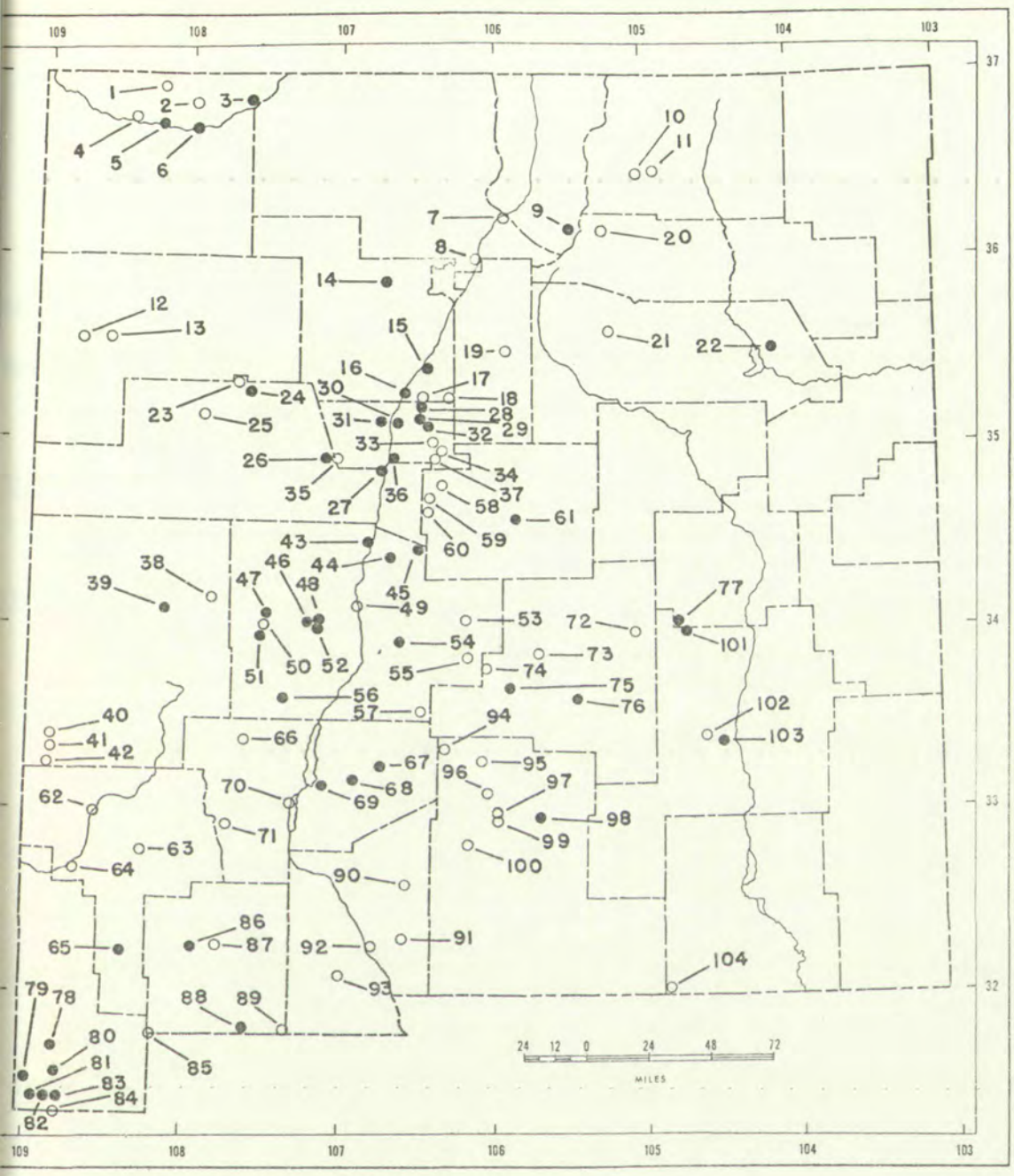

Fig. 56. Reithrodontomys megalotis

PEROMYSCUS CRINITUS (Merriam)

Canyon Mouse

Peromyscus crinitus auripectus (Allen).

General remarks.--There are only two record stations or the canyon mouse in New Mexico--both are in the Upper onoran Life Zone.

Subspecies ascribed to New Mexico.--Peromyscus rinitus auripectus (Allen).

Records of occurence (Fig. 57).--

an Juan Co.:

1. Los Pinos River, T30N-R7W, NW ¼ Sec. 7 (UNMCV).
2. Chaco Canyon (Bailey, 1931: 161).

PEROMYSCUS EREMICUS (Baird)

Cactus Mouse

Peromyscus eremicus eremicus (Baird).

Peromyscus eremicus anthonyi (Merriam).

General remarks.--The cactus mouse is primarily a eature of the Lower Sonoran Life Zone in New Mexico, th only a slight overlap into the Upper Sonoran.

Identification of specimens from 1 mi. E Elephant tte, 8 mi. S and 1 mi. W Lordsburg, and 7.1 mi. W Bing-m is tentative as cleaned skulls are not yet available r specimens from these localities.

Subspecies ascribed to New Mexico.--Peromyscus emicus eremicus (Baird); Peromyscus eremicus anthonyi erriam).

Records of occurence (Fig. 57).--

ocorro Co.:

1. 17 mi. E and 15 mi. S Belen (UNMCV).

2. 5 mi. E and 18 mi. S Belen (UNMCV).

3. 7.1 mi. W Bingham (UNMCV).

rant Co.:

4. Near Silver City (Bailey, 1931: 160).

5. Near Redrock (Bailey, 1931: 160); 1 mi. E Redrock UNMCV).

6. Hachita (Osgood, 1909: 250).

7. Camp Apache, near Hachita (Bailey, 1931: 160).

ierra Co.:

8. Cuchillo (Bailey, 1931: 158).

9. 1 mi. E Elephant Butte (UNMCV).

10. Las Palomas (Bailey, 1931: 158).

11. Lake Valley (Bailey, 1931: 158).

incoln Co.:

12. 4 mi. NW Carrizozo by road (Bradt, 1932: 324); 4 mi. W Carrizozo in malpais (Dice, 1942: 200).

13. Carrizozo (A. Svihla, 1932: 8).

14. Tularosa Malpais about 5 mi. W Oscuro (Blair, 1947c: 2).

idalgo Co.:

15. Doubtful Canyon, Peloncillo Mts., 8 mi. N and 2 mi. W Steins (UNMCV).

16. Near Steins, T24S-R21W, Sec. 10 (UNMCV).

17. 8 mi. S and 1 mi. W Lordsburg (UNMCV).

18. 17 mi. S Animas (UNMCV).

19. 18 mi. S and 3.2 mi. W Animas (UNMCV).

20. Occidental Mines, T29S-R14W, Sec. 25 (UNMCV); oundary line, 100 mi. W El Paso (Osgood, 1909: 250); oyle's Well, 10 mi. S and 5 mi. E Hachita (UNMCV).

21. Sierra Rica between Hatchet Ranch and Doyle's ell (UNMCV); T30S-R15W, Sec. 12 (UNMCV).

22. Big Hatchet Mts., T31S-R15W, Sec. 36, 5250 ft. UNMCV).

23. Clanton Canyon, Peloncillo Mts., 5700 ft., 22 mi. and 2 mi. E Rodeo (UNMCV); Pass on top of Peloncillo ts., on Geronimo Trail, 5900-6000 ft. (UNMCV).

24. Emory Canyon, Alamo Hueco Mts. (UNMCV).

25. Guadalupe Canyon, 31 mi. S Rodeo (UNMCV).

26. 37½ mi. S and 8 mi. W Animas, 5500 ft. (UNMCV).

27. T33S-R19W, Sec. 29 (UNMCV).

28. Dog Spring (Mearns, 1907: 440); Horse Canyon, lamo Hueco Mts. (UNMCV).

una Co.:

29. Rio Mimbres, Deming (Bailey, 1931: 160).

30. Little Florida Mts., 10 mi. S Deming (Bailey, 931: 160).

31. Florida Mts. (Osgood, 1909: 250).

32. Near Carrizalillo Springs (Mearns, 1907: 440); arrizalillo (Osgood, 1909: 250).

33. 1 mi. E Columbus (UNMCV).

34. S of Wragg's Ranch, Monument 15 (Mearns, 1907: 40).

ona Ana Co.:

35. Just N Garfield (Bailey, 1931: 158).

36. Foothills of Organ Mts. (Bailey, 1931: 158).

37. Near Las Cruces (Bailey, 1931: 158).

38. Lava bed at Kenzin (Blair, 1947c: 2).

39. Foothills of Franklin Mts. (Bailey, 1931: 158).

tero Co.:

40. Malpais Spring (Benson, 1933: 38).

41. Near Salinas (Blair, 1941: 224); Sacramento Mts., 2 to 3 mi. E Salinas (Blair, 1941: 225).

42. About 13 mi. W Tularosa (Blair, 1947c: 2); About 12 mi. W Tularosa (Blair, 1941: 224).

43. 3 mi. N Tularosa (Blair, 1947c: 2); Tularosa (Dice, 1930: 24); Sacramento Mts., 2 to 3 mi. E Tularosa (Blair, 1941: 225).

44. Cerrito Tularosa (Benson, 1933: 38).

45. About 4 mi. N Alamogordo (Dice, 1930: 14); Sacramento Mts., 2 to 3 mi. E Alamogordo (Blair, 1941: 225).

46. Jarilla (Osgood, 1909: 242).

Eddy Co.:

47. Carlsbad (Bailey, 1931: 158).

PEROMYSCUS MANICULATUS (Wagner)

Deer Mouse

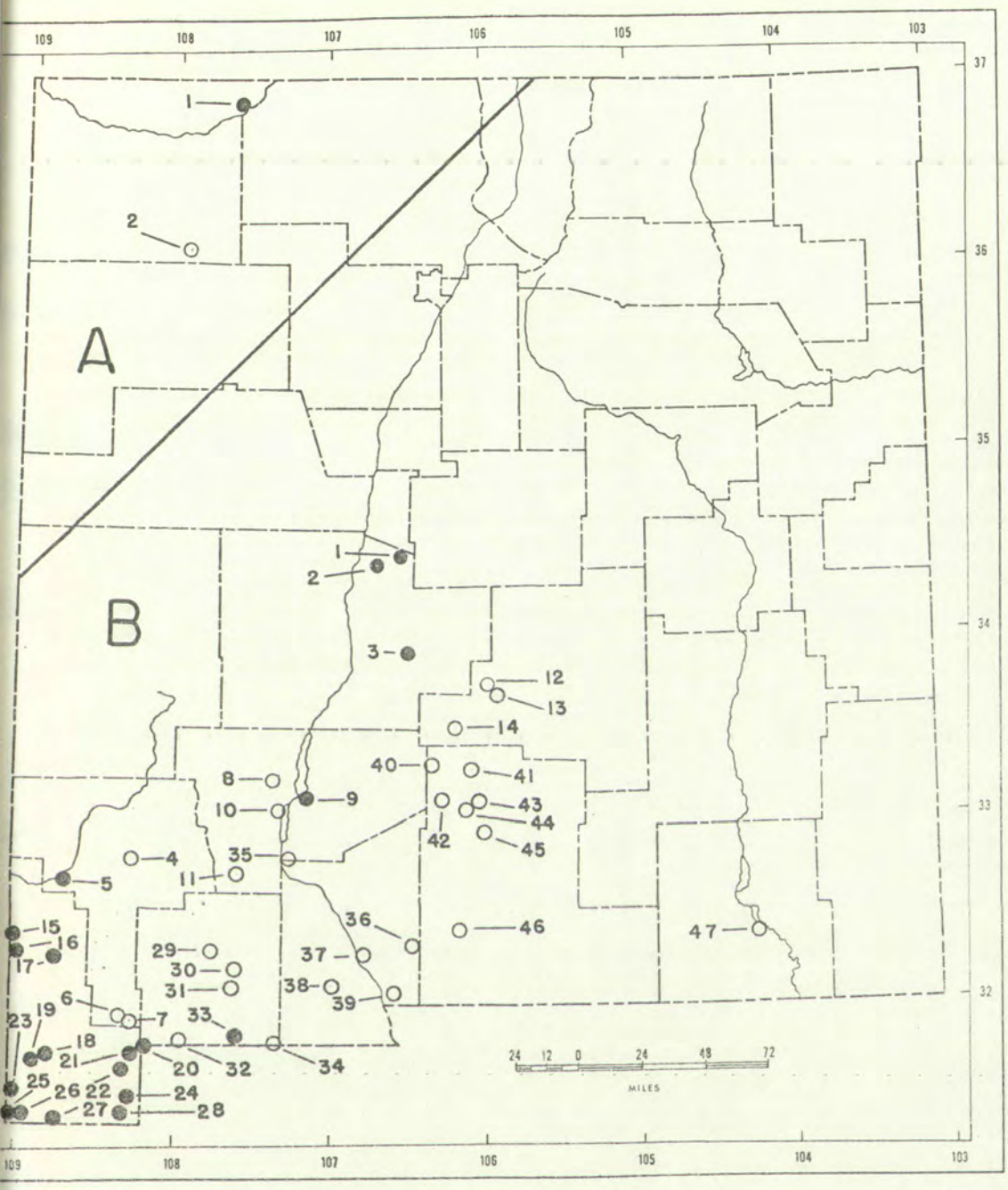

Fig. 57. A. Peromyscus crinitus

B. Peromyscus eremicus

Peromyscus maniculatus rufinus (Merriam).

Peromyscus maniculatus blandus Osgood

General remarks.--In New Mexico, the deer mouse ranges throughout the life zones from Lower Sonoran to Arctic-alpine.

Subspecies ascribed to New Mexico.--Peromyscus maniculatus rufinus (Merriam); Peromyscus maniculatus blandus Osgood.

Records of occurence (Fig. 58).--

San Juan Co.:

1. Laplata (J. A. Allen, 1893: 74).

2. Aztec (J. A. Allen, 1893: 74).

3. Los Pinos River, T30N-R7W, NW ¼ Sec. 7 (UNMCV); Los Pinos River, T30N-R7W, NE ¼ Sec. 7 (UNMCV).

4. 9 mi. S and 6½ mi. W Bloomfield (UNMCV).

5. Washington Pass, Chuska Mts., 6 mi. E Crystal (UNMCV).

6. 1 mi. N of canyon, Chaco Canyon Mesa (UNMCV); Chaco Canyon (J. A. Allen, 1896: 252).

Rio Arriba Co.:

7. Chama (Osgood, 1909: 74).

8. East Fork Rio Brazos, 10,000 ft., 10½ mi. E Chama (UNMCV).

9. Boulder Lake (Osgood, 1909: 74).

10. Tierra Amarilla (Osgood, 1909: 74).

11. Stinking Spring Lake (Osgood, 1909: 74).

12. Gallinas (Osgood, 1909: 74).

13. Abiquiu (Osgood, 1909: 74).

14. Santa Clara Canyon (Osgood, 1909: 74).

15. Rinconada (Osgood, 1909: 74).

16. Espanola (Osgood, 1909: 74).

Taos Co.:

17. Arroyo Hondo (Osgood, 1909: 74); Arroyo Seco (Osgood, 1909: 74).

18. Twining (Osgood, 1909: 74).

19. Goose Lake, 12,000 ft., 7 mi. S and 1 mi. N Red River (UNMCV).

20. Taos Mtn. (Osgood, 1909: 74).

21. Taos (Osgood, 1909: 74); Taos Pueblo (Osgood, 1909: 74).

22. 4 mi. NE Tres Ritos (UNMCV); Tres Ritos (UNMCV).

23. Tres Piedras (Osgood, 1909: 74).

143. Costilla Pass (Osgood, 1909: 74); Foot of E slope Culebra Range (Gregory, 1927: 288).

145. Cienequilla (Osgood, 1909: 74).

Colfax Co.:

24. Long Canyon, near Catskill (Osgood, 1909: 74).

25. Moreno Valley (Osgood, 1909: 74).

144. Bear Canyon, Raton Range (Osgood, 1909: 74).

155. Chico Springs (Osgood, 1909: 74).

Union Co.:

26. Sierra Grande (Osgood, 1909: 74).

cKinley Co.:

29. Gallup (Osgood, 1909: 74).

30. 3 mi. N Crownpoint (UNMCV).

31. Fort Wingate (Osgood, 1909: 74).

32. 1 mi. E McGaffey (UNMCV).

andoval Co.:

33. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

34. Near Capulin Ranger Station, Sandia Mts., Sec. 3, T12N-R5E (Clothier, 1957a: 256); Juan Tabo Canyon, andia Mts. (Clothier, 1957b: 109).

35. Chaves Springs, 5800 ft., Sandia Mts. (Clothier, 957b: 109); Placitas, Sandia Mts., 5700 ft. (Clothier, 957b: 109).

36. Osha Spring, 9000 ft., Sandia Mts. (Clothier, 957b: 109); Las Huertas Creek, 7400-7800 ft., Sandia Mts. Clothier, 1957b: 109); Ellis Ranch, 8000 ft., Sandia Mts. Clothier, 1957b: 109); Palomas Peak, 8000 ft., Sandia ts. (Clothier, 1957b: 109).

37. San Pedro Valley, 6000 ft. (Clothier, 1957b: 109); an Pedro Creek, ½ mi. N Sandoval-Bernalillo Co. line Clothier, 1957b: 109); Canyon del Agua, San Pedro Valley, 500 ft. (Clothier, 1957b: 109).

146. Mesa W Rio Grande, opposite Bernalillo (Williams, 949: 31).

ora Co.:

27. Pecos Baldy (Osgood, 1909: 74).

28. Coyote Creek (Osgood, 1909: 74).

156. Halls Peak (Osgood, 1909: 74).

Valencia Co.:

45. 1½ mi. SW San Mateo (Hooper, 1941a: 29).

46. ½ mi. NE La Mosca Peak, Mt. Taylor (UNMCV).

47. 6 mi. NE summit Mt. Taylor (Hooper, 1941a: 29).

48. 1 mi. N Cebolleta (Hooper, 1941a: 29); 1½ mi. E Cebolleta (Hooper, 1941a: 29).

50. Zuni Canyon, between 3 and 5 mi. WSW Grants (Hooper, 1941a: 29).

52. El Moro (Coues and Yarrow, 1875: 103).

53. Near Flagpole Crater, 17 mi. SW Grants (Hooper, 1941a: 29); Agua Fria, 15 mi. SW Grants (Hooper, 1941a: 29).

54. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 29).

55. Point of Malpais, T6N-R11W, Sec. 2 (Hooper, 1941a: 29); Shuman's Ranch, T9N-R10W, Sec. 30 (Hooper, 1941a: 29).

56. 4 mi. W McCartys (Hooper, 1941a: 29); 9 mi. SSE Grants (Hooper, 1941a: 29); 11 mi. SSE Grants (Hooper, 1941a: 29).

57. 8 mi. SE Grants (Hooper, 1941a: 29).

58. Mirabal Spring, 9000 ft., Mt. Taylor (UNMCV); Canyon Lobo Ranger Station (Hooper, 1941a: 29).

59. 4 mi. WSW Cebolleta (Hooper, 1941a: 29).

60. Laguna (Osgood, 1909: 74).

61. 1 mi. E Suwanee (UNMCV).

62. Rio Puerco (Osgood, 1909: 74).

148. Grants (Osgood, 1909: 74).

149. Copperton (Osgood, 1909: 74).

rnalillo Co.:

63. 5 7/8 mi. W and 2 1/8 mi. N Albuquerque (UNMCV); va beds W Rio Grande, Albuquerque (UNMCV); 3 mi. W and mi. N Albuquerque, ½ mi. S volcanoes (UNMCV).

64. 5 mi. W Albuquerque (UNMCV).

65. Albuquerque (Osgood, 1909: 74).

66. Sandia Crest, 9½ mi. E Alameda (UNMCV); Sandia est, 10,670 ft., Sandia Mts. (Clothier, 1957b: 109); ee Springs, 8400 ft., Sandia Mts. (Clothier, 1957b: 109); jano Canyon, 3/4 mi. below Tree Springs, Sandia Mts. lothier, 1957b: 109); Tejano Canyon, 7500 ft., Sandia s. (Clothier, 1957b: 109).

67. East Mesa, 1 mi. N Hwy 66, edge Sandia Mts. lothier, 1957b: 109); Mesa E Albuquerque, ½ mi. W Sandia s. (Clothier, 1957b: 109); Mesa E Albuquerque, 3/4 mi. Sandia Mts. (Clothier, 1957b: 109); 5 mi. E and 4 mi. N iv. N. Mex. campus, Albuquerque (Clothier, 1957b: 109); ar Canyon, 8000 ft., Sandia Mts. (Clothier, 1957b: 109); budo Canyon, 6000-6200 ft., Sandia Mts. (Clothier, 957b: 109-110); Embudito Canyon, 7500 ft., Sandia Mts. Clothier, 1957b: 110); 8 mi. E and 3 mi. N Albuquerque UNMCV).

68. Mouth of Tijeras Canyon, E Albuquerque (Clothier, 957b: 109).

69. Juan Tomas Canyon, 7000 ft., Manzano Mts. Clothier, 1957b: 110); Sedillo, 7000 ft., Manzano Mts. Clothier, 1957b: 110).

70. 5 mi. S Tijeras, Cedro Canyon, 7000 ft., Manzano ts. (Clothier, 1957b: 110); Cedro Peak, 7700 ft., Manzano ts. (Clothier, 1957b: 110); Sabino Canyon, 7000 ft., anzano Mts. (Clothier, 1957b: 110); Near State Hwy 10, S oundary Sandia Div. Cibola Nat'l Forest, 7500 ft. (Clother, 1957b: 110).

71. Carolina Canyon, 7600 ft., Manzano Mts. (Clothier, 957b: 110).

72. Hell Canyon, 6400 ft., Manzano Mts. (Clothier, 957b: 110).

anta Fe Co.:

38. Santa Fe Ski Basin (Holdenried and Morlan, 1956: 77); W slope Sangre de Cristo Mts. near Santa Fe (Holdenied and Morlan, 1956: 377).

39. Glorieta (Osgood, 1909: 74).

40. San Pedro (Osgood, 1909: 74).

an Miguel Co.:

147. Willis (Osgood, 1909: 74).

41. Gallinas Creek, Sangre de Cristo Mts., T17N-R14E, ec. 13 (Koster and Clothier, 1952: 250).

42. Las Vegas (Osgood, 1909: 74).

43. Ribera (Osgood, 1909: 74).

44. Cabra Springs (Osgood, 1909: 74).

tron Co.:

78. Datil Mts. (Osgood, 1909: 74).

79. Greens Gap (UNMCV).

80. Willow Creek, Mogollon Mts., 10 mi. E Mogollon NMCV).

corro Co.:

81. 17 mi. W Bernardo (UNMCV).

150. Burley (Osgood, 1909: 86).

82. Bear Spring Mts. (Osgood, 1909: 74).

83. San Augustin Plains, 14 mi. W and 5 mi. S Mag-lena (UNMCV).

84. Baldy Crossing, Magdalena Mts. (UNMCV); Water nyon Picnic Grounds, Magdalena Mts. (UNMCV); 1½ mi. E uth Baldy, Magdalena Mts., 11 mi. S and 3½ mi. E Mag-lena (UNMCV).

85. Mill Canyon, Magdalena Mts., T3S-R4W, Sec. 35 NMCV).

86. Monica Canyon, San Mateo Mts. (UNMCV).

87. Mt. Withington, San Mateo Mts. (UNMCV); Bear ap Canyon, San Mateo Mts., 19 mi. W and 20 mi. S Mag-lena (UNMCV).

88. Hardy Spring, Magdalena Mts. (UNMCV).

89. Sand dunes, 7.1 mi. W Bingham (UNMCV).

90. North Cerro Prieto, 18 mi. NW Carrizozo (Benson, 33: 37).

91. Springtime Canyon, San Mateo Mts. (UNMCV).

orrance Co.:

73. Mosca Peak, 8400 ft., Manzano Mts. (Clothier, 957b: 110); Canyon Diablo, 8000 ft., Manzano Mts. Clothier, 1957b: 110); Tajique Canyon, 7600-7800 ft., anzano Mts. (Clothier, 1957b: 110).

74. New Canyon Camp Ground, 5 mi. W Manzano (UNMCV); ew Canyon Camp, 7750 ft., 3 mi. W and 1 mi. N Manzano UNMCV); Red Canyon, 4 mi. W and 1 mi. S Manzano (UNMCV); apillo Peak, 9200 ft., Manzano Mts. (Clothier, 1957b: 10); Box Canyon, 8200 ft., Manzano Mts. (Clothier, 1957b: 10); New Canyon, 8400 ft., Manzano Mts. (Clothier, 1957b: 10); Comanche Canyon, 6200-7000 ft., Manzano Mts. Clothier, 1957b: 110); Jaramillo Canyon, 6300 ft., Manano Mts. (Clothier, 1957b: 110).

75. Manzano Peak, 9000 ft., Manzano Mts. (Clothier, 957b: 110).

76. 10 mi. E and 2 mi. S Willard (UNMCV).

77. 15 mi. NE Corona (UNMCV).

157. Abo Canyon (Clothier, 1957b: 110).

151. Mesa Jumanes (Osgood, 1909: 74).

rant Co.:

107. Head of Mimbres River (Osgood, 1909: 74).

108. 1 mi. E Redrock (UNMCV).

119. Hachita (Osgood, 1909: 86).

incoln Co.:

92. Red Cloud Canyon, Gallinas Mts., 3 mi. S and 10 ni. W Corona (UNMCV).

93. Ancho (Osgood, 1909: 74).

94. Jicarilla Mts. (Osgood, 1909: 74).

152. Gallo Canyon (Osgood, 1909: 74).

95. Carrizozo (Osgood, 1909: 74).

96. Just E Indian Divide, 6 mi. NW Capitan (Dice, 942: 200).

97. ½ mi. S summit Capitan Gap (Dice, 1942: 200); apitan Gap, 8 mi. NE Capitan (Dice, 1942: 200); Near Gyp pring Canyon, 4 mi. NE Capitan (Dice, 1942: 200).

98. Capitan Mts., 5 mi. N and 9 mi. E Capitan (UNMCV).

99. 1½ mi. NW Angus (Dice, 1942: 200); Near Mesa anger Station, 5 mi. SW Capitan (Dice, 1942: 200).

100. Capitan (UNMCV).

101. Just S Rio Bonita at Double-crossing, 4 mi. NW incoln (Dice, 1942: 200).

102. Fort Stanton (UNMCV).

103. ½ mi. SE Monjeau Lookout (Dice, 1942: 200); 1 i. SE Monjeau Lookout (Dice, 1942: 200); Between Little reek and Eagle Creek, 1 mi. W Alto (Dice, 1942: 200); N ide Little Creek, 3 mi. NW Alto (Dice, 1942: 200); 5.4 i. N and 0.9 mi. W Ruidoso (UNMCV).

104. 2 mi. N Ruidoso (Dice, 1942: 200); Ruidoso Osgood, 1909: 74); Ruidoso Creek (Osgood, 1909: 74); edar Canyon Camp Ground, 3 mi. N Ruidoso (UNMCV).

105. Near road junction known as Hollywood (Dice, 942: 200).

idalgo Co.:

109. Doubtful Canyon, Peloncillo Mts., 8 mi. N and mi. W Steins (UNMCV).

110. 8 mi. S and 1 mi. W Lordsburg (UNMCV).

111. Clanton Canyon, Peloncillo Mts., 5500 ft., 22 i. S and 2 mi. E Rodeo (UNMCV).

112. 36 mi. S and 9 mi. W Animas (UNMCV).

113. Adobe Ranch (Osgood, 1909: 86).

114. Doyle's Well, T29S-R14W, Sec. 23, 10 mi. S and mi. E Hachita (UNMCV).

115. Upper Animas Valley, 36 mi. S and 3 mi. W Animas UNMCV).

116. 3 mi. W and 1 mi. N San Luis Pass (UNMCV).

117. 1 mi. E Culbertson's Ranch, Deer Creek (UNMCV).

118. Dog Spring (Osgood, 1909: 86).

141. Hatchet Ranch (Osgood, 1909: 86).

142. Hachita Mts. (Mearns, 1907: 389).

una Co.:

120. Deming (Osgood, 1909: 86).

121. Near Carrizalillo Spring (Osgood, 1909: 86).

ona Ana Co.:

126. San Andres Mts. (Bailey, 1931: 148).

153. Fort Thorn (Allen, 1891: 302).

139. Mesilla (Bailey, 1931: 148).

ero Co.:

122. Salinas (Blair, 1941: 225).

123. About 4 mi. N Tularosa (Blair, 1947a: 2).

124. About 13 mi. W Tularosa (Blair, 1947b: 2); White nds, 14 mi. W Tularosa (Benson, 1933: 37).

125. White Sands, 10 mi. SW Tularosa (Benson, 1933:); About 9 mi. W Alamogordo (Dice, 1930: 10).

127. 7-12 mi. N Tularosa (Blair, 1947b: 2).

128. Mescalero (Stone and Rehn, 1903: 23).

129. About 4 mi. NE Tularosa (Blair, 1941: 225); 5 . E Tularosa (Osgood, 1909: 74).

130. Tularosa (Dice, 1930: 25).

131. About 4 mi. N Alamogordo (Dice, 1930: 14); Near ghrolls (Dice, 1930: 25).

132. Cloudcroft (Osgood, 1909: 74); 1 mi. N Cloud-oft (UNMCV).

133. 18 mi. SW Alamogordo (Benson, 1933: 47).

134. T17S-R7E, Sec. 19, White Sands (Blair, 1947b: 3).

135. About 6 mi. SW Alamogordo (Dice, 1930: 10).

136. About 3 mi. S Alamogordo (Blair, 1947b: 2).

137. Near Alamogordo (Dice, 1930: 8).

138. Jarilla (Osgood, 1909: 86).

aves Co.:

106. Mesa (UNMCV).

dy Co.:

140. Carlsbad, Pecos Valley (Bailey, 1931: 148).

ot Located:

Vaqueros Ranger Station, Rio Arriba Co. (UNMCV).

Durango, New Mexico (J. A. Allen, 1893: 74).

Fisher Peak (Osgood, 1909: 74).

Gallinas Mts. (Osgood, 1909: 74).

Pinyon Hills (Osgood, 1909: 74).

Waco Tanks (J. A. Allen, 1891: 305).

PEROMYSCUS LEUCOPUS (Rafinesque)

White-footed Mouse

Peromyscus leucopus tornillo Mearns.

Peromyscus leucopus arizonae (Allen).

General remarks.--In New Mexico, the white-footed ouse is commonly found in the Lower Sonoran Life Zone and n the lower portions of the Upper Sonoran Zone.

Subspecies ascribed to New Mexico.--Peromyscus eucopus tornillo Mearns; Peromyscus leucopus arizonae Allen).

Records of occurence (Fig. 59).--

nion Co.:

1. Clayton (Bailey, 1931: 149).

2. Clapham (Bailey, 1931: 149).

andoval Co.:

7. Juan Tabo Canyon, 6000 ft., Sandia Mts. (Clothier, 957b: 113).

8. San Pedro Valley, 6000 ft., E Sandia Mts.

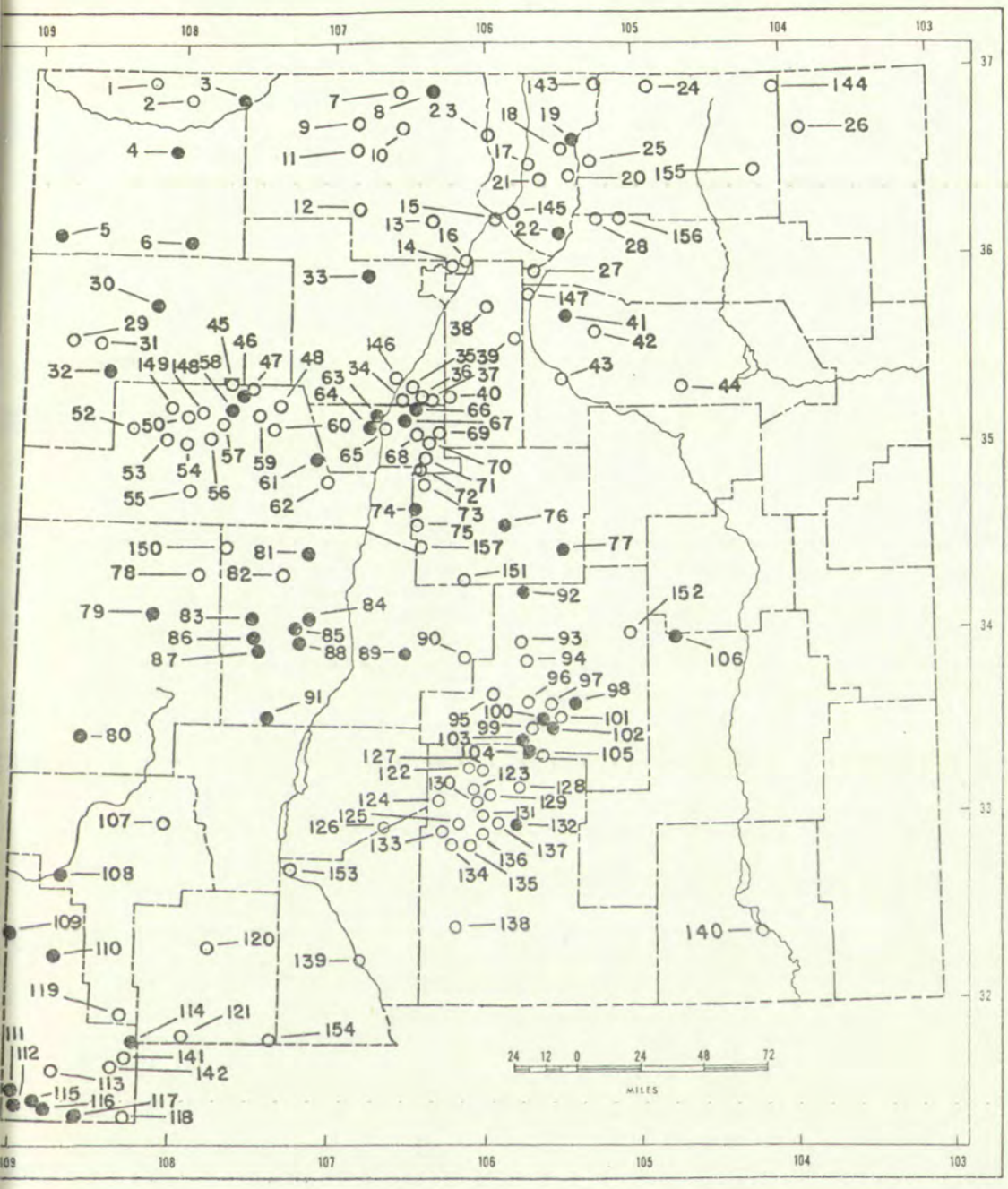

Fig. 58. Peromyscus maniculatus

Clothier, 1957b: 113).

cKinley Co.:

3. Laguna (Osgood, 1909: 126).

4. 1 mi. E Suwanee, Rio San Jose (UNMCV).

5. 5 mi. N and 1½ mi. E Los Lunas (UNMCV).

6. Sand Canyon, Manzano Mts. (Clothier, 1957b: 114).

ernalillo Co.:

9. Jaral Canyon, 6250 ft., Sandia Mts. (Clothier, 957b: 113); 7 mi. E Alameda, T11N-R4E, Sec. 11 (UNMCV); foothills Sandia Mts., S La Cueva Recreation Area (UNMCV).

10. Lava beds W Rio Grande (UNMCV); 5 mi. W Albuquer-ue (UNMCV); 5 7/8 mi. W and 2 1/8 mi. N Albuquerque UNMCV).

11. Albuquerque (UNMCV).

12. Mouth Tijeras Canyon, E Albuquerque (Clothier, 957b: 113); East Mesa, 50 yds. S "U" on hill, 1 mi. N US 6 (UNMCV).

13. Juan Tabo Rd., 2 mi. N Las Lomas Rd., E Albu-uerque (Clothier, 1957b: 113); Bear Canyon, 6300 ft., andia Mts. (Clothier, 1957b: 113); Embudito Canyon, 6000 t., Sandia Mts. (Clothier, 1957b: 113); Embudo Canyon, 200 ft., Sandia Mts. (Clothier, 1957b: 113); 8 mi. E and mi. N Albuquerque (UNMCV); T10N-R4E, E ½ Sec. 2 (UNMCV); ear mouth Embudito Canyon (UNMCV); Mouth of Embudo Can-on (UNMCV).

14. Junction Puerco and San Jose Rivers (Bailey,

931: 149).

15. Hwy 85, 2 mi. S and 1½ mi. W Isleta (UNMCV).

16. Hell Canyon, 6400 ft., Manzano Mts. (Clothier, 957b: 113).

anta Fe Co.:

17. 6 mi. N and 7 mi. W Santa Fe (Holdenried and orlan, 1956: 377).

18. Santa Fe (Bailey, 1931: 148); Mocho Ranch near anta Fe (UNMCV).

19. La Bajada (UNMCV).

an Miguel Co.:

20. Bell Ranch (UNMCV).

21. Concha's Creek Valley, near Cabra Springs Bailey, 1931: 149).

atron Co.:

22. Glenwood (Bailey, 1931: 150).

ocorro Co.:

23. 11¼ mi. W and 5 mi. N Bernardo (UNMCV).

24. Hwy 85, 3 mi. N Bernardo (UNMCV).

25. 2 mi. E and 10 mi. S Belen (UNMCV).

26. 4 mi. E and 3½ mi. N Bernardo (UNMCV).

27. 2 mi. E and 14 mi. S Belen (UNMCV).

28. 7 mi. E and 15 mi. S Belen (UNMCV).

29. Near mouth Water Canyon, Magdalena Mts. (Bailey, 931: 149).

30. Socorro (Bailey, 1931: 149).

31. Big Rosa Canyon, San Mateo Mts., 14½ mi. S and 9 mi. W Magdalena (UNMCV).

32. 2 mi. E and 14 mi. S Socorro (UNMCV).

Torrance Co.:

33. 4 mi. E Tajique, 6500 ft., E Manzano Mts. (Clothier, 1957b: 113).

34. Jaramillo Canyon, 6300 ft., Manzano Mts. (Clothier, 1957b: 113-114).

35. Gran Quivera (Bailey, 1931: 149).

Guadalupe Co.:

36. Santa Rosa (Bailey, 1931: 148).

Grant Co.:

37. Gila (Bailey, 1931: 150).

38. Redrock (Bailey, 1931: 150).

Sierra Co.:

39. Cuchillo (Bailey, 1931: 149).

40. Hot Spring, 7 mi. N Las Palomas (Bailey, 1931: 149).

41. Las Palomas (Bailey, 1931: 149).

42. Near Lake Valley (Bailey, 1931: 149).

Lincoln Co.:

43. Corona (Osgood, 1909: 126).

44. Rio Bonito, 4 mi. NW Lincoln (Dice, 1942: 200).

De Baca Co.:

45. Pecos Valley, 8 mi. N Fort Sumner (Bailey, 1931: 149).

46. Fort Sumner (Osgood, 1909: 126).

idalgo Co.:

47. Upper Corner Monument (Mearns, 1907: 409).

48. 17 mi. S Animas (UNMCV).

49. 36 mi. S and 10 mi. W Animas (UNMCV).

50. Upper Animas Valley, 36 mi. S and 3 mi. W Animas UNMCV).

51. 3 mi. W and 1 mi. N San Luis Pass (UNMCV).

52. Guadalupe Canyon, 31 mi. S Rodeo (UNMCV).

una Co.:

53. Deming (Bailey, 1931: 150).

54. Sink of Mimbres, 8 mi. E Deming (Bailey, 1931: 51).

ona Ana Co.:

55. Garfield (Bailey, 1931: 149).

56. About the San Andres Mts. (Bailey, 1931: 149).

57. About the Organ Mts. (Bailey, 1931: 149).

58. Las Cruces (Bailey, 1931: 149); Mesilla (Osgood, 909: 126).

59. La Mesa (Osgood, 1909: 126).

60. Chamberino (Osgood, 1909: 126).

ero Co.:

61. Salinas (Blair, 1941: 225).

62. Tularosa (Dice, 1930: 25).

63. 1 mi. NW Cerrito Tularosa (Benson, 1933: 37).

64. Near Alamogordo (Blair, 1941: 225).

65. Escondida (Benson, 1933: 37).

66. Jarilla (Osgood, 1909: 126).

67. Guadalupe Ranch (J. A. Allen, 1903: 588).

haves Co.:

68. Roswell (Bailey, 1931: 149).

69. 5.4 mi. E and 2 mi. S Roswell (UNMCV).

70. 9.3 mi. E and 8.2 mi. S Roswell (UNMCV).

ddy Co.:

71. 1 mi. above Carlsbad (Bailey, 1931: 149); Eddy Osgood, 1909: 126).

72. Carlsbad Cave (Bailey, 1931: 150).

PEROMYSCUS BOYLII (Baird)

Brush Mouse

Peromyscus boylii rowleyi (Allen).

General remarks.--Although Bailey (1931: 154) gives ıe range of the brush mouse as Upper Sonoran, these mice re often taken in areas of oak which are closely asso-ated with Transition and even Canadian Zone vegetation.

Subspecies ascribed to New Mexico.--Peromyscus boylii owleyi (Allen).

Records of occurence (Fig. 60).--

n Juan Co.:

1. Laplata (Osgood, 1909: 147).

2. Aztec (Osgood, 1909: 147).

3. Los Pinos River, T30N-R7W, NW ¼ Sec. 7 (UNMCV).

os Co.:

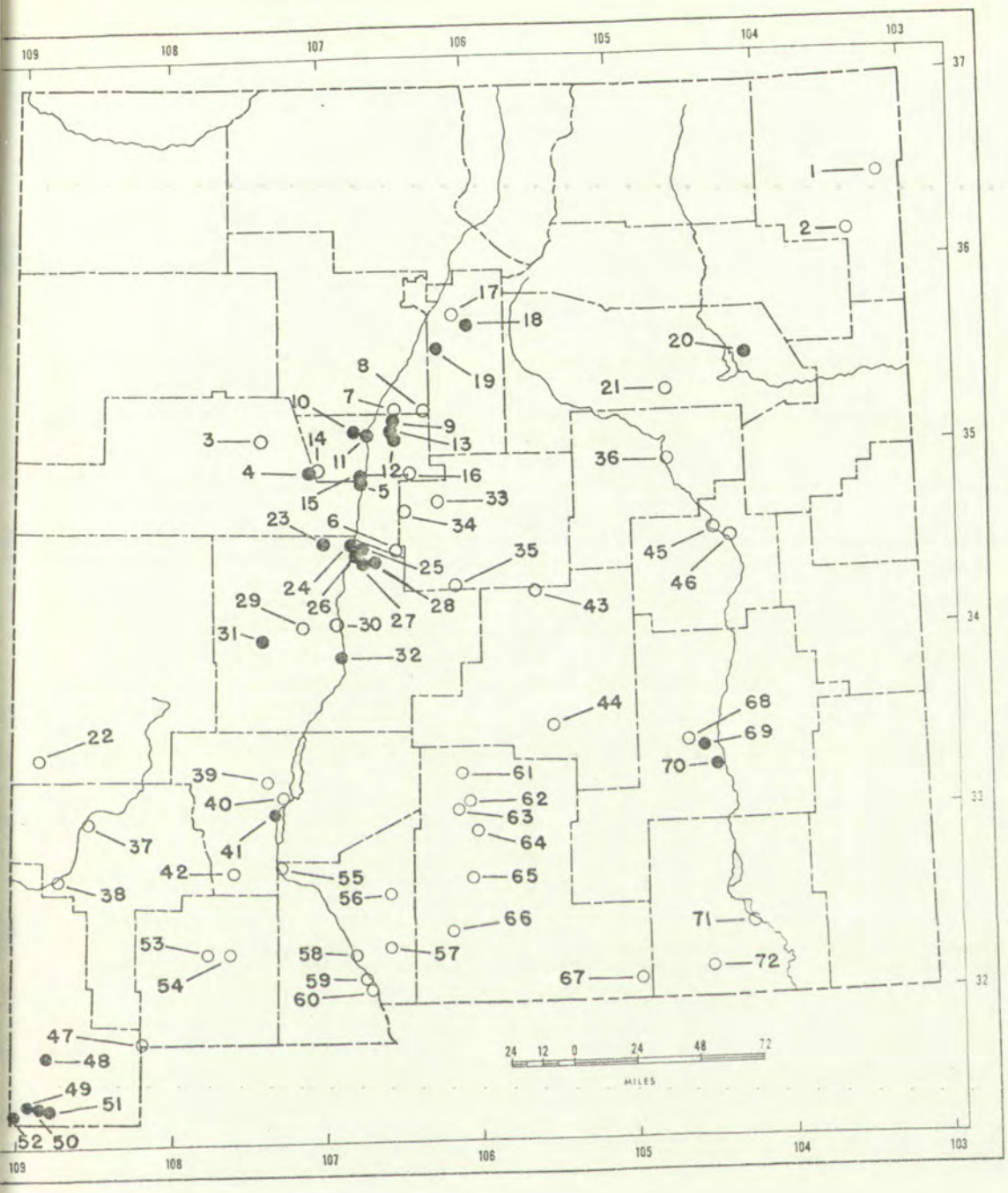

Fig. 59. Peromyscus leucopus

4. Hondo Canyon (Bailey, 1931: 155).

lfax Co.:

5. Raton Mts. (Bailey, 1931: 155).

6. 4 mi. SW Cimarron (Hill, 1942a: 80).

ion Co.:

7. Emery Peak (Osgood, 1909: 147).

8. Folsom (Osgood, 1909: 147).

9. Sierra Grande Mts. (Bailey, 1931: 155).

10. Clayton (Osgood, 1909: 147).

Kinley Co.:

11. Gallup (Osgood, 1909: 147).

12. Fort Wingate (Osgood, 1909: 147).

ndoval Co.:

13. Chavez Springs, 5800 ft., Sandia Mts. (Clothier, 57b: 117); Placitas, 5700 ft. (Clothier, 1957b: 117).

14. Juan Tabo Canyon, 6000 ft., Sandia Mts. (Clothier, 57b: 117); Las Huertas Creek, 7400-7800 ft., Sandia Mts. lothier, 1957b: 117); Capulin Peak, 8300 ft., Sandia s. (Clothier, 1957b: 117); Palomas Peak, 8000 ft., ndia Mts. (Clothier, 1957b: 117).

15. San Pedro Creek, ½ mi. N Sandoval-Bernalillo Co. ne (Clothier, 1957b: 117).

lencia Co.:

19. 1½ mi. SW San Mateo (Hooper, 1941a: 29).

20. Zuni Mts. (Bailey, 1931: 154); Copperton (Osgood, 09: 147).

21. 4 mi. WSW Cebolleta (Hooper, 1941a: 29).

22. Zuni Canyon, between 3 and 5 mi. WSW Grants
oper, 1941a: 29).

23. 8 mi. SE Grants (Hooper, 1941a: 29).

24. Near Flagpole Crater, 17 mi. SW Grants (Hooper,
1a: 29).

25. Point of Malpais, T6N-R11W, Sec. 2 (Hooper,
1a: 29).

rnalillo Co.:

26. Along crest of range, 3½ mi. SE Sandia Crest,
00 ft., Sandia Mts. (Clothier, 1957b: 117); Jaral Canyon,
00-6300 ft., Sandia Mts. (Clothier, 1957b: 117); Tejano
nyon, 7500-7800 ft., Sandia Mts. (Clothier, 1957b: 117);
1N-R4E, Sec. 35, 2½ mi. N and 7 mi. E Alameda (UNMCV);
an Tabo Recreation Area, 6 mi. N and 5 mi. E Albuquerque
NMCV); Tree Springs, Sandia Mts. (UNMCV); T10N-R4E, Sec.
E ½ (UNMCV); 6½ mi. E Alameda (UNMCV); T11N-R4E, SE ¼
c. 11, 7 mi. E Alameda (UNMCV).

27. Embudo Canyon, 6000-6400 ft., Sandia Mts.
lothier, 1957b: 117); Pino Canyon, 3 mi. From Juan Tabo
. (UNMCV); E of Juan Tabo Rd. between La Cueva and Simm's
fence (UNMCV); 8 mi. E and 3 mi. N Albuquerque (UNMCV).

28. Slopes E Rio Puerco (Ivey, 1957: 498).

29. Mouth of Tijeras Canyon, E Albuquerque (Clothier,
57b: 117); 1 mi. N Hwy 66, base Sandia Mts., 6 mi. E
buquerque (Clothier, 1957b: 118); ½ mi. S Hwy 66, near
radise Valley (Clothier, 1957b: 118); Tijeras Canyon,

3/4 mi. E Univ. N. Mex. Stables (UNMCV).

30. 5 mi. S Tijeras, Hwy 10, 7000 ft., Manzano Mts. (Clothier, 117-118); Juan Tomas Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 118); Sedillo, 7000 ft., Manzano Mts. (Clothier, 1957b: 118).

31. Carolina Canyon, 7600 ft., Manzano Mts. (Clothier, 1957b: 118); Hell Canyon, 6400 ft., Manzano Mts. (Clothier, 1957b: 118); Near State Hwy 10, S boundary Sandia Div. Cibola Nat'l Forest, 7500 ft., Manzano Mts. (Clothier, 1957b: 118).

Santa Fe Co.:

16. W slopes Sangre de Cristo Range, near Santa Fe (Holdenried and Morlan, 1956: 377).

17. Lamy-Glorieta region (Holdenried and Morlan, 1956: 377); Glorieta (Osgood, 1909: 147).

18. San Pedro (Osgood, 1909: 147).

San Miguel Co.:

32. Las Vegas (Osgood, 1909: 147).

33. Bell Ranch (UNMCV).

Quay Co.:

34. Tucumcari (Osgood, 1909: 147).

Catron Co.:

35. Alma (Osgood, 1909: 147).

36. Mogollon Mts. (Bailey, 1931: 155).

37. Glenwood (Bailey, 1931: 155).

38. Dry Creek (Osgood, 1931: 147).

ocorro Co.:

39. Ladron Mts., 16 mi. W and 1 mi. N Bernardo, 7800 t. (UNMCV); Ladron Mts., 8000 ft., 16 mi. W and 1 mi. N ernardo (UNMCV); 17 mi. W Bernardo (UNMCV).

40. Mill Canyon, Magdalena Mts., T3S-R4W, Sec. 35 UNMCV).

41. Water Canyon (Borell and Bryant, 1942: 33); ater Canyon Picnic Grounds, Magdalena Mts. (UNMCV); Hall's anch, Copper Canyon, Magdalena Mts. (UNMCV).

42. Big Rosa Canyon, San Mateo Mts., 14½ mi. S and 9 i. W Magdalena (UNMCV).

43. Hardy Spring, Magdalena Mts. (UNMCV).

44. Baldy Crossing, Magdalena Mts. (UNMCV); 11 mi. S nd 3½ mi. E Magdalena, ½ mi. E South Baldy (UNMCV); 11 mi. and 4 mi. E Magdalena, 2 mi. E South Baldy (UNMCV).

orrance Co.:

45. Tajique Canyon, 7600-7800 ft., Manzano Mts. Clothier, 1957b: 118); Tajique, 6600 ft., Manzano Mts. Clothier, 1957b: 118).

46. Jaramillo Canyon, 6000-6500 ft., Manzano Mts. Clothier, 1957b: 118).

47. Capillo Peak, 9200 ft., Manzano Mts. (Clothier, 957b: 118); New Canyon, 8400 ft., Manzano Mts. (Clothier, 957b: 118).

48. Abo Canyon, Manzano Mts. (Clothier, 1957b: 118).

uadalupe Co.:

49. Santa Rosa (Osgood, 1909: 147).

Grant Co.:

50. Silver City (Osgood, 1909: 147).

51. Burro Mts. (Bailey, 1931: 155).

52. 3 mi. SW Santa Rita (Borell and Bryant, 1942: 33).

Sierra Co.:

53. Black Range, 5 mi. W Chloride (UNMCV).

54. Kingston (Bailey, 1931: 156).

Lincoln Co.:

55. Corona (Osgood, 1909: 147).

56. Gallo Canyon (Osgood, 1909: 147).

57. Jicarilla Mts. (Bailey, 1931: 155).

58. Capitan Gap, 8 mi. NE Capitan (Dice, 1942: 200); 5 mi. S summit Capitan Gap (Dice, 1942: 200).

59. E base Capitan Mts. (Bailey, 1931: 155).

60. Alongside Salado Creek, ½ mi. E Capitan (Dice, 1942: 200).

61. Rio Bonito, 4 mi. NW Lincoln (Dice, 1942: 200).

62. 1½ mi. NW Angus (Dice, 1942: 200).

Hidalgo Co.:

63. Skeleton Canyon, Peloncillo Mts., 10 mi. S Rodeo (UNMCV).

64. 18 mi. S and 3.2 mi. W Animas (UNMCV).

65. Animas Peak (Osgood, 1909: 147); Indian Creek, Animas Mts., T31S-R19W, Sec. 16 (UNMCV); Black Bill Can-

on, Animas Mts. (UNMCV).

66. Big Hatchet Mts., T31S-R15W, Sec. 36, 5250 ft. UNMCV).

67. Pass on Geronimo Trail, Peloncillo Mts., 5900-000 ft., 22 mi. S and 2 mi. E Rodeo (UNMCV); Clanton anyon, Peloncillo Mts., 22 mi. S and 2 mi. E Rodeo, 700 ft. (UNMCV); Clanton Canyon, Peloncillo Mts., 2 mi. S and 2 mi. E Rodeo, 5500 ft. (UNMCV).

68. 36 mi. S and 9 mi. W Animas, 5300 ft. (UNMCV).

69. Emory Canyon, Alamo Hueco Mts. (UNMCV).

70. Guadalupe Canyon, 31 mi. S Rodeo (UNMCV).

71. Guadalupe Mts., T34S-R21W, Sec. 22 (UNMCV).

72. 12 mi. W Antelope Wells, Whitewater Canyon, San uis Mts. (UNMCV); 13 mi. W Antelope Wells, Whitewater anyon, San Luis Mts. (UNMCV).

73. Horse Canyon, Alamo Hueco Mts. (UNMCV).

79. 3 mi. W and 1 mi. N San Luis Pass (UNMCV); T33S-19W, Sec. 29 (UNMCV).

una Co.:

74. Florida Mts. (Bailey, 1931: 155).

ona Ana Co.:

75. San Andres Mts. (Bailey, 1931: 155).

76. Organ City (Osgood, 1909: 147).

77. Organ Mts. (Bailey, 1931: 155).

Eddy Co.:

78. Carlsbad Cavern (Bailey, 1928: 73).

ot Located:

Granite Gap (Osgood, 1909: 147).

PEROMYSCUS PECTORALIS Bailey

White-ankled Mouse

General remarks.--In New Mexico, the white-ankled ouse is known from only one locality.

Subspecies ascribed to New Mexico.--Peromyscus ectoralis laceianus Bailey.

Records of occurence (Not mapped).--

ddy Co.:

Near Carlsbad Cavern, 26 mi. SW Carlsbad, 4450 ft. Hall and Kelson, 1959: 638).

PEROMYSCUS TRUEI (Shufeldt)

Pinyon Mouse

Peromyscus truei truei (Shufeldt).

General remarks.--Peromyscus truei inhabits the pper Sonoran Life Zone in New Mexico, with occasional verlap into the Lower Sonoran and Transition Zones.

Specimens in the University of New Mexico Collection f Vertebrates from the southwest portion of the species' ange in New Mexico (approximately those from south and est of Socorro) pose a problem in identification. Individuals from this region frequently differ in body proportions, relative size of audital bullae, etc., from embers of P. truei from other parts of the state. These

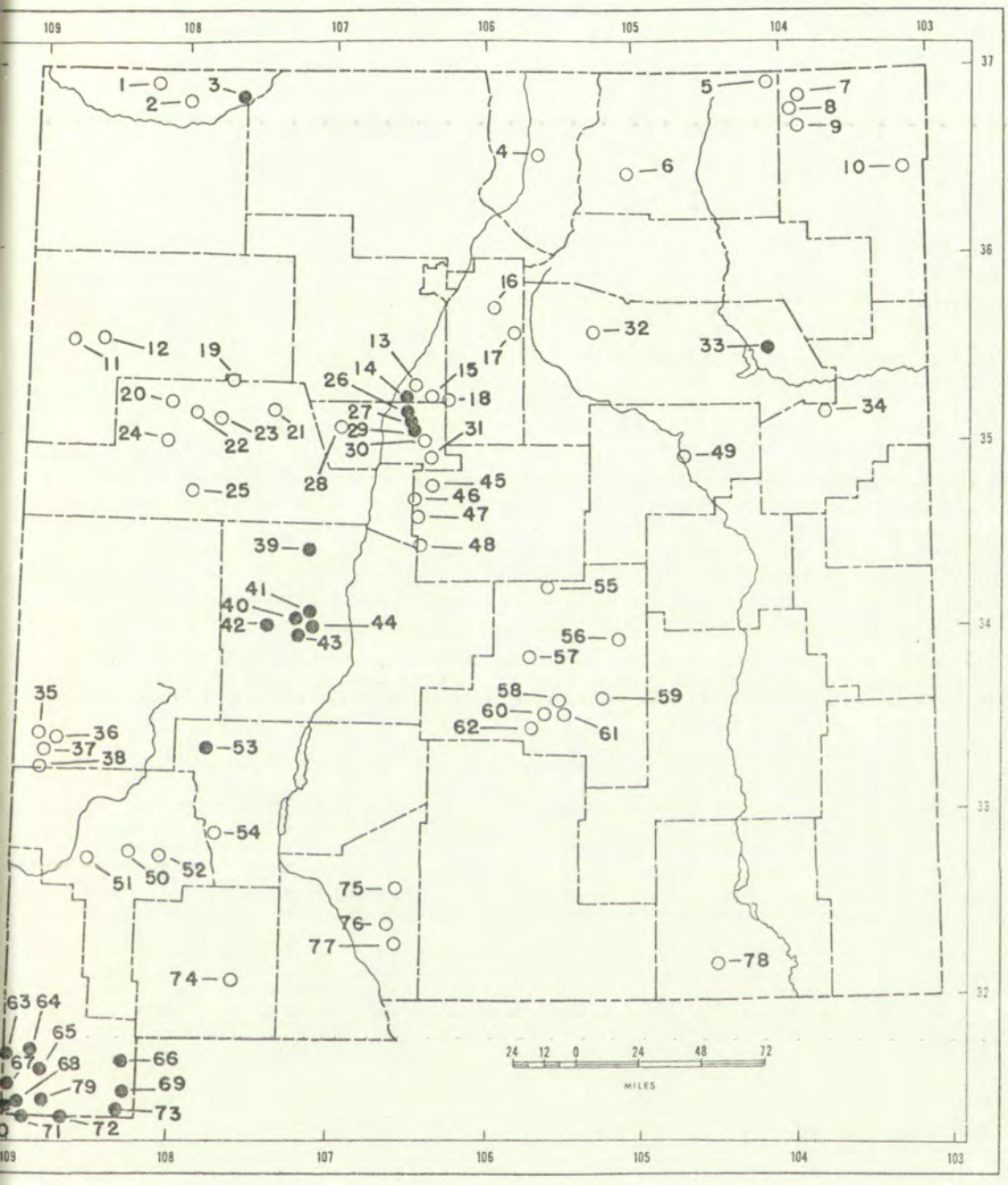

Fig. 60. Peromyscus boylii

differences are such that some individuals apparently could as well be assigned to P. nasutus as to P. truei. Individuals with intermediate characteristics further confuse the picture. Because specimens of large-eared Peromyscus from this general area have been referred to P. truei by other workers, all such specimens in the University of New Mexico collection have been tentatively assigned to this species and have been so listed below.

Subspecies ascribed to New Mexico.--Peromyscus truei truei (Shufeldt).

Records of occurence (Fig. 61).--

San Juan Co.:

1. Laplata (Osgood, 1909: 169).

2. Los Pinos River, T30N-R7W, NE ¼ Sec. 7 (UNMCV); Los Pinos River, T30N-R7W, NW ¼ Sec. 7 (UNMCV).

3. Aztec (Hoffmeister, 1951: 39).

4. Near Fruitland (Bailey, 1931: 153).

5. Blanco (Hoffmeister, 1951: 39).

6. Chaco Canyon Nat'l Monument (Hoffmeister, 1951: 39).

Rio Arriba Co.:

7. Abiquiu (Osgood, 1909: 169).

8. 5 mi. E Abiquiu (Hoffmeister, 1951: 39).

9. Rinconada (Osgood, 1909: 169).

10. Espanola (Osgood, 1909: 169).

Taos Co.:

11. Cieneguilla (Osgood, 1909: 169).

Union Co.:

12. Sierra Grande region (Bailey, 1931: 151).

McKinley Co.:

13. Gallup (Osgood, 1909: 169).

14. Fort Wingate (Bailey, 1931: 151).

15. Thoreau (Hoffmeister, 1951: 39).

16. Bluewater Lake, Valencia and McKinley Counties (UNMCV).

Sandoval Co.:

17. Rio de los Frijoles (Hoffmeister, 1951: 39).

18. Jemez (Hoffmeister, 1951: 39).

19. Placitas, 5700 ft., Sandia Mts. (Clothier, 1957b: 121).

20. Chavez Springs, 5800 ft., Sandia Mts. (Clothier, 1957b: 121); Juan Tabo Canyon, 6500-7000 ft., Sandia Mts. (Clothier, 1957b: 121); Palomas Peak, 7500-8000 ft., Sandia Mts. (Clothier, 1957b: 121).

21. San Pedro Creek, ½ mi. N Sandoval-Bernalillo Co. line (Clothier, 1957b: 121); San Pedro Grant (UNMCV).

Valencia Co.:

22. 1½ mi. SW San Mateo (Hooper, 1941a: 30).

23. Canyon Lobo Ranger Station (Hooper, 1941a: 30).

24. 4 mi. WSW Cebolleta (Hooper, 1941a: 30).

25. Grants (Osgood, 1909: 169).

26. 4 mi. W McCartys (Hooper, 1941a: 30); 8 mi. SE

Grants (Hooper, 1941a: 30).

27. Laguna (Osgood, 1909: 169).

28. Shuman's Ranch, T6N-R10W, Sec. 30 (Hooper, 1941a: 30).

Bernalillo Co.:

29. Jaral Canyon, 6200-7000 ft., Sandia Mts. (Clothier, 1957b: 121); Tejano Canyon, 7500 ft., Sandia Mts. (Clothier, 1957b: 121); Cole Springs, Sandia Mts. (Clothier, 1957b: 121); Doc Long Campground, Sandia Mts. (Clothier, 1957b: 122); 2 mi. along Cole Spring Rd. from State Hwy 10, Sandia Mts. (Clothier, 1957b: 122); Juan Tabo, Sandia Mts. (Clothier, 1957b: 122); T11N-R4E, SE ¼ Sec. 11 (UNMCV).

30. 5 mi. W Albuquerque (UNMCV); 5 7/8 mi. W and 2 1/8 mi. N Albuquerque (UNMCV).

31. Rio Puerco (UNMCV).

32. Bear Canyon, 6200-7500 ft., Sandia Mts. (Clothier, 1957b: 121); Embudo Canyon, 7000-7500 ft., Sandia Mts. (Clothier, 1957b: 121); Mouth of Tijeras Canyon, E Albuquerque (Clothier, 1957b: 121); Tijeras Canyon, 3/4 mi. E Univ. N. Mex. Stables (UNMCV).

33. Near San Antonio, Sandia Mts. (Clothier, 1957b: 121); Near Tijeras, 6500 ft., Tijeras Canyon (Clothier, 1957b: 121); ½ mi. N US Hwy 66 on road to Sandia Mts. (Clothier, 1957b: 122); ½ mi. S US Hwy 66 in Paradise Valley, Manzano Mts. (Clothier, 1957b: 122); 1½ mi. S US Hwy 66 in Cedro Canyon, Manzano Mts. (Clothier, 1957b: 122); ½ mi. E and 5/8 mi. N Tijeras (UNMCV).

34. 5 mi. S Tijeras, Cedro Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 121); Cedro Peak, 7700 ft., Manzano Mts. (Clothier, 1957b: 121); Sabino Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 121); Juan Tomas Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 121); Sedillo, 7000 ft., Manzano Mts. (Clothier, 1957b: 121); 3 mi. S US Hwy 66 in Cedro Canyon, Manzano Mts. (Clothier, 1957b: 122); 6 mi. S US Hwy 66 in Cedro Canyon, Manzano Mts. (Clothier, 1957b: 122).

35. Near Hwy 10, S boundary Sandia Div. Cibola Nat'l Forest, 7500 ft. (Clothier, 1957b: 121); Carolina Canyon, 7600 ft., Manzano Mts. (Clothier, 1957b: 121); Hell Canyon, 6400 ft., Manzano Mts. (Clothier, 1957b: 121).

36. Isleta (Osgood, 1909: 169).

37. Near Chilili, Manzano Mts. (Clothier, 1957b: 121).

Santa Fe Co.:

38. Santa Fe (Hoffmeister, 1951: 39).

39. Canyon del Agua, 6500 ft., San Pedro Valley (Clothier, 1957b: 121).

San Miguel Co.:

40. Pecos (Hoffmeister, 1951: 39); 3 mi. S Pecos (Hoffmeister, 1951: 39-40).

41. Ribera (Hoffmeister, 1951: 40).

42. Conchas Creek, a few mi. N Cabra Springs (Bailey, 1931: 152).

Catron Co.:

43. Datil Mts. (Osgood, 1909: 169).

44. 9 mi. E state line, Hwy 70 (Hoffmeister, 1951: 39).

45. Luna, 7000 ft. (Hoffmeister, 1951: 39).

46. 6 mi. SW Luna, 7000 ft. (Hoffmeister, 1951: 39).

47. Alma (Hoffmeister, 1951: 39).

48. San Francisco River, 5000 ft., Glenwood (Hoffmeister, 1951: 39).

49. West Fork Gila River, Mogollon Mts. (Hoffmeister, 1951: 49).

Socorro Co.:

50. 10 mi. NE Socorro (Hoffmeister, 1951: 39).

51. Mill Canyon, Magdalena Mts., T3S-R4W (UNMCV).

52. Head of Water Canyon, Magdalena Mts., 9300 ft. (Hoffmeister, 1951: 39); Water Canyon, 6500 ft., Magdalena Mts. (Hoffmeister, 1951: 39); Baldy Crossing, Magdalena Mts. (UNMCV).

53. Monica Canyon, San Mateo Mts. (UNMCV).

54. Hardy Spring, Magdalena Mts. (UNMCV).

Torrance Co.:

55. Tajique Canyon, 7200 ft., Manzano Mts. (Clothier, 1957b: 121).

56. Comanche Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 121); Capillo Peak, 9000 ft., Manzano Mts. (Clothier, 1957b: 121); Near road, 2 mi. NE Manzano (Clothier, 1957b: 121).

57. New Canyon Camp, 7750 ft., Manzano Mts., 5 mi. W and 1 mi. N Manzano (UNMCV); Red Canyon, Manzano Mts., 4 mi. W and 1 mi. S Manzano (UNMCV).

58. Abo Canyon, Manzano Mts. (Clothier, 1957b: 121).

60. Mesa Jumanes (Osgood, 1909: 169).

Guadalupe Co.:

61. Cuervo (Osgood, 1909: 169).

62. 15 mi. E Cuervo (Hoffmeister, 1951: 40).

63. Near Santa Rosa (Bailey, 1931: 52); 18 mi. N Hich's Ranch, Santa Rosa (Hoffmeister, 1951: 40).

64. 5 mi. S Santa Rosa (Hoffmeister, 1951: 40).

Grant Co.:

65. Silver City (Osgood, 1909: 169).

66. Burro Mts. (Hoffmeister, 1951: 39).

Sierra Co.:

67. Fairview, 6500 ft. (Hoffmeister, 1951: 39).

68. Black Range, 5 mi. W Chloride (UNMCV).

69. 10 mi. W Chloride (Hoffmeister, 1951: 39).

70. About 4 mi. W Kingston (Hoffmeister, 1951: 39).

71. N slope Salinas Peak, 6000 ft., San Andres Mts. (Hoffmeister, 1951: 39).

72. Rhodes Pass, San Andres Mts. (UNMCV).

Lincoln Co.:

73. Corona (Osgood, 1909: 169).

74. Red Cloud Canyon, Gallinas Mts., 3 mi. S and 10 mi. W Corona (UNMCV).

75. Ancho (Osgood, 1909: 169).

76. Jicarilla Mts. (Osgood, 1909: 169).

77. 4 mi. NW Carrizozo by road (Bradt, 1932: 324).

78. NW and SW foothills Capitan Mts. (Hoffmeister, 1951: 40).

79. Just E Indian Divide, 6 mi. NW Capitan (Dice, 1942: 200).

80. About 8 mi. NE Capitan (Blair, 1953: 103); ½ mi. S summit Capitan Gap, 7 mi. NW Capitan (Dice, 1942: 200).

81. Near Mesa Ranger Station, 5 mi. SW Capitan (Dice, 1942: 200).

82. Hale's Ranch, near Ruidoso (Osgood, 1909: 169).

Hidalgo Co.:

83. Dog Spring (Osgood, 1909: 169).

Otero Co.:

85. Near Tularosa (Blair, 1941: 226).

86. Near Cloudcroft (Dice, 1930: 18); Cloudcroft (Osgood, 1909: 169).

87. About ½ mi. SW Highrolls (Dice, 1930: 25); Highrolls (Hoffmeister, 1951: 40).

88. Lower slopes Sacramento Mts., near Alamogordo (Dice, 1930: 13).

89. Weed (Osgood, 1909: 169).

Not Located:

Gallina Mts. (Osgood, 1909: 169).

Lava Mesa, S Clyde, 4700 ft. (Hoffmeister, 1951: 39).

10 mi. SE Clyde, lava beds, 4800 ft. (Hoffmeister, 1951: 39).

Just N Box Canyon, W slope Sacramento Mts. (Dice, 1930: 25).

PEROMYSCUS NASUTUS (Allen)

Rock Mouse

Peromyscus nasutus (Allen).

General remarks.--In New Mexico, this species of mouse is typically Upper Sonoran in distribution.

Subspecies ascribed to New Mexico.--Peromyscus nasutus nasutus (Allen); Peromyscus nasutus griseus Benson.

Records of occurence (Fig. 62).--

Rio Arriba Co.:

1. Rinconada (Osgood, 1909: 177).

Taos Co.:

2. Hondo Canyon (Bailey, 1931: 158).
3. Arroyo Seco (Osgood, 1909: 177).
4. Cienequilla (Osgood, 1909: 177).

Colfax Co.:

5. Near Catskill (Bailey, 1931: 157).
6. 4 mi. SW Cimarron (Hill, 1942a: 80).

Union Co.:

7. Oak Canyon, Raton Range (Bailey, 1931: 157).
8. Near summit Emery Peak (Bailey, 1931: 157).
9. Folsom, Raton Range (Bailey, 1931: 157).
10. Sierra Grande (Osgood, 1909: 177).

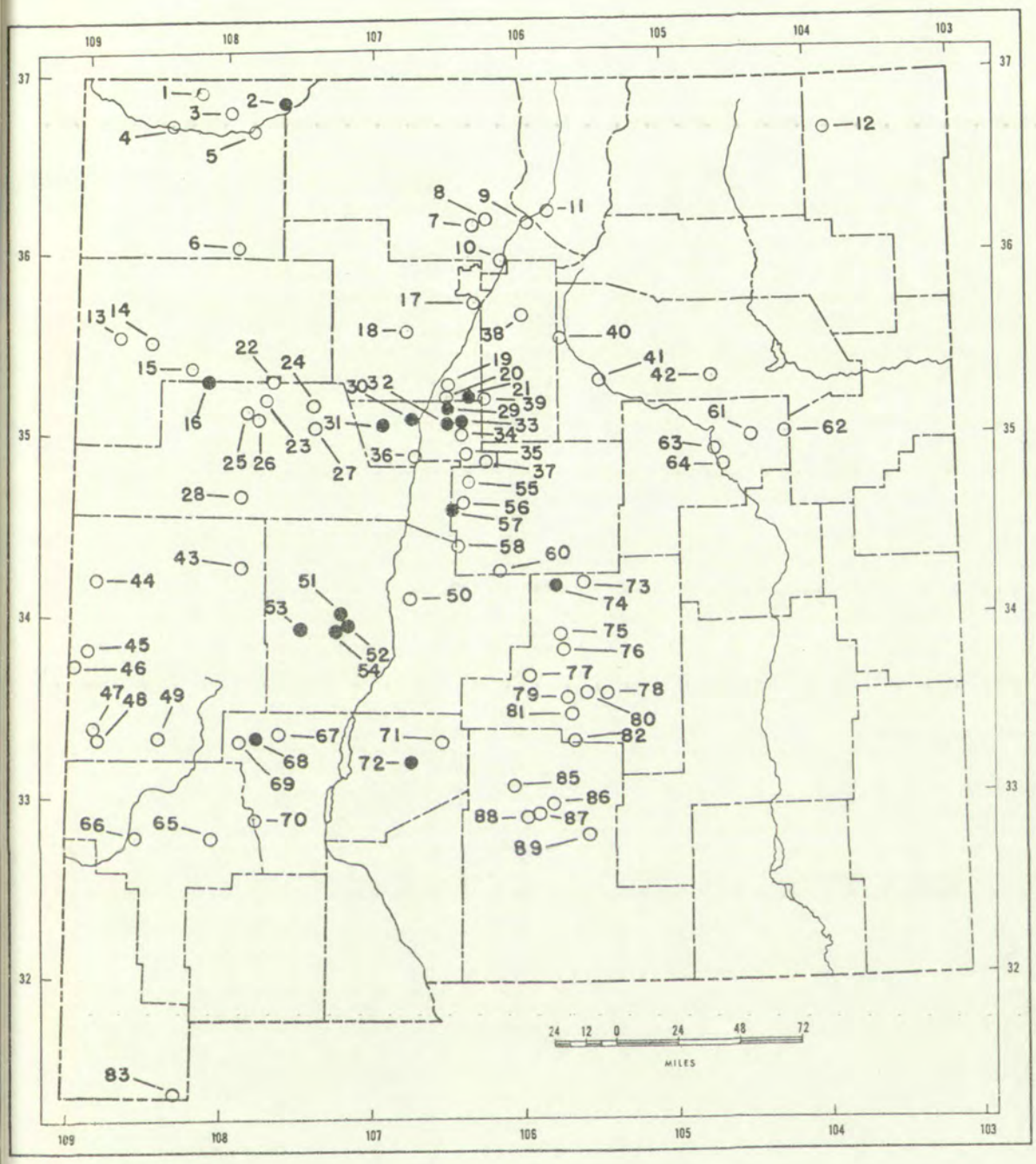

Fig. 61. Peromyscus truei

11. Clayton (Osgood, 1909: 177).

McKinley Co.:

12. Fort Wingate (Osgood, 1909: 177).

Sandoval Co.:

13. 1.4 mi. W La Ventana (UNMCV).

14. Jemez Mts. (Williams, 1949: 50).

15. Palomas Peak, 8000 ft., Sandia Mts. (Clothier, 1957b: 125).

Mora Co.:

16. Coyote Creek (Osgood, 1909: 177).

17. Halls Peak (Osgood, 1909: 177).

18. Mora (Osgood, 1909: 177).

Valencia Co.:

19. 1 mi. N Cebolleta (Hooper, 1941a: 30).

20. Zuni Canyon, between 3 and 5 mi. WSW Grants (Hooper, 1941a: 30).

21. 9 mi. SSW Grants (Hooper, 1941a: 30-31).

22. 1½ mi. S Grants (Hooper, 1941a: 31).

23. Flagpole Crater, 17 mi. SW Grants (Hooper, 1941a: 31).

24. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 31).

25. 1 mi. E Suwanee (UNMCV).

Bernalillo Co.:

26. Jaral Canyon, 6250 ft., Sandia Mts. (Clothier, 1957b: 125); Tejano Canyon, 8200 ft., Sandia Mts. (Clothier,

1957b: 125); Tejano Canyon, 7500 ft., Sandia Mts. (Clothier, 1957b: 125); Cole Springs Rd., 7100 ft., Sandia Mts. (Clothier, 1957b: 125); Doc Long Campground, Sandia Mts. (Clothier, 1957b: 125); T11N-R4E, Sec. 11, 7 mi. E Alameda (UNMCV).

27. Bear Canyon, 6300 ft., Sandia Mts. (Clothier, 1957b: 125); Embudito Canyon, 6500 ft., Sandia Mts. (Clothier, 1957b: 125); Embudo Canyon, 6200-6500 ft., Sandia Mts. (Clothier, 1957b: 125); Pino Canyon, Sandia Mts. (UNMCV).

28. 3 mi. N Tijeras, road to Sandia Crest, Sandia Mts. (Clothier, 1957b: 125); 1 mi. S Tijeras, Cedro Canyon, Manzano Mts. (Clothier, 1957b: 125); 1½ mi. S Tijeras, Cedro Canyon, Manzano Mts. (Clothier, 1957b: 125); ½ mi. N US Hwy 66, 20 mi. E Albuquerque (Clothier, 1957b: 125); ½ mi. S US Hwy 66, Paradise Valley, Manzano Mts. (Clothier, 1957b: 125); 1½ mi. S US Hwy 66, Cedro Canyon, Manzano Mts. (Clothier, 1957b: 125); 16 mi. E and 2 mi. S Albuquerque (UNMCV); T10N-R4E, W edge Sec. 14, ½ mi. E and 3/4 mi. N Tijeras (UNMCV).

29. Mouth of Tijeras Canyon, E Albuquerque (Clothier, 1957b: 125).

30. 5 mi. S Tijeras, Cedro Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 125); Cedro Peak, 7700 ft., Manzano Mts. (Clothier, 1957b: 125); Juan Tomas Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 125); Sedillo,

7000 ft., Manzano Mts. (Clothier, 1957b: 125); T10N-R5E, W ½ Sec. 35 (UNMCV).

Santa Fe Co.:

31. W slopes Sangre de Cristo Mts., Santa Fe area (Holdenried and Morlan, 1956: 378).

32. Lamy-Glorieta region (Holdenried and Morlan, 1956: 378); Glorieta (Bailey, 1931: 157).

33. La Bajada (UNMCV).

34. Canyon del Agua, 6500 ft., San Pedro Valley (Clothier, 1957b: 125).

San Miguel Co.:

35. Up the river 8 or 10 mi. above Pecos (Bailey, 1931: 157).

36. Bell Ranch (UNMCV).

37. Ribera (Bailey, 1931: 157).

Quay Co.:

38. Tucumcari (Osgood, 1909: 177).

Catron Co.:

39. Datil Mts. (Bailey, 1931: 158).

Socorro Co.:

40. North Cerro Prieto, 6200 ft., 17 mi. NW Carrizozo (Benson, 1932: 338).

Torrance Co.:

41. Abo Canyon, Manzano Mts. (Clothier, 1957b: 125).

Guadalupe Co.:

42. Santa Rosa (Bailey, 1931: 157).

Sierra Co.:

43. San Andres Mts. (Bailey, 1931: 158).

Lincoln Co.:

44. Corona (Osgood, 1909: 177).

45. Gallo Canyon (Osgood, 1909: 177).

46. Jicarilla Mts. (Bailey, 1931: 158).

47. French's Ranch, 12 mi. NW Carrizozo (Benson, 1932: 338); Lava beds, 7½ mi. N and 11 mi. W Carrizozo (UNMCV).

48. Malpais 3½ mi. W Carrizozo, 5150 ft. (Benson, 1932: 338); 4 mi. NW Carrizozo by road (Bradt, 1932: 324); 4 mi. W Carrizozo, in malpais (Dice, 1942: 200); Lava beds, 6½ mi. NW Carrizozo, 1.1 mi. S State Rt. 380 (UNMCV).

49. Just E Indian Divide, 6 mi. NW Capitan (Dice, 1942: 200).

50. Capitan Gap, 8 mi. NE Capitan (Dice, 1942: 200); ½ mi. S summit Capitan Gap (Dice, 1942: 200).

51. Alongside Salado Creek, ½ mi. E Capitan (Dice, 1942: 200).

52. Capitan Mts. (Bailey, 1931: 157).

53. Immediately S Rio Bonito at Double-crossing, 4 mi. NW Lincoln (Dice, 1942: 200).

54. Malpais W Oscuro (Blair, 1941: 226).

55. 1½ mi. NW Angus (Dice, 1942: 200).

56. Between Little Creek and Eagle Creek, 1 mi. W Alto (Dice, 1942: 200); 2 mi. N Ruidoso (Dice, 1942: 200);

Cedar Canyon Camp Ground, 3 mi. N Ruidoso (UNMCV).

57. Near Hollywood (Dice, 1942: 200).

Otero Co.:

58. Malpais Spring, 14 mi. W Three Rivers (Benson, 1932: 338).

59. Near Tularosa (Blair, 1941: 226).

BAIOMYS TAYLORI (Thomas)

Pygmy Mouse

General remarks.--Based on the somewhat scanty material thus far available from New Mexico, the pygmy mouse appears to be an animal of the Upper Sonoran Life Zone in this state.

Subspecies ascribed to New Mexico.--*Baiomys taylori ater* Blossom and Burt.

Records of occurence (Fig. 62).--

Hidalgo Co.:

1. 18 mi. S and 2 mi. W Animas (Packard, 1959: 146).

2. Black Bill Canyon, Animas Mts. (UNMCV).

3. Crest of Peloncillo Mts., 22 mi. S and 2 mi. E Rodeo (UNMCV).

ONYCHOMYS LEUCOGASTER (Wied-Neuwied)

Northern Grasshopper Mouse

Onychomys leucogaster melanophrys Merriam.

Onychomys leucogaster arcticeps Rhoads.

Onychomys leucogaster ruidosae Rehn.

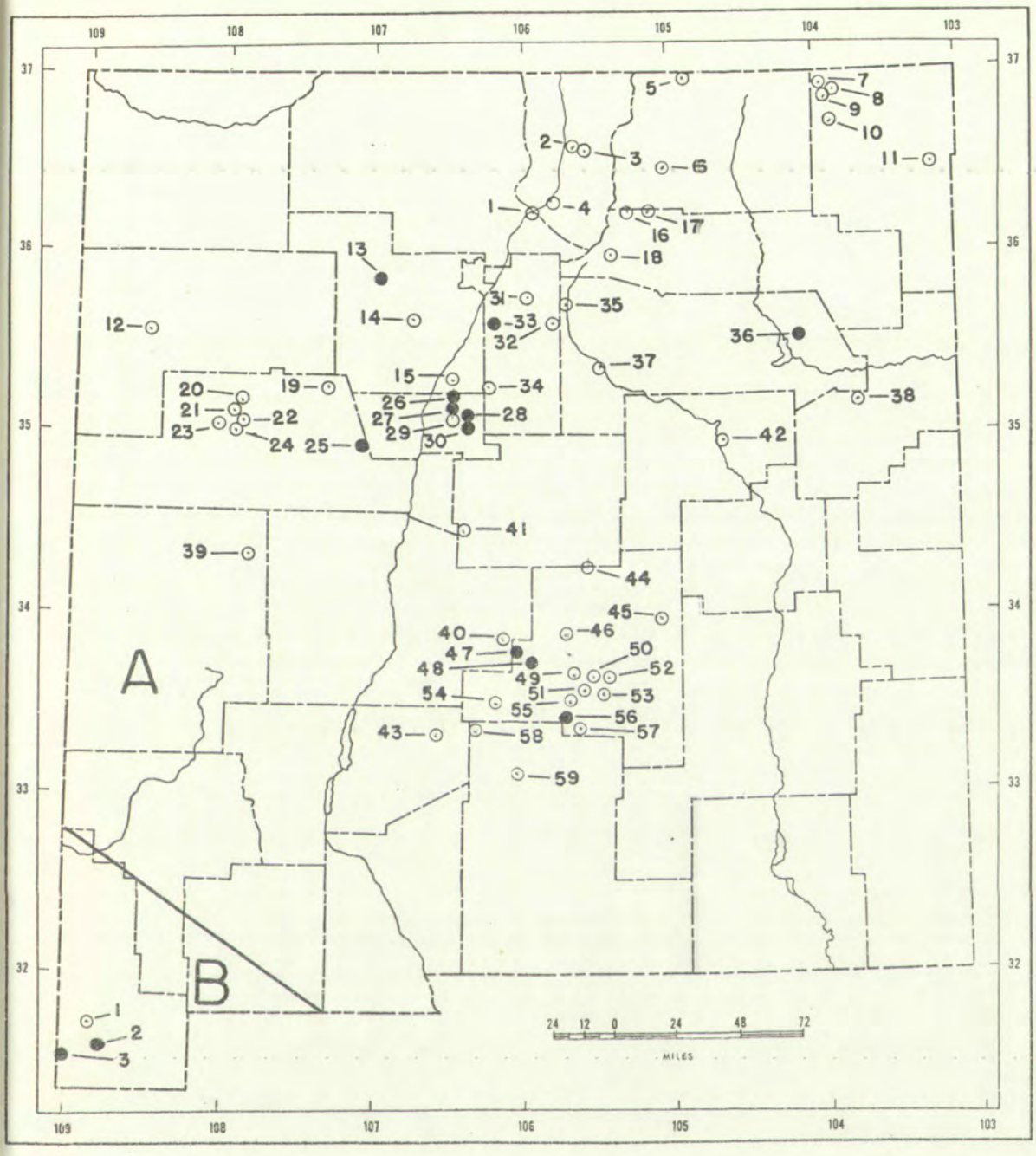

Fig. 62. A. Peromyscus nasutus

B. Baiomys taylori

General remarks.--The northern grasshopper mice are mainly creatures of the Upper Sonoran Life Zone in New Mexico, but specimens have been taken in the Transition Zone and in the lower parts of the Canadian Life Zone.

Subspecies ascribed to New Mexico.--*Onychomys leucogaster arcticeps* Rhoads; *Onychomys leucogaster pallescens* Merriam; *Onychomys leucogaster ruidosae* Stone and Rehn.

Records of occurence (Fig. 63).--

San Juan Co.:

1. Laplata (Hollister, 1914: 446).
2. Near Fruitland (Bailey, 1931: 138).
3. Chaco Canyon (Hollister, 1914: 446).

Rio Arriba Co.:

4. Jicarilla Ranger Station, 21 mi. SW Dulce (UNMCV).
5. Tierra Amarilla (Hollister, 1914: 446).
6. Stinking Spring Lake (Bailey, 1931: 137).
7. Abiquiu (Hollister, 1914: 446).
8. Espanola (Hollister, 1914: 446).

Colfax Co.:

9. Koehler Junction (Hollister, 1914: 441).
10. SW Colfax Co. (Hill, 1942a: 80).

Union Co.:

11. Clayton (Hollister, 1914: 441).
12. Clapham (Bailey, 1931: 139).

McKinley Co.:

13. Wingate (Bailey, 1931: 137).

14. Gallup (Hollister, 1914: 446).

15. Zuni River (Hollister, 1914: 446).

Sandoval Co.:

16. Jemez (Hollister, 1914: 446).

17. Mesa W Rio Grande opposite Bernalillo (Williams, 1949: 41).

18. Juan Tabo Canyon, Sandia Mts. (Clothier, 1957b: 102).

Valencia Co.:

19. 1½ mi. W San Mateo (Hooper, 1941a: 28).

20. 8 mi. SE Grants (Hooper, 1941a: 28).

21. Laguna (Hollister, 1914: 446).

22. Near Acoma (Bailey, 1931: 138).

23. North Plains near Point of Malpais (Hooper, 1941a: 28).

24. 15 mi. S Acoma (Hollister, 1914: 446).

Bernalillo Co.:

25. Jaral Canyon, 6200 ft., Sandia Mts. (Clothier, 1957b: 102); T11N-R4E, Sec. 26 (UNMCV).

26. 2 mi. W and 5 mi. N Albuquerque (UNMCV); 5½ mi. N Albuquerque (UNMCV).

27. Bear Canyon, 6200 ft., Sandia Mts. (Clothier, 1957b: 102); 8 mi. W and 4 mi. N Albuquerque (Clothier, 1957b: 102); E Albuquerque, 3/4 mi. W Sandia Mts. (Clothier, 1957b: 102); E Albuquerque on Las Lomas Rd., ½ mi. W Sandia Mts. (Clothier, 1957b: 102); E Albuquerque on Las Lomas Rd., ¼ mi. W Sandia Mts. (Clothier, 1957b:

102); Embudo Canyon, just outside nat'l forest (Clothier, 1957b: 102); Embudo Canyon, 6200 ft., Sandia Mts. (Clothier, 1957b: 102).

28. 8 mi. W Albuquerque (UNMCV); 5 7/8 mi. W and 2 1/8 mi. N Albuquerque (UNMCV).

29. 2 mi. W Rio Grande, Bowman Farm (UNMCV); Mesa 8 mi. W and 4 mi. N Univ. N. Mex. (UNMCV).

30. Mesa, 1 mi. W Albuquerque (UNMCV); Albuquerque (UNMCV); Mesa N Univ. N. Mex. (UNMCV).

31. East Mesa, 1 mi. N US Hwy 66, near Sandia Mts. (Clothier, 1957b: 102); Tijeras Canyon, near mouth, opposite Sandia Base (Clothier, 1957b: 102); East Mesa, 50 yds. S "U" on hill, 1 mi. N US 66 (UNMCV).

32. Albuquerque, 5 mi. W and 1 mi. S US Hwy 66 (UNMCV); 5 mi. W Albuquerque (UNMCV).

33. Hell Canyon, 6400 ft., W slope Manzano Mts. (Clothier, 1957b: 102).

Santa Fe Co.:

34. Santa Fe (Hollister, 1914: 446).

35. Lamy-Glorieta region (Holdenried and Morlan, 1956: 378).

36. San Pedro, Sandia Mts. (Bailey, 1931: 140).

San Miguel Co.:

37. Las Vegas (Hollister, 1914: 449).

Catron Co.:

38. Datil Mts. (Bailey, 1931: 140).

39. Mangas Valley (Hollister, 1914: 449).

40. Greens Gap (UNMCV).

Socorro Co.:

41. Burley (Hollister, 1914: 449).

42. 17½ mi. W Bernardo, T3N-R3W, Sec. 36 (UNMCV).

43. 2 mi. E and lo mi. S Belen (UNMCV).

44. Gallina Mts. (Bailey, 1931: 140).

45. Bear Spring Mts. (Bailey, 1931: 140).

46. Magdalena (Hollister, 1914: 449).

47. Socorro (Bailey, 1931: 141).

48. San Augustin Plains, 14 mi. W and 5 mi. S Magdalena (UNMCV).

49. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 20 mi. S Magdalena (UNMCV).

50. 7.1 mi. W Bingham (UNMCV).

51. Rio Alamosa (Hollister, 1914: 449).

Torrance Co.:

52. Comanche Canyon, 6250 ft., Manzano Mts. (Clothier, 1957b: 102); Jaramillo Canyon, 6300 ft., Manzano Mts. (Clothier, 1957b: 102).

53. Negra, 4 mi. W Encino (UNMCV).

54. 10 mi. E and 2 mi. S Willard (UNMCV).

55. Mesa Jumanes (Hollister, 1914: 449).

Guadalupe Co.:

56. Santa Rosa (Bailey, 1931: 139).

Grant Co.:

57. Cactus Flat, between Gila and San Francisco Rivers (Bailey, 1931: 140).

58. Hachita (Bailey, 1931: 140).

Sierra Co.:

59. Fairview (Hollister, 1914: 449).

60. Lake Valley (Bailey, 1931: 140).

Lincoln Co.:

61. Ancho (Hollister, 1914: 449).

62. Jicarilla Mts. (Bailey, 1931: 140).

63. Carrizozo (Benson, 1933: 36).

64. Gyp Spring Canyon, 4 mi. NE Capitan (Dice, 1942: 203).

65. Fort Stanton (UNMCV).

66. Hale's Ranch, Ruidoso (Bailey, 1931: 140).

De Baca Co.:

67. Fort Sumner (Hollister, 1914: 441).

Roosevelt Co.:

68. Milnesand Restoration Area (UNMCV).

Hidalgo Co.:

69. Hatchet Ranch (Hollister, 1914: 449).

70. 1 mi. SW Aspen Spring, Animas Mts. (Jones, Fleharty, and Harris, Jour. Mamm., in press).

71. Upper Animas Valley, 36 mi. S and 3 mi. W Animas (UNMCV).

72. Deer Creek (Hollister, 1914: 449).

Luna Co.:

73. Deming (Bailey, 1931: 140).

74. Mimbres Valley, near Monument 15 (Mearns, 1907: 371).

75. 1 mi. E Columbus (UNMCV).

Dona Ana Co.:

76. College Ranch, 25 mi. N Las Cruces, Plot 21 (UNMCV).

77. Mesilla (Bailey, 1931: 140).

78. Near Strauss (Benson, 1933: 36).

Otero Co.:

79. 14 mi. W Tularosa (Benson, 1933: 36).

80. Near Tularosa (Blair, 1941: 224).

81. 10 mi. W Tularosa (Benson, 1933: 36).

82. 12 mi. W Alamogordo (Benson, 1933: 36).

83. Near Alamogordo (Benson, 1933: 36).

84. Penasco Creek (Bailey, 1928: 74).

85. White Sands, 18 mi. SW Alamogordo (Benson, 1933: 36).

86. Escondida (Benson, 1933: 36).

87. Jarilla (Bailey, 1931: 140).

Chaves Co.:

88. Roswell (Bailey, 1931: 139).

89. 6.4 mi. E and 2 mi. S Roswell (UNMCV).

Eddy Co.:

90. Carlsbad (Bailey, 1931: 139).

Not Located:

Carasal, Bernalillo Co. (Hollister, 1914: 446).

Vaqueros Ranger Station, Rio Arriba Co. (UNMCV).

ONYCHOMYS TORRIDUS (Coues)

Southern Grasshopper Mouse

Onychomys torridus torridus (Coues).

General remarks.--In New Mexico, Onychomys torridus is found mainly in the Lower Sonoran Life Zone.

Subspecies ascribed to New Mexico.--Onychomys torridus torridus (Coues).

Records of occurence (Fig. 64).--

Catron Co.:

1. Glenwood (Bailey, 1931: 141); Pleasanton (Bailey, 1931: 141).

2. Dry Creek (Hollister, 1914: 459).

Socorro Co.:

3. 1 mi. S and 2 mi. W Bernardo (UNMCV).

4. Socorro (Bailey, 1931: 141).

5. 5.6 mi. E Springtime Camp, San Mateo Mts. (UNMCV).

Grant Co.:

6. Near Silver City (Bailey, 1931: 141).

7. Redrock (Bailey, 1931: 141); 1 mi. E Redrock (UNMCV).

8. Near Hachita (Bailey, 1931: 141).

9. Apache (Hollister, 1914: 459).

Sierra Co.:

10. Rhodes Pass, San Andres Mts. (UNMCV).

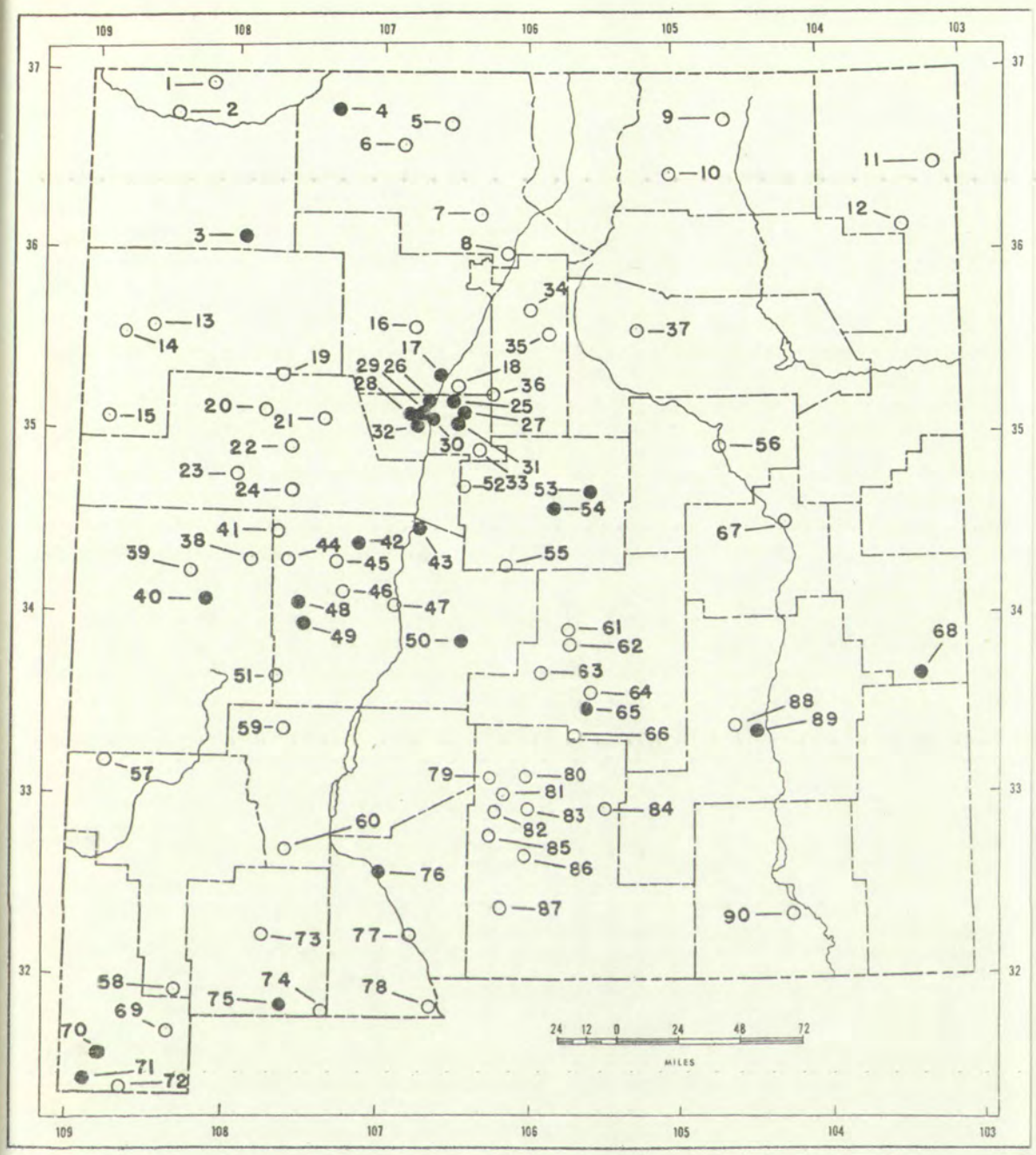

Fig. 63. Onychomys leucogaster

11. Hillsboro (Bailey, 1931: 141).

12. N. Mex. Hwy 27, 2 mi. N and 1½ mi. E Lake Valley (UNMCV).

Hidalgo Co.:

13. Doubtful Canyon, Peloncillo Mts., 8 mi. N and 2 mi. W Steins (UNMCV).

14. 8 mi. S and 1 mi. W Lordsburg (UNMCV).

15. Clanton Canyon, Peloncillo Mts., 5500 ft., 22 mi. S and 2 mi. E Rodeo (UNMCV).

16. 36 mi. S and 10 mi. W Animas (UNMCV); 36 mi. S and 9 mi. W Animas (UNMCV).

17. Black Bill Canyon, Animas Mts. (UNMCV).

18. 3 mi. W and 1 mi. N San Luis Pass (UNMCV); T33S-R19W, Sec. 29 (UNMCV).

19. 1 mi. E Culberson Ranch, Deer Creek (UNMCV).

20. Dog Spring (Hollister, 1914: 459).

21. Monument 40, 100 mi. W Rio Grande (Mearns, 1907: 376).

Luna Co.:

22. US 70-80, 11 mi. W and 2 mi. S Deming (UNMCV).

23. Carrizalillo Springs, near Monument 32 (Mearns, 1907: 376).

Dona Ana Co.:

24. Gold Camp (Hollister, 1914: 459).

25. Organ City (Hollister, 1914: 459).

26. Base of Organ Mts. (Bailey, 1931: 141).

27. Base of Franklin Mts. (Bailey, 1931: 141).

Otero Co.:

28. Dry Canyon, 5500 ft., Sacramento Mts. (Dice, 1930: 24).

29. 14 mi. W Tularosa (Benson, 1933: 37).

30. Tularosa (Bailey, 1931: 141); Between Alamogordo and Dry Canyon (Hollister, 1914: 459).

31. White Sands, 10 mi. SW Tularosa (Benson, 1933: 36).

32. About 4 mi. N Alamogordo (Dice, 1930: 14).

33. Alamogordo (Hollister, 1914: 459).

34. 12 mi. SW Alamogordo (Benson, 1933: 37).

35. Weed (Hollister, 1914: 459).

36. Tularosa Valley S Sacramento Mts. (Bailey, 1931: 142).

Eddy Co.:

37. Carlsbad (Bailey, 1931: 141).

38. 5 mi. E Carlsbad Caverns (Borell and Bryant, 1942: 29).

SIGMODON HISPIDUS Say and Ord

Hispid Cotton Rat

Sigmodon hispidus berlandieri Baird.

General remarks.--The hispid cotton rat is found in much of the Lower Sonoran Life Zone in New Mexico and extends its range well into the Upper Sonoran in some areas.

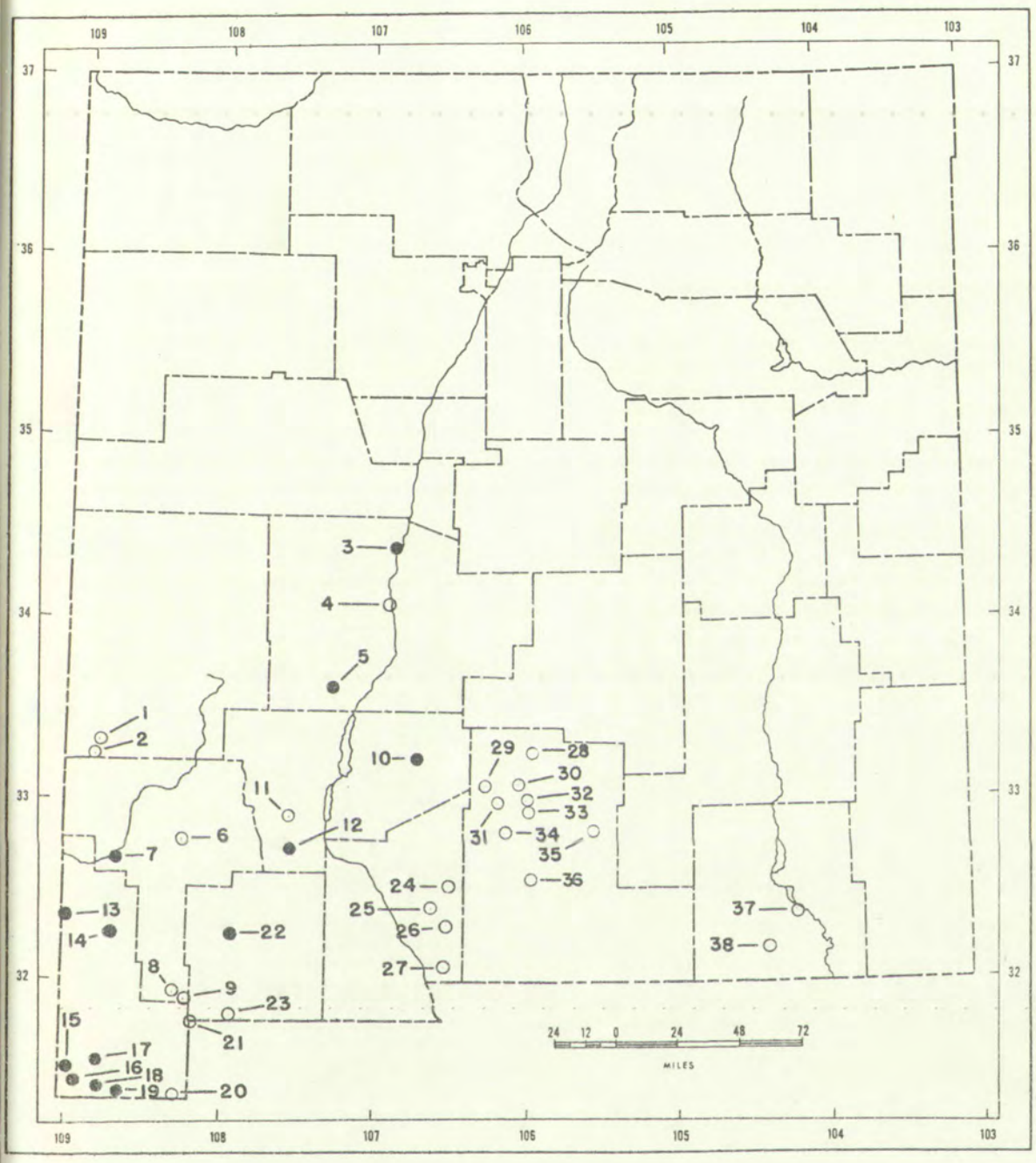

Fig. 64. Onychomys torridus

Subspecies ascribed to New Mexico.--*Sigmodon hispidus berlandieri* Baird.

Records of occurence (Fig. 65).--

Union Co.:

1. 3 mi. W Kenton (UNMCV).

2. 5 mi. S Moses (UNMCV).

3. Mt. Dora (UNMCV).

Harding Co.:

4. Mosquero (UNMCV).

Valencia Co.:

5. 2 mi. E and 1 mi. S Belen (UNMCV).

6. Pato Arroyo, 13 mi. W Bosque (UNMCV).

San Miguel Co.:

7. Variadero (UNMCV).

8. 4 mi. S and 2 mi. E Variadero (UNMCV).

9. Conchas (UNMCV).

Quay Co.:

10. 1 mi. N and 1 mi. W Logan (UNMCV).

11. 4 mi. N and 1 mi. W Tucumcari (UNMCV).

Socorro Co.:

12. Abeytas (UNMCV).

13. 1 mi. N and 6 mi. W Bernardo (UNMCV); 4 mi. W Bernardo (UNMCV).

14. 3½ mi. E Bernardo (UNMCV).

15. 6½ mi. W Scholle (UNMCV); 4 mi. W and 2 mi. S Scholle (UNMCV).

16. Scholle (UNMCV).

17. 1 mi. E Socorro (UNMCV); Socorro (Bailey, 1931: 167).

18. 1 mi. E and 5 mi. N San Antonio (UNMCV).

19. 1 mi. E and 2 mi. N San Antonio (UNMCV).

20. Carthage (UNMCV).

21. 4 mi. E Carthage (UNMCV).

22. 5 mi. E and 4 mi. S Bingham (UNMCV).

23. Bosque del Apache Nat'l Wildlife Refuge (UNMCV).

24. 13 mi. E and 8 mi. N Monticello (UNMCV).

Guadalupe Co.:

25. Newkirk (UNMCV).

26. Santa Rosa (UNMCV).

27. Pintada Arroyo, 4 mi. SW Santa Rosa (Univ. Kansas Mus. Nat. Hist. specimen).

Curry Co.:

28. 3 mi. W Melrose (UNMCV).

29. 5 mi. W Clovis (UNMCV).

Grant Co.:

30. 1 mi. W and 2 mi. S Faywood (UNMCV).

31. 1 mi. W Hachita (UNMCV).

Sierra Co.:

32. 3 mi. E and 3 mi. N Monticello (UNMCV).

33. 6 mi. E and 1 mi. N Monticello (UNMCV).

34. Monticello (UNMCV).

35. 9½ mi. E and 3½ mi. S Monticello (UNMCV); 9½ mi.

E and 6 mi. S Monticello (UNMCV).

36. 6 mi. E and 7 mi. S Monticello (UNMCV).

37. 16 mi. E and 4 mi. N Engle (UNMCV).

38. Engle (UNMCV).

39. 5 mi. W and 3 mi. S Engle (UNMCV); 4 mi. W and 3 mi. S Engle (UNMCV).

40. 1 mi. E and 1 mi. N Truth or Consequences (UNMCV).

41. Las Palomas (UNMCV).

42. 3 mi. N and 1 mi. E Arrey (UNMCV).

Lincoln Co.:

43. 4 mi. N and 1 mi. E Carrizozo (UNMCV).

44. Carrizozo (UNMCV).

45. Capitan (UNMCV).

46. Lincoln (UNMCV).

47. Hondo (UNMCV).

De Baca Co.:

48. 4 mi. E Cardenas (UNMCV).

49. 1 mi. S and 1 mi. E Fort Sumner (UNMCV).

50. 3 mi. N and 3 mi. W Mesa (UNMCV).

Roosevelt Co.:

51. 1 mi. S and 1 mi. W Elida (UNMCV).

Hidalgo Co.:

52. 2 mi. E Lordsburg (UNMCV); 4 mi. E and 2 mi. S Lordsburg (UNMCV).

53. 8½ mi. S and 1½ mi. W Lordsburg (UNMCV).

54. Animas (UNMCV).

55. San Simon Cienega, on Arizona-New Mexico line (Cahalane, 1939: 434).

56. 5 mi. S and 2 mi. W Hachita (UNMCV).

57. 15 mi. S and 8 mi. W Hachita (UNMCV).

58. 22 mi. S and 9 mi. W Hachita (UNMCV).

59. Cloverdale (UNMCV).

60. Whitewater Canyon, 12 mi. W Antelope Wells, 5500 ft. (UNMCV).

Luna Co.:

61. 4 mi. E and 2 mi. S Spalding (UNMCV).

62. 4 mi. S and 3 mi. W Florida (UNMCV).

63. 1 mi. W Deming (UNMCV); Near Deming, around sink of Mimbres (Bailey, 1931: 167).

64. 6½ mi. W Akela (UNMCV).

65. 11 mi. W and 2 mi. S Deming (UNMCV).

66. 1 mi. E Columbus (UNMCV).

67. 13 mi. E and 2 mi. S Columbus (UNMCV).

Dona Ana Co.:

68. 2 mi. W and 2 mi. N Salem (UNMCV); 2 mi. W and 1 mi. N Salem (UNMCV); Salem (UNMCV).

69. 4 mi. E and 1 mi. S Hatch (UNMCV); 6 mi. E and 2 mi. S Hatch (UNMCV).

70. 12 mi. E Akela (UNMCV).

71. 17½ mi. E Akela (UNMCV).

72. 3 mi. W and 3 mi. N Las Cruces (UNMCV); 3 mi. W and 2 mi. N Las Cruces (UNMCV).

73. Mesilla (Stone and Rehn, 1903: 23).

74. La Mesa (J. A. Allen, 1903: 588).

75. Chamberino (J. A. Allen, 1903: 588).

76. Town of Mt. Riley (UNMCV).

Otero Co.:

77. Salinas (Blair, 1941: 226).

78. Tularosa (Bailey, 1931: 167).

79. Near Alamogordo (Blair, 1941: 226).

80. 6 mi. SW Alamogordo (Dice, 1930: 8).

81. 10 mi. S and 8 mi. W Headquarters, White Sands Nat'l Monument (UNMCV).

82. W slope Guadalupe Mts. (Bailey, 1931: 167); Guadalupe Ranch (J. A. Allen, 1903: 588).

Chaves Co.:

83. Mesa (UNMCV).

84. 3 mi. N Roswell (UNMCV).

85. 6.4 mi. E and 2 mi. S Roswell (UNMCV); 7 mi. E Roswell (UNMCV).

Eddy Co.:

86. 1 mi. S Artesia (UNMCV).

87. Carlsbad (Bailey, 1931: 167).

Lea Co.:

88. Caprock (UNMCV).

89. Tatum (UNMCV).

90. 2 mi. W Hobbs (UNMCV).

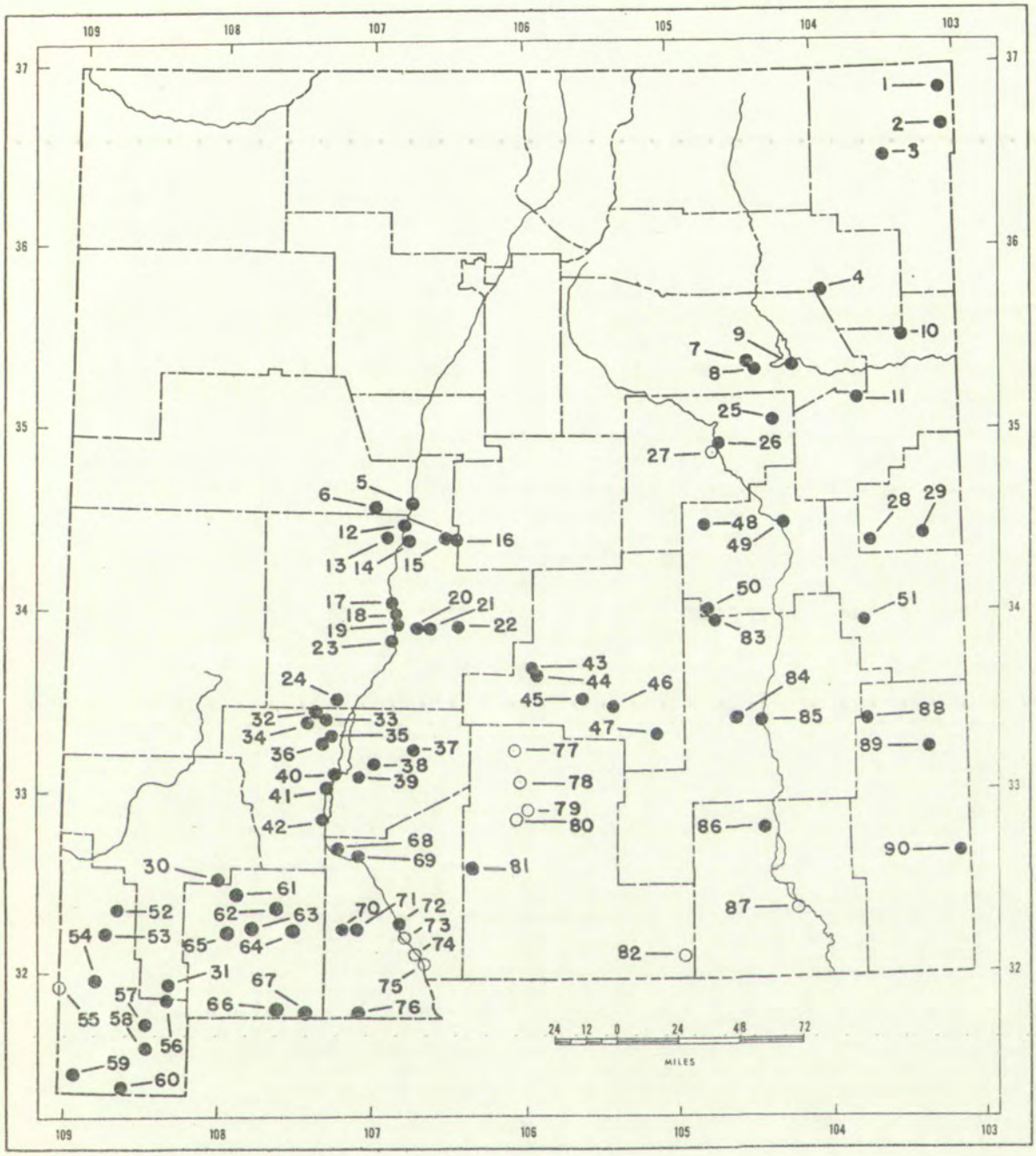

Fig. 65. Sigmodon hispidus

SIGMODON MINIMUS Mearns

Least Cotton Rat

Sigmodon minimus minimus Mearns.

Sigmodon minimus goldmani Bailey.

General remarks.--The least cotton rat, like the hispid cotton rat, is found in both Lower and Upper Sonoran Life Zones in New Mexico. However, its range in the Lower Sonoran is much more limited than that of the hispid cotton rat.

Subspecies ascribed to New Mexico.--Sigmodon minimus minimus Mearns; Sigmodon minimus goldmani Bailey; Sigmodon minimus woodi Gardner.

Records of occurence (Fig. 66).--

Sandoval Co.:

1. ½ mi. N and ½ mi. E Algodones (UNMCV); Algodones (UNMCV).

2. Bernalillo (UNMCV).

3. 5 mi. S and 2 mi. W Bernalillo (UNMCV).

Valencia Co.:

4. 5 mi. N and 1 mi. E Los Lunas (UNMCV).

5. 1 mi. N Los Lunas (UNMCV).

6. ½ mi. W and 1 mi. N Belen (UNMCV).

Bernalillo Co.:

7. Isleta (UNMCV).

8. 2 mi. S and 1½ mi. W Isleta (UNMCV).

Socorro Co.:

9. Bernardo (Gardner, 1948: 65).

10. E side Rio Grande, 51 mi. S Albuquerque, 5000 ft. (Gardner, 1948: 65).

Grant Co.:

11. Silver City (Bailey, 1931: 169).

12. 2 mi. W and 4 mi. S Silver City (UNMCV).

13. Bayard (UNMCV).

14. 3½ mi. S Hurley (UNMCV).

15. 3 mi. E and 7 mi. S Hurley (UNMCV).

16. 2½ mi. W White Signal (UNMCV).

17. Separ (UNMCV).

18. Wilna (UNMCV).

19. 1 mi. W Hachita (UNMCV).

Sierra Co.:

20. 6 mi. N and 1 mi. W Winston (UNMCV).

21. 5 mi. E Winston (UNMCV).

22. 1 mi. S and 1 mi. W Winston (UNMCV).

23. Ladder Ranch, T14S-R7W, Sec. 4 (UNMCV).

24. 7 mi. N Las Palomas (Gardner, 1947: 190).

25. 4 mi. E and 2½ mi. N Hillsboro (UNMCV).

26. 2 mi. N and 1½ mi. E Lake Valley (UNMCV).

27. 8 mi. N and 4½ mi. W Nutt (UNMCV).

Hidalgo Co.:

28. 7 mi. N and 4½ mi. E Lordsburg (UNMCV).

29. 2 mi. E Lordsburg (UNMCV).

30. 4 mi. E and 2 mi. S Lordsburg (UNMCV).

31. Animas (UNMCV).

32. San Simon Cienega, on Arizona-New Mexico line (Cahalane, 1939: 434).

33. 5 mi. S and 2 mi. W Hachita (UNMCV).

34. Upper corner monument of Mexican Boundary (Bailey, 1931: 169).

35. 20 mi. S and 3 mi. W Animas (UNMCV); 18 mi. S and 3.2 mi. W Animas (UNMCV); 18 mi. S and 2 mi. W Animas (Univ. Kansas Mus. Nat. Hist. specimen).

36. Cloverdale (UNMCV).

37. 9½ mi. N and 2 mi. W Antelope Wells (UNMCV).

38. 12 mi. W Antelope Wells (UNMCV).

39. 5½ mi. N and 3 mi. W Antelope Wells (UNMCV).

40. Lang's Ranch, T34S-R19W, Sec. 19 (UNMCV).

Luna Co.:

41. 7½ mi. E and 2 mi. N Nutt (UNMCV).

42. 7 mi. SW Nutt (Univ. Kansas Mus. Nat. Hist. specimen).

43. 4 mi. S and 3 mi. W Florida (UNMCV).

44. 1 mi. W Deming (UNMCV).

45. 6½ mi. W Akela (UNMCV).

46. 1 mi. S Akela (UNMCV).

47. 11 mi. E and 6 mi. S Hachita (UNMCV).

48. Hermanas (UNMCV).

49. 1 mi. E Columbus (UNMCV).

50. 13 mi. E and 2 mi. S Columbus (UNMCV).

Dona Ana Co.:

51. 12 mi. E Akela (UNMCV).

52. 16 mi. W and 1 mi. S Las Cruces, Los Corralitos Ranch (UNMCV).

53. 17½ mi. E Akela (UNMCV).

SIGMODON OCHROGNATHUS Bailey

Yellow-nosed Cotton Rat

General remarks.-- In New Mexico, the yellow-nosed cotton rat has been taken in the Upper Sonoran and Transition Life Zones and in an area which shows some features of the Canadian Life Zone.

Subspecies ascribed to New Mexico.--Sigmodon ochrognathus montanus Benson.

Records of occurence (Fig. 67).--

Hidalgo Co.:

1. 4 mi. NW San Luis Pass, 5200 ft. (Benson, 1940: 157).

2. Pass on Geronimo Trail at top of Peloncillo Mts., 22 mi. S and 2 mi. E Rodeo (UNMCV).

3. Aspen Spring, Indian Creek Canyon, Animas Mts. (UNMCV); 1 mi. SW Aspen Spring, Animas Mts. (UNMCV).

4. Indian Creek Canyon, Animas Mts., 22 mi. S Animas (UNMCV).

NEOTOMA MICROPUS Baird

Southern Plains Wood Rat

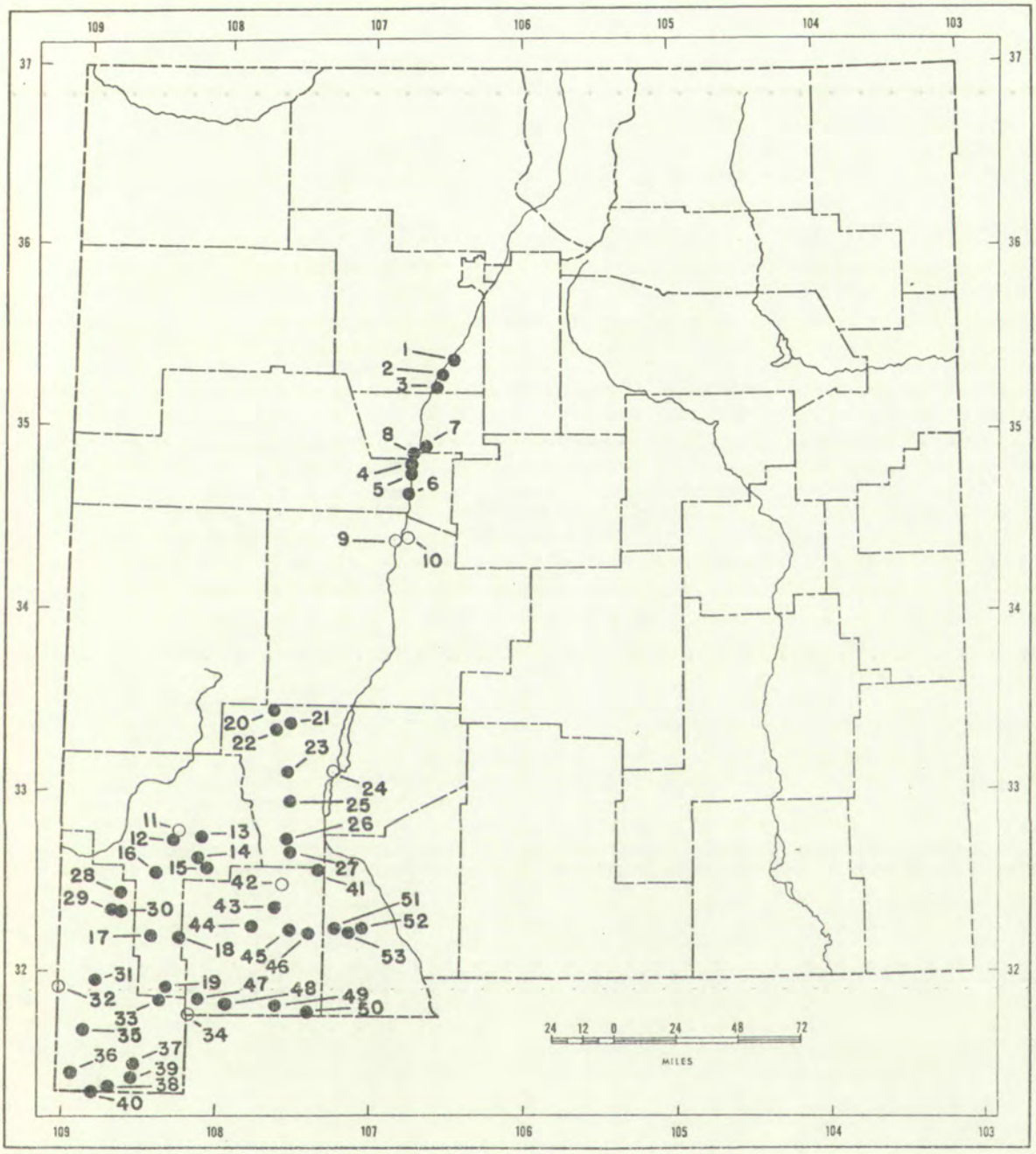

Fig. 66. Sigmodon minimus

Neotoma micropus canescens Allen.

General remarks.--Members of this species inhabit the Lower Sonoran Life Zone and, to some degree, the Upper Sonoran Life Zone in New Mexico.

Hooper's record from 8 mi. SE Grants is based on a juvenile specimen and only tentatively assigned to this species.

Subspecies ascribed to New Mexico.--Neotoma micropus canescens Allen; Neotoma micropus leucophaea Goldman.

Records of occurence (Fig. 67).--

Rio Arriba Co.:

1. Rinconada (Goldman, 1910: 29).

Sandoval Co.:

2. W Placitas, 5500 ft., Sandia Mts. (Clothier, 1957b: 128).

3. Albuquerque, 14 mi. N Central Ave., ½ mi. E road to Santa Fe (UNMCV); Albuquerque, 12 mi. N Central Ave., ½ mi. E road to Santa Fe (UNMCV).

Valencia Co.:

4. 8 mi. SE Grants (Hooper, 1941a: 32).

Bernalillo Co.:

5. 4 mi. E Alameda (Clothier, 1957b: 128); Juan Tabo, Sandia Mts. (Clothier, 1957b: 128); La Cueva Recreation Area, Juan Tabo Rd. (UNMCV); 8 mi. E and 7 mi. N Albuquerque (UNMCV).

6. About 2 mi. NE US 66 bridge over Rio Puerco (Williams, 1949: 20).

7. 2 mi. W Rio Grande, W Albuquerque (Clothier, 1957b: 128); 2 mi. W Rio Grande, Bowman's Farm (UNMCV).

8. 5 mi. E and 4 mi. N Univ. N. Mex. (Clothier, 1957b: 128).

9. Bear Canyon, 6000 ft., Sandia Mts. (Clothier, 1957b: 128); 8 mi. E Albuquerque, mesa W Base Sandia Mts. (Clothier, 1957b: 128); Embudo Canyon, 5700 ft., Sandia Mts. (Clothier, 1957b: 128); 6 mi. E Albuquerque (Williams, 1949: 17); T11N-R4E, SE corner Sec. 35 (UNMCV).

10. 8 mi. E and 1 mi. N Albuquerque, at "U" (UNMCV).

11. Hell Canyon, 6400 ft., Manzano Mts. (Clothier, 1957b: 128).

Santa Fe Co.:

12. Santa Fe area (Holdenried and Morlan, 1956: 378).

San Miguel Co.:

13. Bell Ranch (UNMCV).

Quay Co.:

14. Tucumcari (Goldman, 1910: 29).

Socorro Co.:

15. 11¼ mi. W and 5 mi. N Bernardo (UNMCV); 10½ mi. W and 4.7 mi. N Bernardo (UNMCV).

16. Near Ojo de la Parida, 10 mi. NE Socorro (Bailey, 1931: 173).

17. Socorro (Goldman, 1910: 29).

18. 10 mi. SE Magdalena (Goldman, 1910: 29); Near E base Magdalena Mts. (Bailey, 1931: 173).

19. Summit northern Cerro Prieto, 18 mi. NW Carrizozo (Benson, 1933: 42).

20. Mesa W San Marcial (Bailey, 1931: 173).

Torrance Co.:

21. Jaramillo Canyon, 6200 ft., Manzano Mts. (Clothier, 1957b: 128); E base Manzano Mts. (Bailey, 1931: 173).

22. 10 mi. E and 2 mi. S Willard (UNMCV).

Guadalupe Co.:

23. Near Cuervo, about 20 mi. E Santa Rosa (Bailey, 1931: 172).

24. Santa Rosa (Goldman, 1910: 29).

Lincoln Co.:

25. Corona (Goldman, 1910: 29).

26. Ancho (Goldman, 1910: 29).

27. W base Jicarilla Mts. (Bailey, 1931: 173).

28. About 10 mi. from Carrizozo by road, S Carrizozo-Socorro Rd. (Bradt, 1932: 325).

29. NW base Capitan Mts. (Bailey, 1931: 173).

30. Fort Stanton (UNMCV).

De Baca Co.:

31. Fort Sumner (Goldman, 1910: 29).

32. US Hwy 285, 3 mi. N and 3 mi. W Mesa (UNMCV).

Hidalgo Co.:

33. 6 mi. SSE Lordsburg (Hall and Kelson, 1959: 685).

Luna Co.:

34. Deming (Bailey, 1931: 171).

35. 8 mi. E Deming (Goldman, 1910: 29).

36. Monument 15, 50 mi. W Rio Grande (Mearns, 1907: 472).

Dona Ana Co.:

37. Mesa E Mesilla Park (Bailey, 1931: 173).

Otero Co.:

38. Salinas (Blair, 1941: 226).

39. Tularosa (Goldman, 1910: 29).

40. Near Alamogordo (Benson, 1933: 42).

41. White Sands, 10 mi. W Point of Sands, White Sands Nat'l Monument (Goldman, 1933b: 472).

Chaves Co.:

42. Roswell (Goldman, 1910: 29).

43. 8 mi. E and 2 mi. S Roswell (UNMCV).

44. 9.3 mi. E and 8.2 mi. S Roswell (UNMCV).

Eddy Co.:

45. Carlsbad (Goldman, 1910: 29); 3 mi. N Carlsbad (Feldman, 1935: 300).

46. Harrison Ranch, 34 mi. SW Carlsbad (Parker, 1932: 70).

NEOTOMA ALBIGULA Hartley

White-throated Wood Rat

Neotoma albigula albigula Hartley.

Neotoma albigula warreni Merriam.

General remarks.--In New Mexico, the white-throated wood rat is most common in the Upper Sonoran Life Zone but

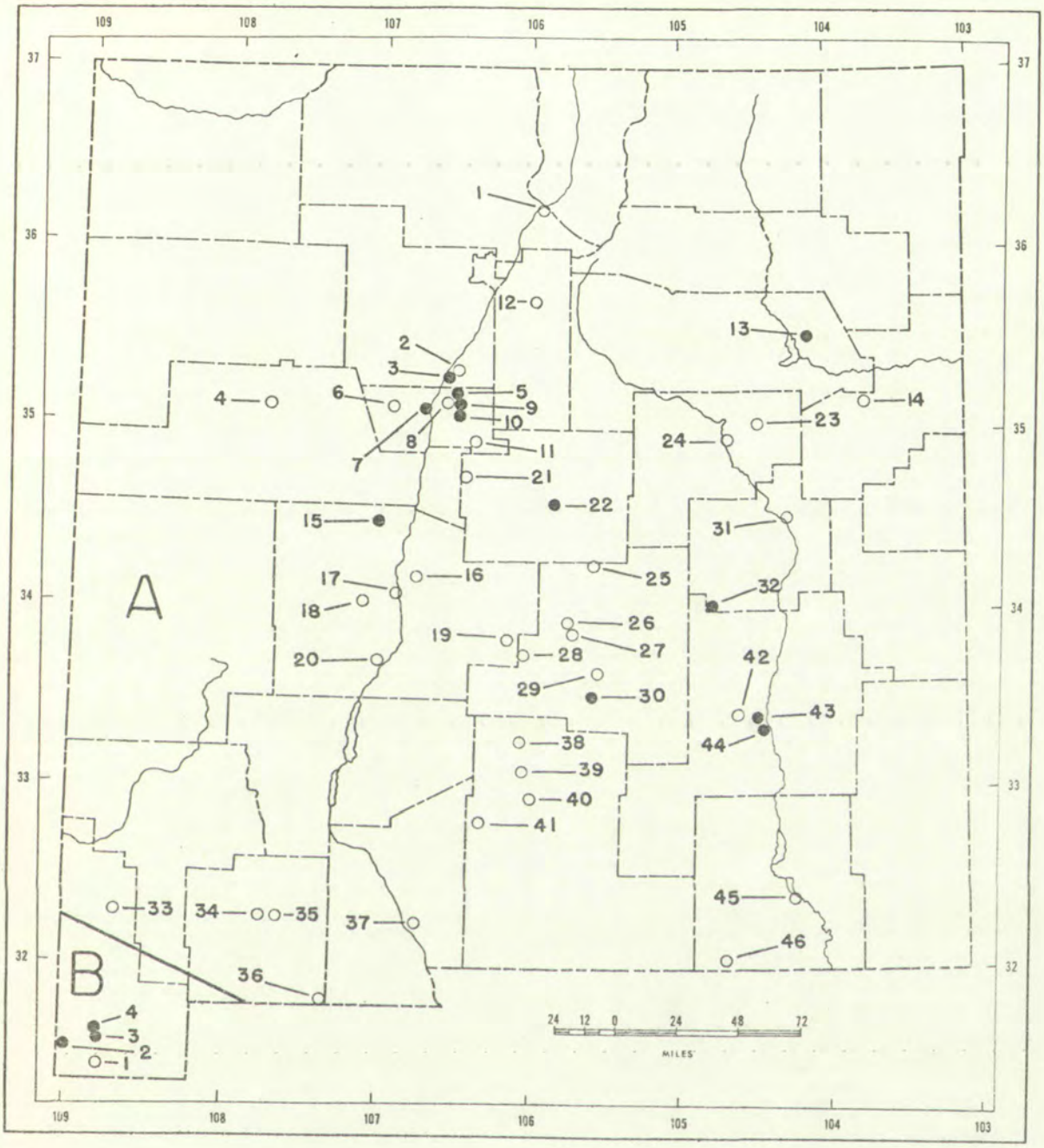

Fig. 67. A. Neotoma micropus

B. Sigmodon ochrognathus

also is to be found in the Lower Sonoran.

Bailey (1931: 177) mentions wood-rat houses on the plains near Deming and assumes that these houses were built by wood rats of this species. No specimens were collected there, however.

Subspecies ascribed to New Mexico.--*Neotoma albigula albigula* Hartley; *Neotoma albigula warreni* Merriam; *Neotoma albigula melas* Dice.

Records of occurence (Fig. 68).--

San Juan Co.:

1. "Four Corners" of Utah, Colo., Ariz., and N. Mex. (Finley, 1958: 297).

2. Los Pinos River, T30N-R7W, Sec. 6 (UNMCV).

3. 9 mi. S and 6½ mi. W Bloomfield (UNMCV).

Rio Arriba Co.:

4. Stinking Spring Lake (Goldman, 1910: 33).

5. Rinconada (Goldman, 1910: 33).

6. Chama Valley, near Abiquiu (Bailey, 1931: 177).

7. Espanola (Goldman, 1910: 33).

Colfax Co.:

8. 4 mi. SW Cimarron (Hill, 1942a: 81).

Union Co.:

9. Clayton (Goldman, 1910: 35).

McKinley Co.:

10. Gallup (Bailey, 1931: 177).

11. Wingate (Goldman, 1910: 33); Fort Wingate

(Goldman, 1910: 33).

Sandoval Co.:

12. Santa Clara Canyon (Goldman, 1910: 33).

13. Cabezon (Goldman, 1910: 33).

14. Juan Tabo Canyon, Sandia Mts. (Clothier, 1957b: 131); Chaves Springs, 5800 ft., Sandia Mts. (Clothier, 1957b: 131); Las Huertas Creek, 6000 ft., Sandia Mts. (Clothier, 1957b: 131).

15. San Pedro Creek, ½ mi. N Sandoval-Bernalillo Co. line (Clothier, 1957b: 131).

Valencia Co.:

16. 1½ mi. SW San Mateo (Hooper, 1941a: 32).

17. 1 mi. N Cebolleta (Hooper, 1941a: 32).

18. Canyon Lobo Ranger Station (Hooper, 1941a: 32).

19. Grants (Goldman, 1910: 33).

20. San Rafael (Goldman, 1910: 33).

21. 4 mi. W McCartys (Hooper, 1941a: 32).

22. 4 mi. WSW Cebolleta (Hooper, 1941a: 32).

23. 9 mi. SSE Grants (Hooper, 1941a: 32).

24. Laguna (Goldman, 1910: 33).

25. 1 mi. E Suwanee (UNMCV).

26. Shuman's Ranch, T6N-R10W, Sec. 30 (Hooper, 1941a: 32).

27. Rio Puerco (Goldman, 1910: 32).

Bernalillo Co.:

28. Jaral Canyon, 6250 ft., Sandia Mts. (Clothier,

1957b: 131); La Cueva Recreation Area, 6475 ft., Sandia Mts. (Clothier, 1957b: 131); Juan Tabo, Sandia Mts. (Clothier, 1957b: 131); Juan Tabo Recreation Area, 5 mi. E and 6 mi. N Albuquerque (UNMCV); T11N-R4E, E part Sec. 11 (UNMCV).

29. Lava beds W Rio Grande, near Albuquerque (UNMCV); 5 7/8 mi. W and 2 1/8 mi. N Albuquerque (UNMCV).

30. 5 mi. W Albuquerque (UNMCV).

31. Bear Canyon, Sandia Mts. (Clothier, 1957b: 131); Embudo Canyon, 6200-6800 ft., Sandia Mts. (Clothier, 1957b: 131); 8 mi. E and 3 mi. N Albuquerque (UNMCV); Near mouth Embudito Canyon (UNMCV); Mouth of Embudo Canyon (UNMCV); Pino Canyon, 3.4 mi. E Juan Tabo Rd., Sandia Mts. (UNMCV); Mouth of Bear Canyon on Juan Tabo Rd. (UNMCV).

32. San Antonito, 7000 ft., Sandia Mts. (Clothier, 1957b: 131).

33. Mouth of Tijeras Canyon, E Albuquerque (Clothier, 1957b: 131); 8 mi. E and 1 mi. S Albuquerque (Clothier, 1957b: 131); 1 mi. N US Hwy 66, W base Sandia Mts. (Clothier, 1957b: 131).

34. Near Tijeras Ranger Station, 6500 ft., Manzano Mts. (Clothier, 1957b: 131); Cedro Canyon, 3 mi. S Tijeras (Clothier, 1957b: 131); Sedillo, 7000 ft., Manzano Mts. (Clothier, 1957b: 131); ½ mi. N US Hwy 66 on road to Sandia Mts. (Clothier, 1957b: 131); 1½ mi. S Hwy 66, Cedro Canyon (Clothier, 1957b: 131); Tijeras Canyon, Sandia Mts.

(UNMCV); 16 mi. E and 2 mi. S Albuquerque (UNMCV).

35. Cedro Canyon, 5 mi. S Tijeras, Manzano Mts. (Clothier, 1957b: 131); Cedro Peak, 7700 ft., Manzano Mts. (Clothier, 1957b: 131); Juan Tomas Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 131); Cedro Canyon, 3 mi. S Tijeras, Manzano Mts. (Clothier, 1957b: 131).

36. Isleta (Goldman, 1910: 33).

37. Hell Canyon, 6400 ft., Manzano Mts. (Clothier, 1957b: 131).

38. Chilili, 6800 ft., Manzano Mts. (Clothier, 1957b: 131).

Santa Fe Co.:

39. Lower portion Santa Fe Ski Basin (Holdenried and Morlan, 1956: 378).

40. Lamy-Glorieta region (Holdenried and Morlan, 1956: 378).

41. Lamy (Goldman, 1910: 33).

42. San Pedro (Goldman, 1910: 33).

San Miguel Co.:

43. Ribera (Goldman, 1910: 33).

44. Bell Ranch (UNMCV).

45. Cabra Spring (Goldman, 1910: 33).

Quay Co.:

70. 25 mi. SW Tucumcari (Goldman, 1910: 33).

Catron Co.:

47. Datil Mts. (Goldman, 1910: 33).

48. Mangas Valley (Goldman, 1910: 33).

49. Alma (Goldman, 1910: 33).

50. Glenwood (Bailey, 1931: 176).

51. Pleasanton (Goldman, 1910: 33).

Socorro Co.:

46. Burley (Goldman, 1910: 33).

52. 2 mi. E and 10 mi. S Belen (UNMCV).

53. 16 mi. W and 1 mi. N Bernardo, 8000 ft. (UNMCV).

54. Riley (Goldman, 1910: 33).

55. 7½ mi. W Bernardo (UNMCV).

56. 17 mi. E and 15 mi. S Belen (UNMCV).

57. Bear Spring Mts. (Goldman, 1910: 33).

58. Hall's Ranch, Copper Canyon, Magdalena Mts. (UNMCV).

59. Near Socorro (Bailey, 1931: 178).

60. Big Rosa Canyon, San Mateo Mts. (UNMCV).

61. Northern Cerro Prieto (Benson, 1933: 42).

62. Rio Alamosa (Goldman, 1910: 33).

63. Springtime Canyon, San Mateo Mts. (UNMCV); 3.3 mi. E Springtime Canyon Camp, San Mateo Mts. (UNMCV).

Torrance Co.:

64. Apache Canyon, 7000 ft., Manzano Mts. (Clothier, 1957b: 131); Tajique Canyon, 7100 ft., Manzano Mts. (Clothier, 1957b: 131).

65. Jaramillo Canyon, 6400 ft., Manzano Mts. (Clothier, 1957b: 131); Manzano, 6800 ft., Manzano Mts. (Clothier, 1957b: 131); 4 mi. W and 1 mi. S Manzano, Red Canyon,

Manzano Mts. (UNMCV).

66. Abo Canyon, Manzano Mts. (Clothier, 1957b: 131).

67. Mesa Jumanes (Goldman, 1910: 33).

Guadalupe Co.:

68. Cuervo (Goldman, 1910: 33).

69. Santa Rosa (Bailey, 1931: 178).

Grant Co.:

71. Cactus Flat (Bailey, 1931: 176).

72. Gila (Goldman, 1910: 33).

73. Burro Mts. (Bailey, 1931: 177).

74. Silver City (Bailey, 1931: 178).

75. Redrock (Goldman, 1910: 33); 1 mi. E Redrock (UNMCV).

76. Faywood (Goldman, 1910: 33).

77. Separ (Mearns, 1907: 483).

78. Hachita (Goldman, 1910: 33).

Sierra Co.:

79. Fairview (Bailey, 1931: 179).

80. San Andres Mts. (Bailey, 1931: 176).

81. Cuchillo (Bailey, 1931: 179).

82. Jornada del Muerto, 8½ mi. E Engle (UNMCV).

83. 1 mi. E Elephant Butte (UNMCV).

84. Las Palomas (Goldman, 1910: 33).

85. Kingston (Goldman, 1910: 33); Black Range (UNMCV).

86. Lake Valley (Goldman, 1910: 33).

Lincoln Co.:

87. Corona (Goldman, 1910: 33).

88. Ancho (Goldman, 1910: 33).

89. Jicarilla Mts. (Goldman, 1910: 33).

90. About 12 mi. NW Carrizozo by road (Bradt, 1932: 325).

91. Lava beds, 1.1 mi. S State Hwy 38, 6½ mi. NW Carrizozo (UNMCV).

92. 4 mi. NW Carrizozo by road (Bradt, 1932: 324).

93. 3½ mi. W Carrizozo (Benson, 1933: 43); 4 mi. W Carrizozo (Dice, 1942: 200).

94. Just E Indian Divide, 6 mi. NW Capitan (Dice, 1942: 200).

95. Capitan Mts. (Goldman, 1910: 33).

96. Lava sinks W Oscuro (Blair, 1941: 227).

97. Alongside Salado Creek, ½ mi. E Capitan (Dice, 1942: 200).

98. Immediately S Rio Bonita at Double-crossing, 4 mi. NW Lincoln (Dice, 1942: 200).

99. 40 mi. W Roswell (Goldman, 1910: 33).

Hidalgo Co.:

100. N. Mex. Hwy 180, 7 mi. N and 4½ mi. E Lordsburg (UNMCV).

101. Doubtful Canyon, Peloncillo Mts., 8 mi. N and 2 mi. W Steins (UNMCV).

102. Lordsburg (Mearns, 1907: 483).

103. Steins Pass (Mearns, 1907: 483).

104. 8 mi. S and 1 mi. W Lordsburg (UNMCV).

105. 18 mi. S and 3.2 mi. W Animas (UNMCV).

106. Apache Mts., near Monument 40 (Mearns, 1907: 482); Doyle's Well, 10 mi. S and 5 mi. E Hachita (UNMCV).

107. 100 mi. W El Paso (Goldman, 1910: 33).

108. Playas Valley (Goldman, 1910: 33).

109. Hachita Grande Mtn. (Mearns, 1907: 483).

110. Pass on top of Peloncillo Mts., on Geronimo Trail, 5900-6000 ft. (UNMCV); Clanton Canyon, Peloncillo Mts., 5700 ft., 22 mi. S and 2 mi. E Rodeo (UNMCV); Clanton Canyon, Peloncillo Mts., 5500 ft., 22 mi. S and 2 mi. E Rodeo (UNMCV).

111. Indian Creek, Animas Mts., T31S-R19W, Sec. 16 (UNMCV).

112. Black Bill Canyon, Animas Mts. (UNMCV).

113. Emory Canyon, Alamo Hueco Mts. (UNMCV).

114. 36 mi. S and 9 mi. W Animas, 5300 ft. (UNMCV).

115. Upper Animas Valley, 36 mi. S and 3 mi. W Animas (UNMCV).

116. T33S-R19W, Sec. 29, 2½ mi. W and 1 mi. N San Luis Pass (UNMCV); 3 mi. W and 1 mi. N San Luis Pass (UNMCV).

117. Guadalupe Mts., T34S-R21W, Sec. 22 (UNMCV).

118. E base San Luis Mts., vicinity Monument 64 (Mearns, 1907: 479).

119. Dog Spring (Goldman, 1910: 33).

Luna Co.:

120. Deming (Goldman, 1910: 33).

121. Florida Mts. (Goldman, 1910: 33).

122. Carrizalillo Mts., near Monument 32 (Mearns, 1907: 484).

123. Monument 15 (Mearns, 1907: 483).

Dona Ana Co.:

124. Garfield (Goldman, 1910: 33).

125. Jornada Experimental Station (Halloran, 1944: 410).

126. Organ Mts. (Goldman,1910: 33).

127. Las Cruces (Goldman, 1910: 33); Mesilla Park (Bailey, 1931: 180).

128. US Hwy 70-80, 17½ mi. E Akela (UNMCV).

129. Lava beds near Kenzin (Benson, 1933: 17).

Otero Co.:

130. Malpais Spring (Benson, 1933: 43).

131. About 4 mi. NE Tularosa (Blair, 1941: 227).

132. Tularosa (Goldman, 1910: 33).

133. Cerrito Tularosa (Benson, 1933: 42).

134. About 4 mi. N Alamogordo (Dice, 1930: 14).

135. Near Highrolls (Dice, 1930: 26).

136. Lower slopes Sacramento Mts., near Alamogordo (Dice, 1930: 13).

137. Weed (Goldman, 1910: 33).

138. Jarilla (Goldman, 1910: 33).

Eddy Co.:

139. Carlsbad (Goldman, 1910: 33).

140. Carlsbad Cavern (Bailey, 1928: 75).

Not Located:

Gallina Mts. (Goldman, 1910: 33).

Between Buckman and Santa Fe (Holdenried and Morlan, 1956: 378).

NEOTOMA STEPHENSI Goldman

Stephens' Wood Rat

Neotoma lepida lepida Thomas.

Neotoma lepida stephensi Goldman.

General remarks.--Bailey (1931: 186, 188) considered this wood rat to be an Upper Sonoran species in New Mexico.

Subspecies ascribed to New Mexico.--Neotoma stephensi stephensi Goldman; Neotoma stephensi relicta Goldman.

Records of occurence (Fig. 69).--

San Juan Co.:

1. Blanco (Goldman, 1932c: 67).

McKinley Co.:

2. 35 mi. N Bluewater (Bailey, 1931: 187).

3. Gallup (Goldman, 1932c: 67).

4. Fort Wingate (Goldman, 1932c: 67); Wingate (Goldman, 1932c: 67).

Valencia Co.:

5. Bluewater (Goldman, 1932c: 67).

6. Zuni Mts. (Goldman, 1932c: 66).

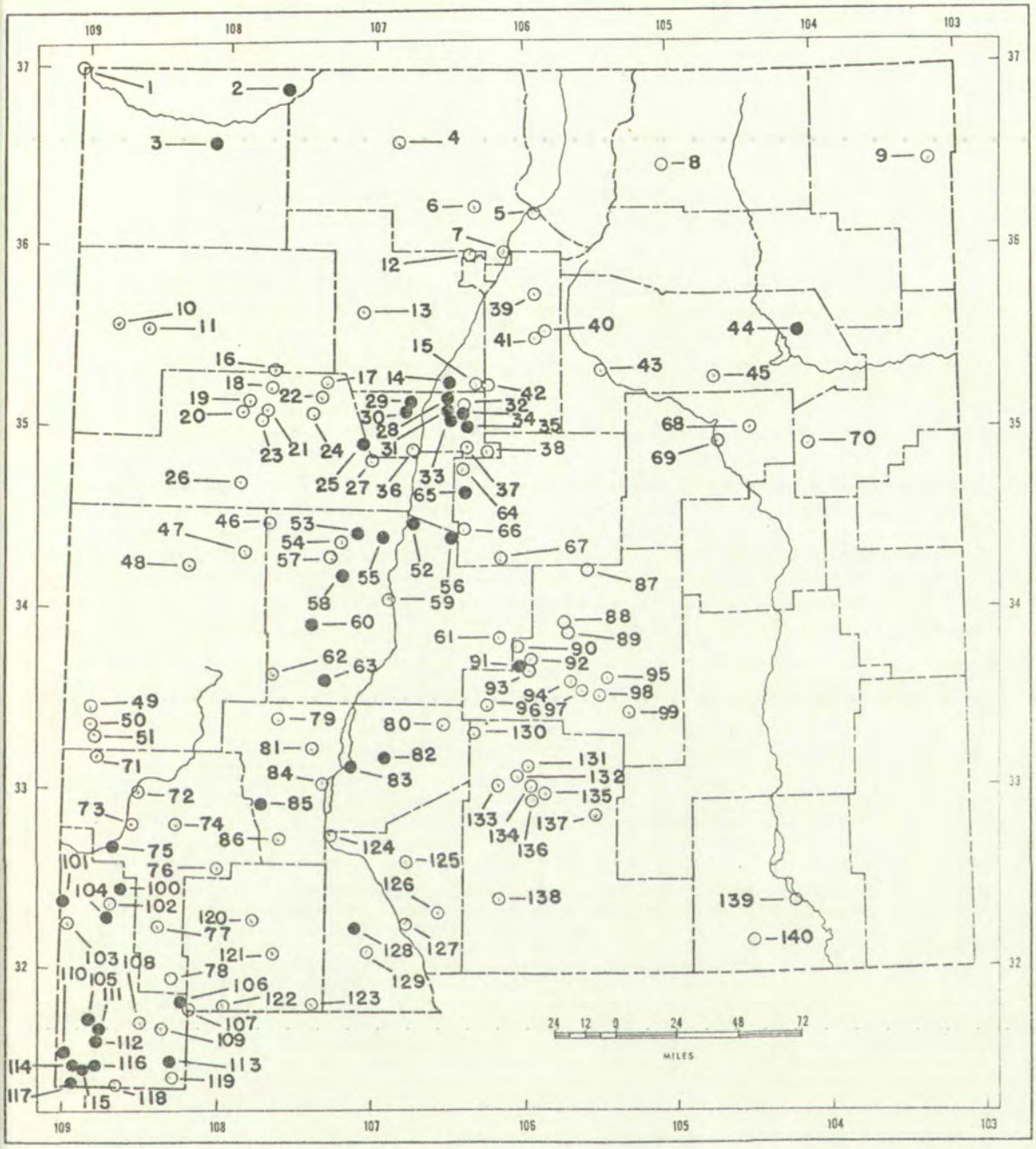

Fig. 68. Neotoma albigula

7. Grants (Goldman, 1910: 81).

8. San Jose River, 4 mi. W McCartys (Hooper, 1941a: 34).

Catron Co.:

9. Glenwood, San Francisco River (Goldman, 1910: 81).

Socorro Co.:

10. Burley (Goldman, 1910: 81).

Grant Co.:

11. Burro Mts. (Goldman, 1910: 81).

NEOTOMA MEXICANA Baird

Mexican Wood Rat

Neotoma mexicana mexicana Baird.

Neotoma mexicana fallax Merriam.

Neotoma mexicana pinetorum Merriam.

General remarks.--The Mexican wood rat is basically a creature of the Transition Life Zone in New Mexico but overlaps into the Canadian and Upper Sonoran Zones in portions of its range.

The record for the Tularosa Mountains is based on Bailey's report of wood-rat houses in these mountains. He collected no specimens, however.

Subspecies ascribed to New Mexico.--Neotoma mexicana mexicana Baird; Neotoma mexicana fallax Merriam; Neotoma mexicana inopinata Goldman; Neotoma mexicana atrata Burt; Neotoma mexicana pinetorum Merriam; Neotoma mexicana scopulorum Finley.

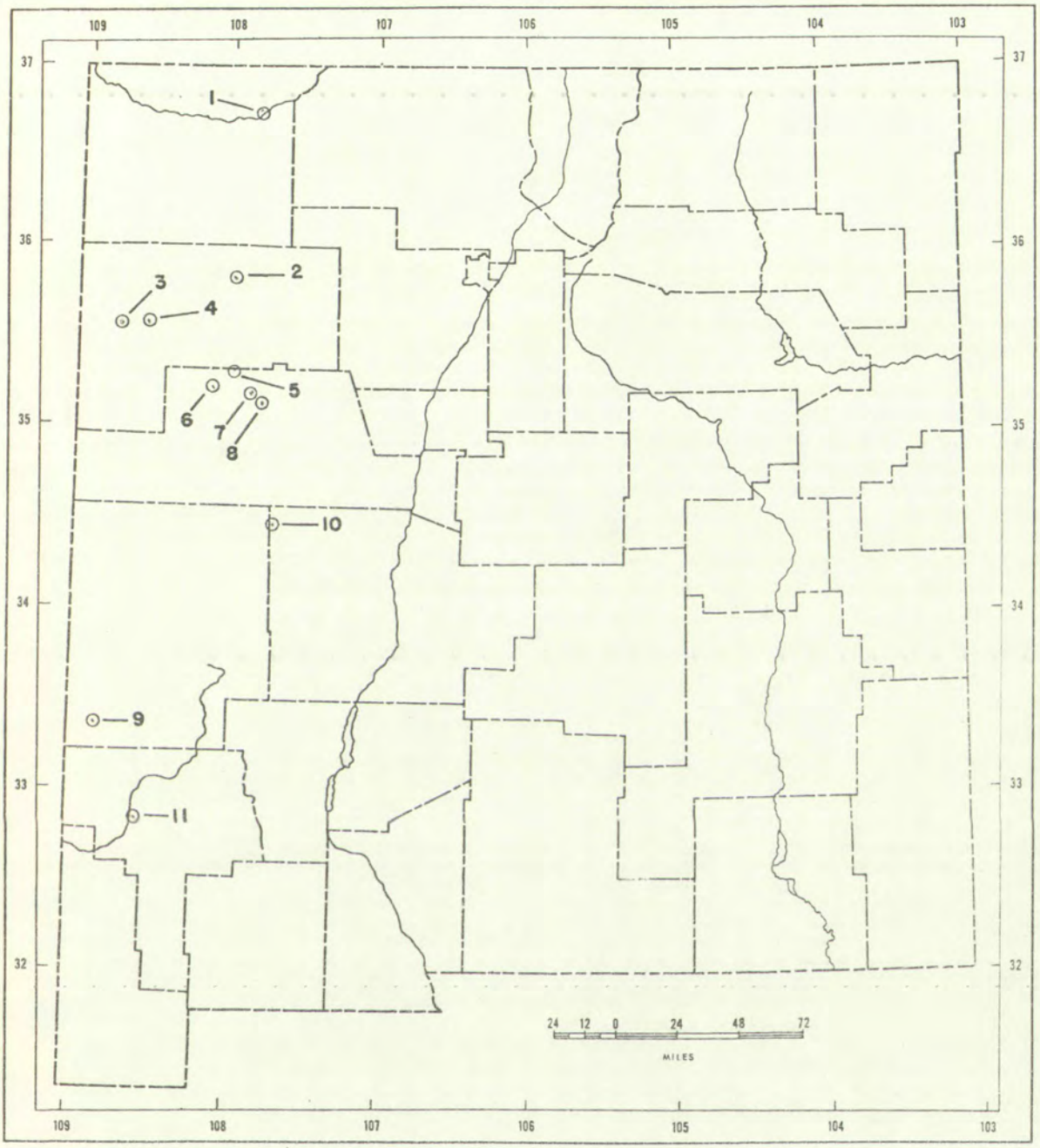

Fig. 69. Neotoma sterhensi

Records of occurence (Fig. 70).--

San Juan Co.:

1. 18 mi. N and 1 mi. E Farmington (Finley, 1958: 288).

2. Laplata (J. A. Allen, 1893: 81).

3. Los Pinos River, T30N-R7W, NW ¼ Sec. 7 (UNMCV).

4. Fruitland (Goldman, 1933: 472).

5. Chuska Mts., 8800 ft. (Goldman, 1933: 472).

Rio Arriba Co.:

6. Horse Lake (Goldman, 1910: 57).

7. Boulder Lake (Goldman, 1910: 57).

8. Stinking Spring Lake (Goldman, 1910: 58).

9. 9 mi. NW El Rito, 8500 ft. (Finley, 1958: 287).

10. 4 mi. N El Rito, 7000 ft. (Finley, 1958: 287).

11. Chama River, 25 mi. SW Tierra Amarilla (Goldman, 1910: 57).

12. Gallinas Mts. (Goldman, 1910: 57).

Taos Co.:

13. Tres Piedras (Goldman, 1910: 58).

14. Twining (Goldman, 1910: 58).

15. Arroyo Seco (Goldman, 1910: 57).

Colfax Co.:

16. Catskill (Bailey, 1931: 184).

17. Road Canyon (Bailey, 1931: 184).

18. Vermejo Park (Goldman, 1910: 58).

19. 4 mi. SW Cimarron (Hill, 1942a: 81).

20. Coyote Creek, 8 mi. N Guadalupita (Goldman, 1910: 57).

Union Co.:

21. 9 mi. NE Des Moines on Cimarron River (Finley, 1953: 534).

22. Oak Canyon, Raton Range (Finley, 1953: 534).

23. Emory Peak, Raton Range (Bailey, 1931: 184).

24. Folsom (Finley, 1953: 534).

25. Sierra Grande (Finley, 1953: 534).

26. Clayton (Finley, 1953: 534).

McKinley Co.:

27. Nakaibito, 17 mi. N Gallup near Mexican Wash (UNMCV).

28. Gallup (Goldman, 1933: 472).

29. 2 mi. S Fort Wingate (UNMCV).

30. 1 mi. E McGaffey (UNMCV).

Sandoval Co.:

31. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

32. Capulin Ranger Station, Sandia Mts., T12N-R5E, Sec. 33 (Clothier, 1957a: 256); Palomas Peak, 8000 ft., Sandia Mts. (Clothier, 1957b: 134).

Mora Co.:

33. Halls Peak (Goldman, 1910: 57).

34. Mora (Goldman, 1910: 57).

35. Headwaters Pecos River (Bailey, 1931: 183).

Valencia Co.:

36. 1½ mi. SW San Mateo (Hooper, 1941a: 35).

37. Mt. Taylor (Goldman, 1910: 58).

38. 1 mi. N Cebolleta (Hooper, 1941a: 35).

39. Mt. Sedgewick (Goldman, 1910: 58); Copperton (Goldman, 1910: 57).

40. 4 mi. WSW Cebolleta (Hooper, 1941a: 35).

41. Grants (Goldman, 1910: 57).

42. Zuni Canyon, between 3 and 5 mi. WSW Grants (Hooper, 1941a: 35).

43. 8 mi. SE Grants (Hooper, 1941a: 35).

44. 9 mi. SSE Grants (Hooper, 1941a: 35).

45. Flagpole Crater, 17 mi. SW Grants (Hooper, 1941a: 35).

46. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 35).

47. Point of Malpais, T6N-R11W, Sec. 2 (Hooper, 1941a: 35).

48. Rio Puerco (Goldman, 1910: 58).

Bernalillo Co.:

49. Tejano Canyon, 8000 ft., Sandia Mts. (Clothier, 1957b: 134); W foothills Sandia Mts., just S La Cueva Recreation Area (UNMCV).

50. Cienega Spring, 7900 ft., Sandia Mts. (Clothier, 1957b: 134-135); Road to Cole Springs, 7400 ft., Sandia Mts. (Clothier, 1957b: 135); Just below La Madera Ski Run, Sandia Mts. (Clothier, 1957b: 135); Tejano Canyon, 3/4 mi.

below Tree Springs, Sandia Mts. (UNMCV); Tree Springs, Sandia Mts. (UNMCV).

Santa Fe Co.:

51. W slopes Sangre de Cristo Mts. near Santa Fe (Holdenried and Morlan, 1956: 379).

52. Glorieta (Goldman, 1910: 57).

53. Lamy (Goldman, 1910: 57).

San Miguel Co.:

54. Willis (Goldman, 1910: 58).

55. Fork of Pecos and Mora Creeks (Bailey, 1931: 183).

56. 10 mi. N Pecos (Goldman, 1910: 58); Pecos River, 8 mi. N Pecos (Goldman, 1910: 58).

57. Bell Ranch (UNMCV).

58. Pecos (Baird, 1857: 492).

Catron Co.:

59. Quemado (Goldman, 1910: 59).

60. Datil Mts. (Goldman, 1910: 57).

61. Luna, Gila Nat'l Forest (Goldman, 1910: 59).

62. San Francisco Mts. (Goldman, 1910: 59).

63. Tularosa Mts. (Bailey, 1931: 186).

64. Beaver Lake (Goldman, 1910: 59).

65. Willow Creek, Mogollon Mts., 10 mi. E Mogollon (UNMCV).

66. Diamond Creek (Goldman, 1910: 59).

Socorro Co.:

67. Burley (Goldman, 1910: 57).

68. Gallina Mts. (Goldman, 1910: 57).

69. Mill Canyon, Magdalena Mts., T3S-R4W, Sec. 35 (UNMCV).

70. 1½ mi. E South Baldy, Magdalena Mts., 11 mi. S and 3½ mi. E Magdalena (UNMCV).

71. Hardy Spring, Magdalena Mts. (UNMCV).

72. Monica Canyon, San Mateo Mts. (Goldman, 1910: 57).

73. Bear Trap Canyon, San Mateo Mts., 19 mi. W and 20 mi. S Magdalena (UNMCV); 19 mi. W and 18 mi. S Magdalena, San Mateo Mts. (UNMCV).

74. San Mateo Peak (Goldman, 1910: 58).

75. Springtime Canyon, San Mateo Mts. (UNMCV).

Torrance Co.:

76. Mosca Peak, 8400 ft., Manzano Mts. (Clothier, 1957b: 135).

77. Canyon Diablo, 8000 ft., Manzano Mts. (Clothier, 1957b: 135); Tajique Canyon, 7600-7800 ft., Manzano Mts. (Clothier, 1957b: 135); Box Canyon, 7200 ft., Manzano Mts. (Clothier, 1957b: 135).

78. New Canyon, 8100 ft., Manzano Mts. (Clothier, 1957b: 135); Manzano Peak, 9000 ft., Manzano Mts. (Clothier, 1957b: 135); Red Canyon, 4 mi. W and 1 mi. S Manzano (UNMCV).

79. Eastview Sawmill (Bailey, 1931: 183).

80. Gran Quivera (Goldman, 1910: 57).

Guadalupe Co.:

81. Santa Rosa (Goldman, 1910: 58).

Grant Co.:

82. Near head Powder Horn Canyon, Mimbres Mts. (Bailey, 1931: 186).

83. Head of Mimbres River (Goldman, 1910: 59).

Sierra Co.:

84. 10 mi. W Chloride (Goldman, 1910: 59).

85. Kingston (Goldman, 1910: 59).

Lincoln Co.:

86. Red Cloud Canyon, Gallinas Mts., 3 mi. S and 10 mi. W Corona (UNMCV).

87. Gallo Canyon, 35 mi. SW Corona (Goldman, 1910: 57).

88. Jicarilla Mts. (Goldman, 1910: 57).

89. Lava beds, 1.1 mi. S State Rd. 380, 6½ mi. NW Carrizozo (UNMCV).

90. 4 mi. W Carrizozo (Burt, 1939: 1).

91. Capitan Gap, 8 mi. NE Capitan (Dice, 1942: 200); ½ mi. S summit Capitan Gap, 7 mi. NE Capitan (Dice, 1942: 200).

92. Capitan Mts. (Goldman, 1910: 57).

93. Near Mesa Ranger Station, 5 mi. SW Capitan (Dice, 1942: 200).

94. Immediately S Rio Bonita at Double-crossing, 4 mi. NW Lincoln (Dice, 1942: 200).

95. Between Little Creek and Eagle Creek, 1 mi. W

Alto, 6½ mi. NW Ruidoso (Dice, 1942: 200).

96. Ruidoso (Stone and Rehn, 1903: 23); Forks of Ruidoso (Stone and Rehn, 1903: 23); Hale's Ranch (Stone and Rehn, 1903: 23).

97. Near Hollywood (Dice, 1942: 200).

Hidalgo Co.:

98. Skeleton Canyon, Peloncillo Mts., 10 mi. S Rodeo (UNMCV).

99. Animas Peak (Goldman, 1910: 56); Indian Creek Canyon, Aspen Spring, Animas Mts. (UNMCV); 1 mi. SW Aspen Spring, Animas Mts. (UNMCV).

Dona Ana Co.:

100. La Mesa (J. A. Allen, 1903: 589).

101. Chamberino (J. A. Allen, 1903: 589).

Otero Co.:

102. Mescalero (Stone and Rehn, 1903: 23).

103. 1 mi. S Ruidoso, 6500 ft. (Hall and Kelson, 1959: 695).

104. About ½ mi. SW Highrolls (Dice, 1930: 17).

105. Guadalupe Ranch (J. A. Allen, 1903: 589).

Eddy Co.:

106. Guadalupe Mts. on the N. Mex.-Tex. line (Bailey, 1931: 181).

Not Located:

Hoskins Ranch, Colfax Co. (Goldman, 1910: 57).

Beal, Upper Vermejo River (Goldman, 1910: 57).

Vaqueros Ranger Station, Rio Arriba Co. (UNMCV).

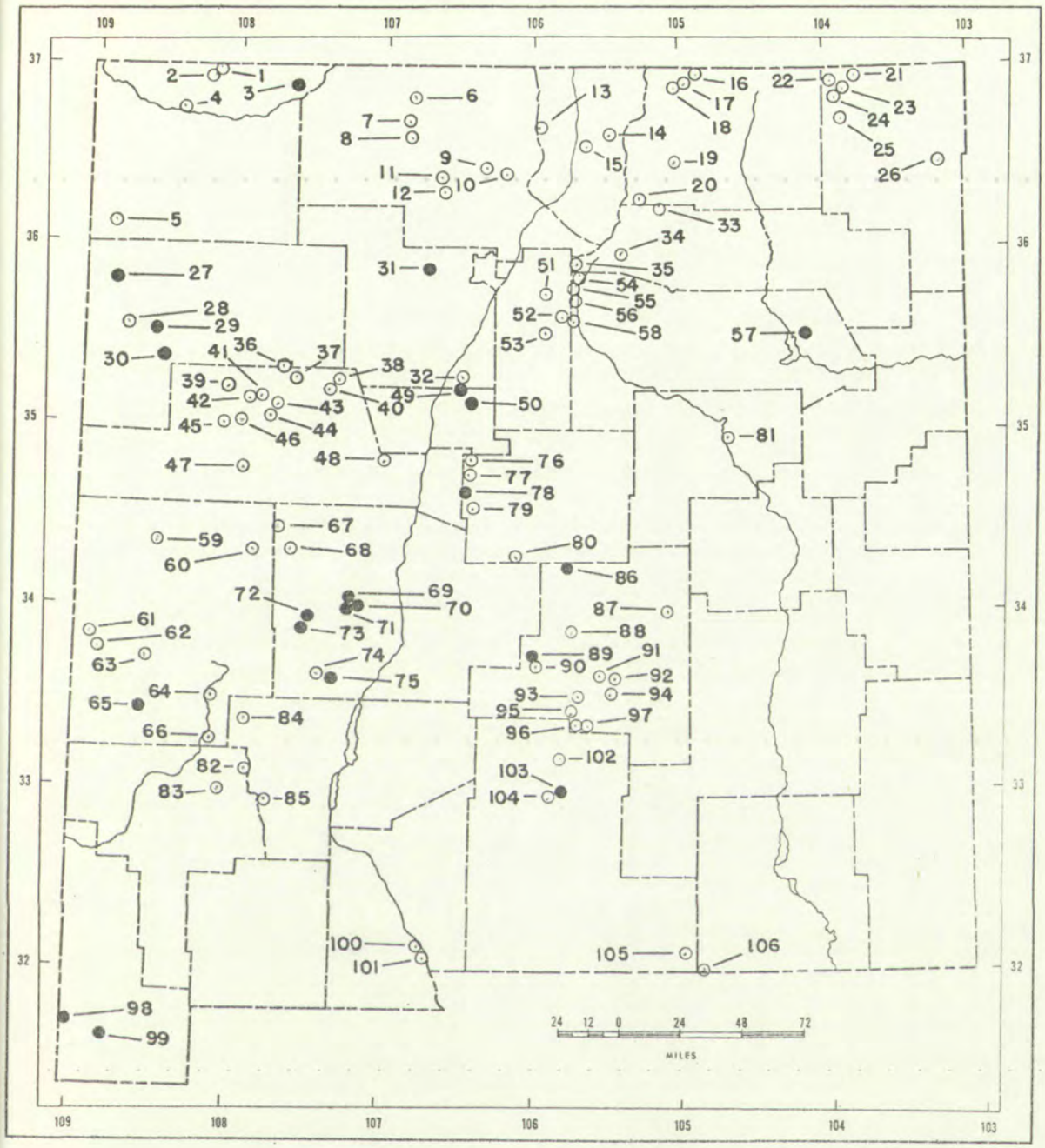

Fig. 70. Neotoma mexicana

NEOTOMA CINEREA (Ord)

Bushy-tailed Wood Rat

Neotoma cinerea orolestes Merriam.

Neotoma cinerea arizonae Merriam.

General remarks.--Members of this species of wood rat appear to inhabit the Upper Sonoran, Transition, and Canadian Life Zones in New Mexico.

Subspecies ascribed to New Mexico.--Neotoma cinerea orolestes Merriam; Neotoma cinerea arizonae Merriam.

Records of occurence (Fig. 71).--

San Juan Co.:

1. "Four Corners" of Utah, Colo., Ariz., and N. Mex. (Finley, 1958: 270).

2. 18 mi. N and 1 mi. E Farmington, 6000 ft. (Finley, 1958: 270).

3. Shiprock (Bailey, 1931: 191).

4. Fruitland (Goldman, 1910: 106).

5. Farmington (Bailey, 1931: 191).

6. Pueblo Bonito, Chaco Canyon (Bailey, 1931: 191).

Rio Arriba Co.:

7. Near Chama, San Juan Mts. (Bailey, 1931: 190).

8. Tierra Amarilla (Goldman, 1910: 105).

Taos Co.:

9. Costilla Pass (Goldman, 1910: 105); Headwaters Costilla River (Bailey, 1931: 190).

10. Tres Piedras (Goldman, 1910: 105).

11. Amizette (Goldman, 1910: 105); Twining (Goldman, 1910: 105).

12. Taos (Goldman, 1910: 105).

13. Tres Ritos, Rio la Junta (UNMCV).

Colfax Co.:

14. Moreno Valley (Goldman, 1910: 105).

15. Agua Fria (Goldman, 1910: 105).

16. La Gruilla Meadow, 16 mi. SW Cimarron (Hill, 1942a: 81).

McKinley Co.:

17. Fort Wingate (Merriam, 1893: 110).

Sandoval Co.:

18. Santa Clara Canyon, Jemez Mts. (Bailey, 1931: 190).

Mora Co.:

19. Coyote Creek (Goldman, 1910: 105).

20. Halls Peak (Goldman, 1910: 105).

21. Pecos Baldy (Goldman, 1910: 105).

Santa Fe Co.:

22. W slopes Sangre de Cristo Mts. near Santa Fe (Holdenried and Morlan, 1956: 379); Santa Fe Ski Basin (Holdenried and Morlan, 1956: 379).

San Miguel Co.:

23. Willis (Goldman, 1910: 105).

24. Junction Pecos and Mora Rivers (Bailey, 1931: 189).

Not Located:

Hermit (Goldman, 1910: 105).

Martinez (Goldman, 1910: 105).

CLETHRIONOMYS GAPPERI (Vigors)

Gapper's Red-backed Mouse

Clethrionomys gapperi galei (Merriam).

Clethrionomys limitis (Bailey).

General remarks.--The range of Clethrionomys gapperi in New Mexico appears to fall almost entirely within the Canadian Life Zone.

Subspecies ascribed to New Mexico.--Clethrionomys gapperi gauti Cockrum and Fitch; Clethrionomys gapperi limitis (Bailey).

Records of occurence (Fig. 72).--

Taos Co.:

1. Taos Mts., lake at head of Lake Fork (Bailey, 1931: 192).

2. Twining, 10,700 ft. (Hall and Cockrum, 1953: 388).

3. 5 mi. S Twining, 11,400 ft. (Cockrum and Fitch, 1952: 290).

4. 4 mi. N Tres Ritos (UNMCV).

Colfax Co.:

5. 15 mi. SW Cimarron (Hill, 1942a: 81).

Sandoval Co.:

6. Goat Peak, Jemez Mts. (Bailey, 1931: 192).

Mora Co.:

7. Just S Pecos Baldy, 11,000 ft (Bailey, 1931: 192).

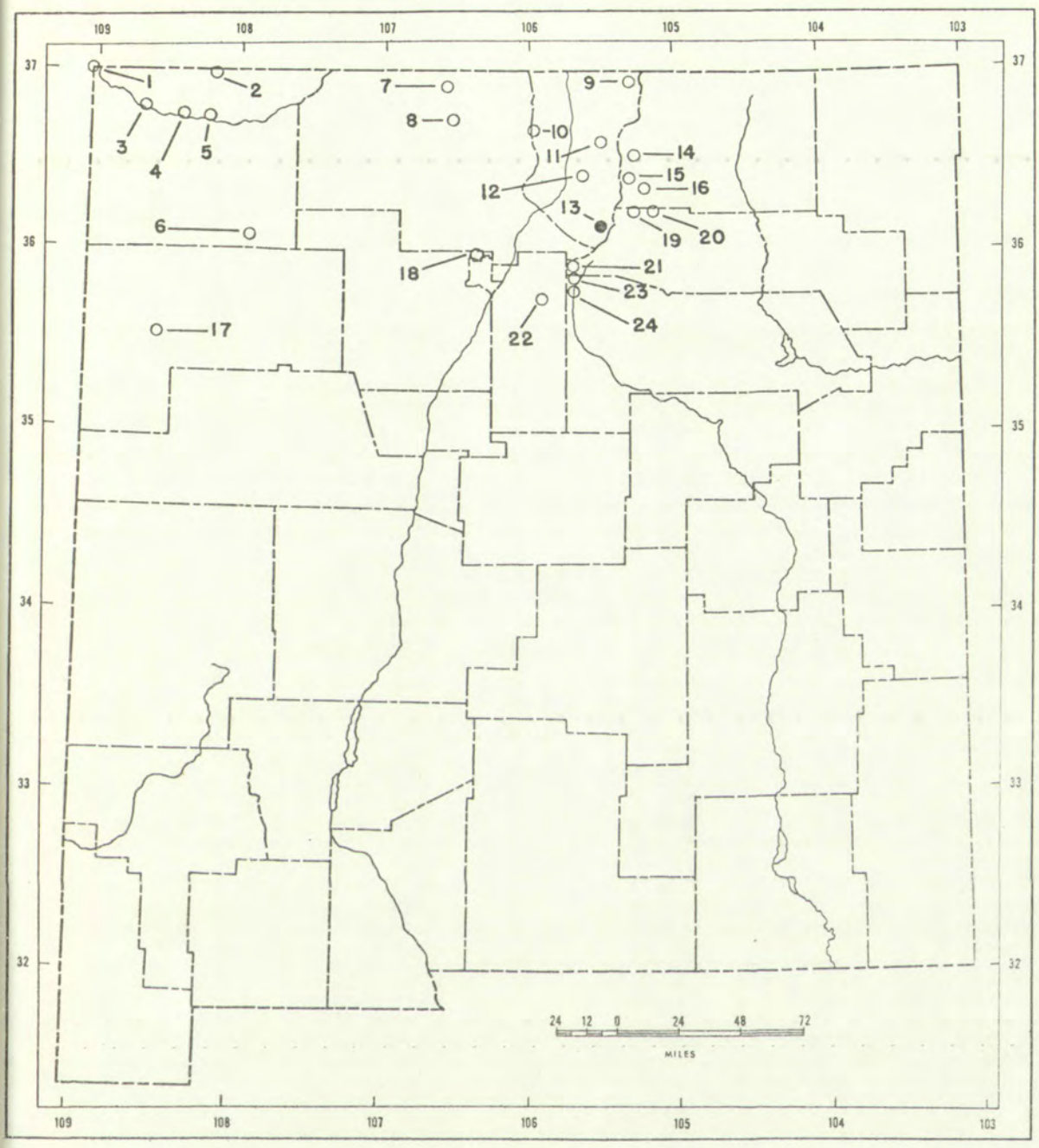

Fig. 71. Neotoma cinerea

Santa Fe Co.:

8. Santa Fe Ski Basin (Holdenried and Morlan, 1956: 379).

Catron Co.:

9. Mogollon Mts., between Mogollon and Willow Creek (UNMCV).

10. Mogollon Mts. on Willow Creek, 8500 ft. (Bailey, 1931: 192).

Socorro Co.:

11. Copper Canyon, 9000 ft., Magdalena Mts. (Bailey, 1931: 194).

12. San Mateo Mts. near top San Mateo Peak, 10,000 ft (Bailey, 1931: 193).

PHENACOMYS INTERMEDIUS Merriam

Heather Vole

General remarks.--*Phenacomys intermedius* probably occurs only above the Transition Zone and only in the Sangre de Cristo Range in New Mexico.

Subspecies ascribed to New Mexico.--*Phenacomys intermedius intermedius* Merriam.

Records of occurence (Fig. 76).--

Taos Co.:

1. Twining (Howell, 1926: 20); Taos Mts. (Howell, 1926: 20).

Mora Co.:

2. Pecos Baldy (Howell, 1926: 20).

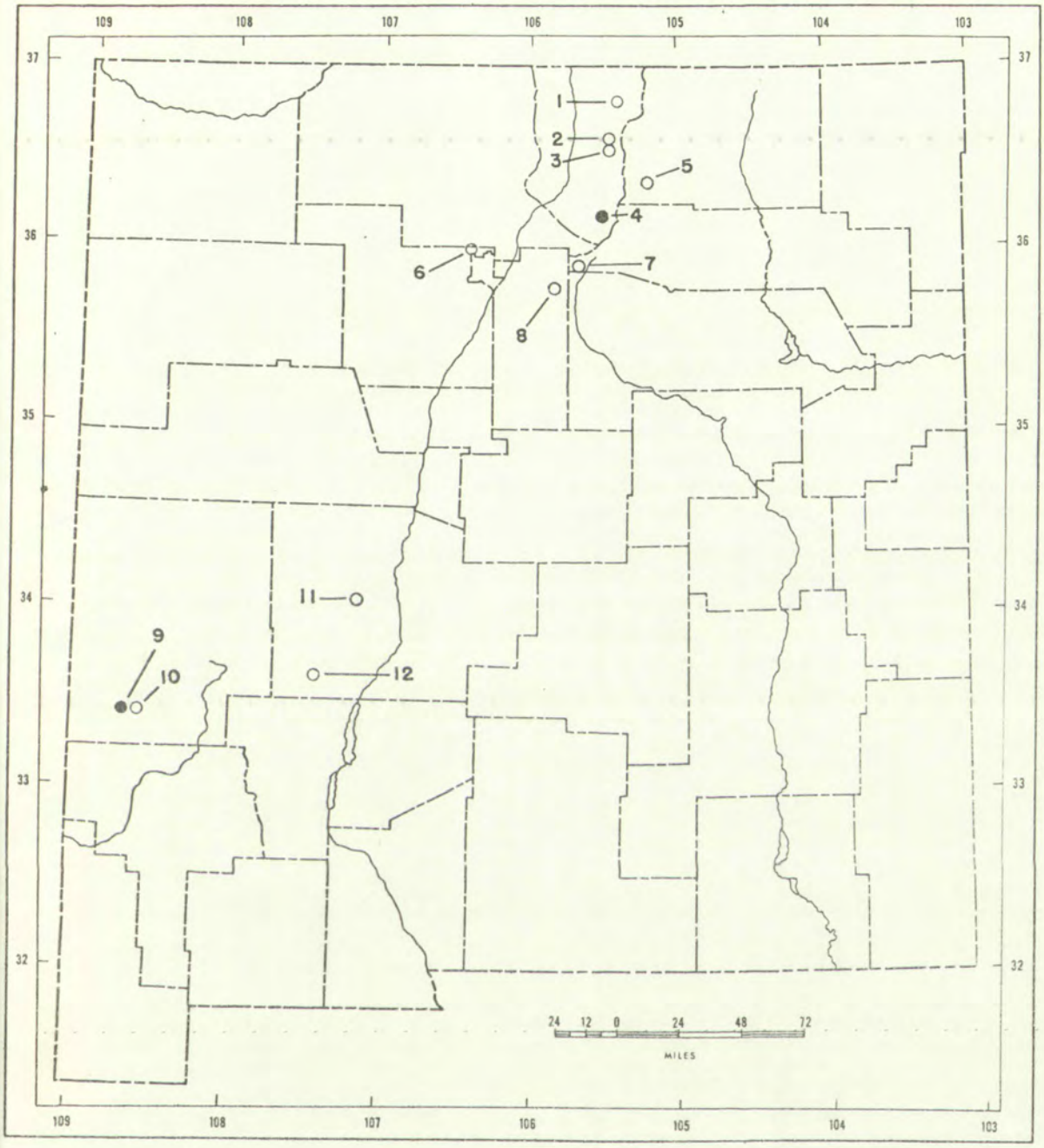

Fig. 72. Clethrionomys gapperi

Santa Fe Co.:

3. Santa Fe (Howell, 1926: 20).

MICROTUS PENNSYLVANICUS (Ord)

Meadow Vole

Microtus pennsylvanicus modestus (Baird).

Microtus aztecus (Allen).

General remarks.--Upper Sonoran and Transition Zone habitats seem to be the general rule for the meadow vole in New Mexico.

Subspecies ascribed to New Mexico.--Microtus pennsylvanicus modestus (Baird); Microtus pennsylvanicus aztecus (Allen).

Records of occurence (Fig. 73).--

San Juan Co.:

1. Laplata (Bailey, 1931: 203).
2. Aztec (Bailey, 1900: 24).
3. Fruitland (Bailey, 1931: 203).
4. Farmington (Bailey, 1931: 203).
5. 1½ mi. W Bloomfield (UNMCV).

Taos Co.:

6. Arroyo Hondo, 7600 ft. (Anderson, 1956: 94).
7. Taos Pueblo (Anderson, 1956: 94).
8. 1 mi. W Penasco (UNMCV).
9. 2 mi. NE Tres Ritos, Rio la Junta (UNMCV).

Colfax Co.:

10. Moreno Valley (Bailey, 1931: 201); 1 mi. S and

2 mi. E Eagle Nest, 8100 ft. (Anderson, 1956: 94).

11. Near Cimarron (Hall and Cockrum, 1953: 410).

12. La Gruilla Meadow, 16 mi. SW Cimarron (Hill, 1942a: 81); 15 mi. S Cimarron (Hill, 1942a: 81).

13. Black Lake (Bailey, 1931: 201); Coyote Creek, E side Sangre de Cristo Mts. (Hall and Cockrum, 1953: 410).

Valencia Co.:

14. San Rafael (Bailey, 1931: 200).

MICROTUS MONTANUS (Peale)

Montane Vole

Microtus nanus nanus (Merriam).

Microtus montanus arizonensis Bailey.

General remarks.--The montane vole occurs in the Transition and Canadian Life Zones in New Mexico.

Microtus montanus has been reported from Nutria, McKinley Co. (Bailey, 1900: 28), but, according to Sidney Anderson (personal communication to James S. Findley), the specimens on which this report was based are not identifiable with any degree of certainty.

Subspecies ascribed to New Mexico.--Microtus montanus fusus Hall; Microtus montanus arizonensis Bailey.

Records of occurence (Fig. 74).--

Rio Arriba Co.:

1. 10½ mi. E Chama, East Fork Rio Brazos, 10,000 ft. (UNMCV).

2. 6 mi. W Hopewell, 9900 ft. (Anderson, 1954: 504).

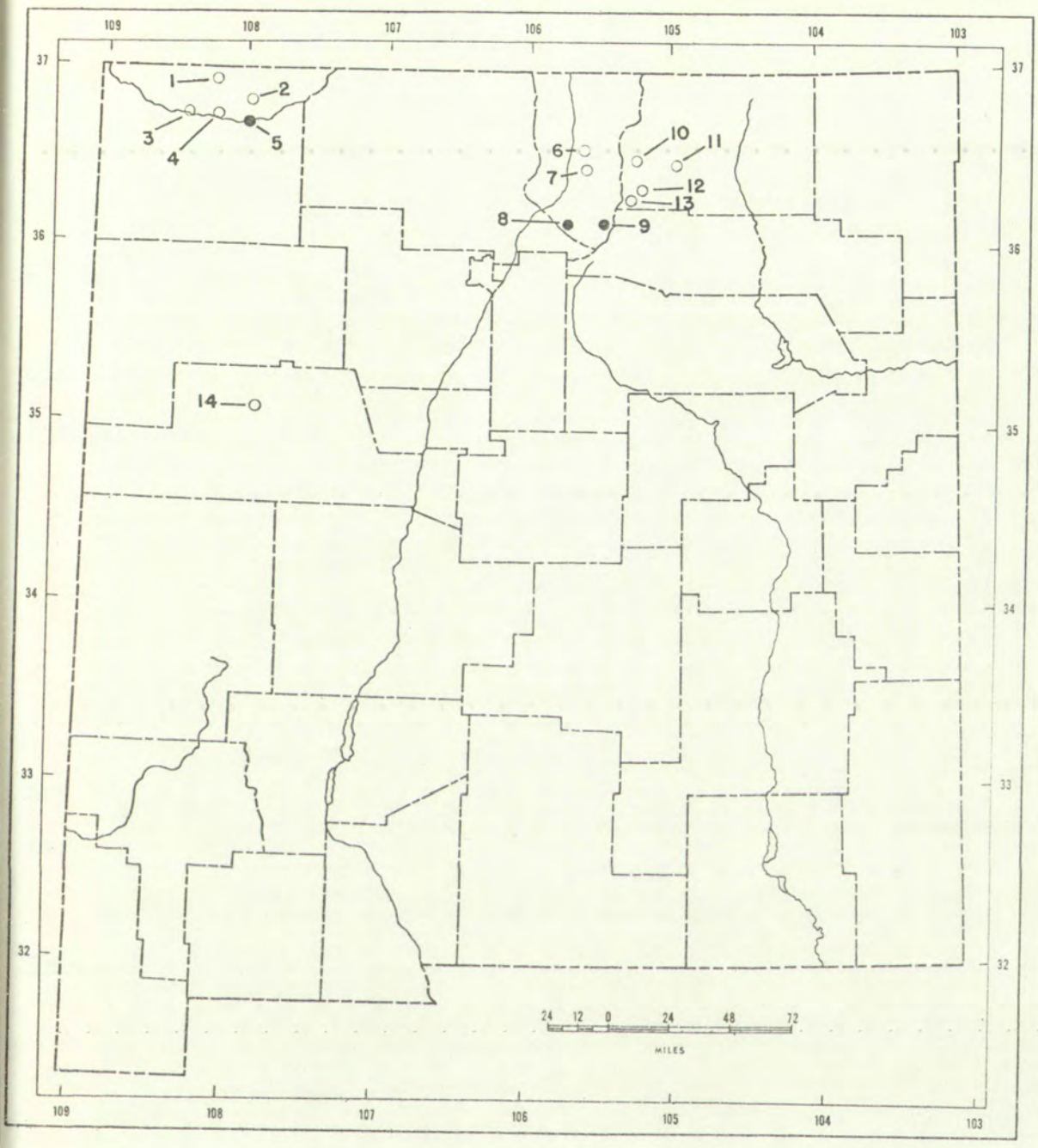

Fig. 73. Microtus pennsylvanicus

3. Tusas River, 8700 ft. (Anderson, 1954: 504).

4. Forks of Tusas Creek, San Juan Mts. (Hall and Cockrum, 1953: 415).

Sandoval Co.:

5. Pelado Peak (Bailey, 1931: 200); Valle San Antonio (Bailey, 1931: 200); Valle Santa Rosa, Jemez Mts. (Anderson, 1954: 503).

6. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

MICROTUS LONGICAUDUS (Merriam)

Long-tailed Vole

Microtus mordax mordax (Merriam).

General remarks.--In New Mexico, long-tailed voles are predominantly mammals of the Canadian and Hudsonian Life Zones.

Subspecies ascribed to New Mexico.--Microtus longicaudus mordax (Merriam).

Records of occurence (Fig. 75).--

San Juan Co.:

1. Washington Pass, Chuska Mts., 6 mi. E Crystal (UNMCV).

Rio Arriba Co.:

2. Chama (Bailey, 1900: 50); Headwaters Chama River (Bailey, 1931: 196).

3. Horse Lake, Jicarilla Indian Reservation (Bailey, 1931: 196).

Taos Co.:

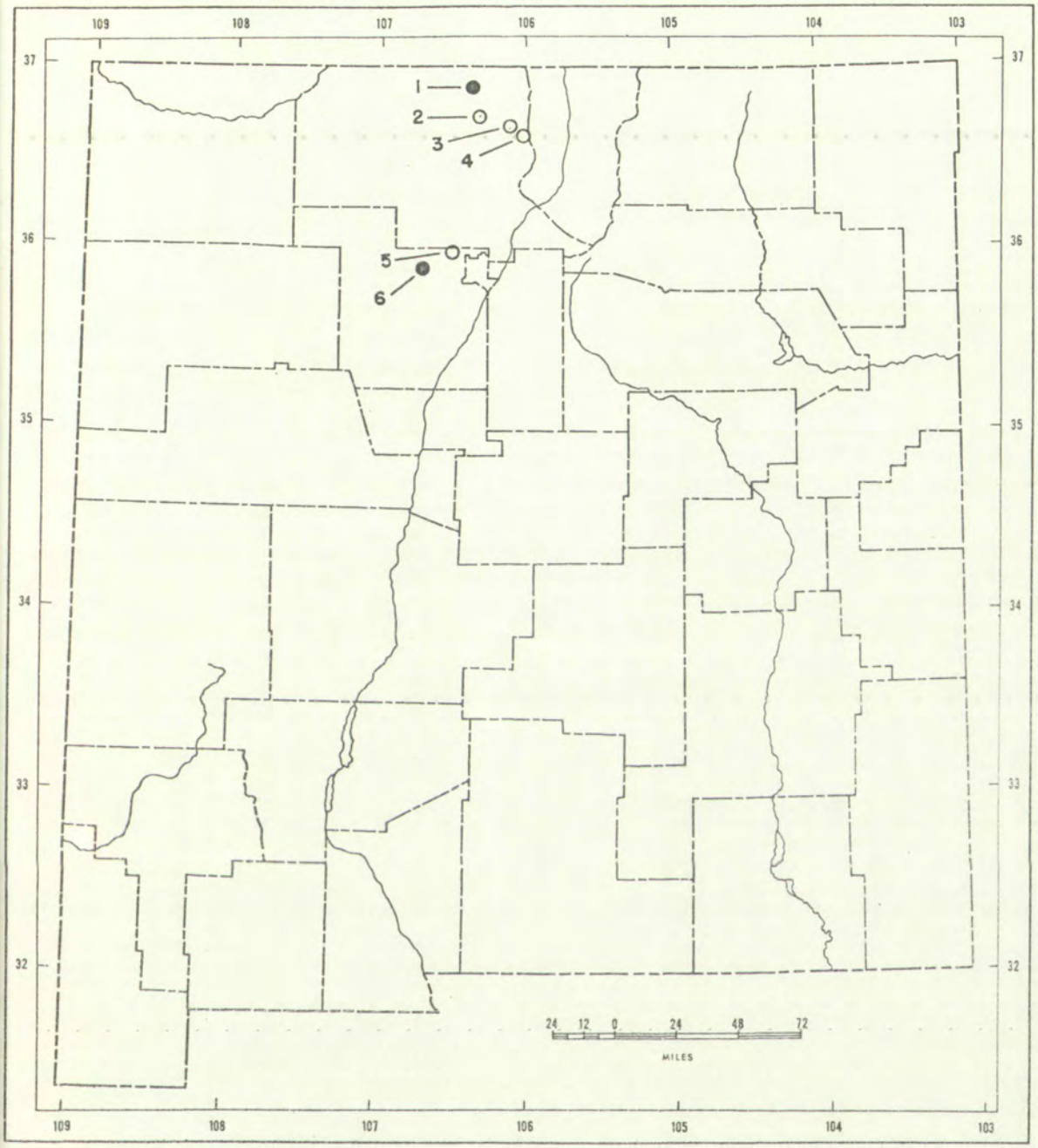

Fig. 74. Microtus montanus

4. Costilla Pass (Bailey, 1931: 196); Culebra Mts. (Bailey, 1931: 196).

5. 7 mi. S and 1 mi. W Red River, Goose Lake, 12,000 ft. (UNMCV).

6. 4 mi. NE Tres Ritos (UNMCV); Rio la Junta, 2 mi. NE Tres Ritos (UNMCV); Tres Ritos (UNMCV).

Colfax Co.:

7. Moreno Valley, Taos Mts. (Bailey, 1931: 196).

8. Near Cimarroncito Creek (Hill, 1942a: 81).

9. La Gruilla Meadow, 16 mi. SW Cimarron (Hill, 1942a: 81).

Sandoval Co.:

10. Fenton Lake, 10 mi. N Jemez Springs (UNMCV).

11. Capulin Ranger Station, Sandia Mts., T12N-R5E, Sec. 33 (Clothier, 1957a: 256); Las Huertas Canyon, Sandia Mts. (UNMCV).

Valencia Co.:

12. ½ mi. NE La Mosca Peak, Mt. Taylor (UNMCV); 1 mi. NE La Mosca Lookout, Mt. Taylor Range (UNMCV).

13. Mirabal Spring, Mt. Taylor Range (UNMCV).

Bernalillo Co.:

14. Tree Springs, approximately 8300 ft., E side Sandia Mts. (Findley, 1956: 277); Below Sandia Crest, 10,000 ft., Sandia Mts. (Clothier, 1957b: 137); Sandia Crest Rd., R5E-T11N, 8840 ft. (UNMCV); La Madera Ski Area (UNMCV); Sandia Crest, 9½ mi. E Alameda (UNMCV); Sandia

Crest, 9 mi. N and 3 mi. W Tijeras (UNMCV).

Santa Fe Co.:

15. W slopes Sangre de Cristo Mts., near Santa Fe (Holdenried and Morlan, 1956: 379).

San Miguel Co.:

16. 1 mi. NW Cowles (UNMCV).

17. Gallinas Creek, Sangre de Cristo Mts., T17N-R14E, Sec. 13 (Koster and Clothier, 1952: 250).

Catron Co.:

18. Between Mogollon and Willow Creek, Mogollon Mts. (UNMCV).

19. Willow Creek, Mogollon Mts., 10 mi. E Mogollon (UNMCV).

20. Willow Creek Ranger Station, 16 mi. E Mogollon (UNMCV).

Torrance Co.:

21. Tajique Canyon, 7800 ft., Manzano Mts. (Clothier, 1957b: 137).

22. New Canyon, 8000 ft., Manzano Mts. (Clothier, 1957b: 137-138).

Sierra Co.:

23. Kingston, Mimbres Mts. (Hall and Cockrum, 1953: 430).

Lincoln Co.:

24. Capitan Mts., 5 mi. N and 9 mi. E Capitan (UNMCV).

25. ½ mi. SE Monjeau Lookout (Dice, 1942: 202); 1 mi.

SE Monjeau Lookout (Dice, 1942: 202); N side Little Creek, 3 mi. NW Alto and 6½ mi. NW Ruidoso (Dice, 1942: 202); Monjeau Peak, 10,000 ft. (UNMCV).

Otero Co.:

26. James Canyon, Sacramento Mts., 8 mi. E Cloudcroft (UNMCV); 7 mi. E and 2½ mi. N Cloudcroft (UNMCV).

27. Cloudcroft, Sacramento Mts. (Hall and Cockrum, 1953: 430); 1 mi. S Cloudcroft (UNMCV); 1 mi. N Cloudcroft (UNMCV).

28. 10 mi. S Cloudcroft (UNMCV).

Not Located:

Martinez (Bailey, 1900: 50).

Agua de Lobo (Bailey, 1900: 50).

MICROTUS MEXICANUS (Saussure)

Mexican Vole

Microtus mexicanus mogollonensis (Mearns).

Microtus mexicanus guadalupensis Bailey.

General remarks.--In New Mexico, the Mexican vole is found most often in the Transition Life Zone.

Bailey (1931: 206) mentions specimens from the upper parts of Dog Canyon and from the head of McKittrick Canyon, both in the Guadalupe Mountains, but fails to indicate whether the specimens were from Texas or New Mexico.

Subspecies ascribed to New Mexico.--Microtus mexicanus mogollonensis (Mearns); Microtus mexicanus guadalupensis Bailey.

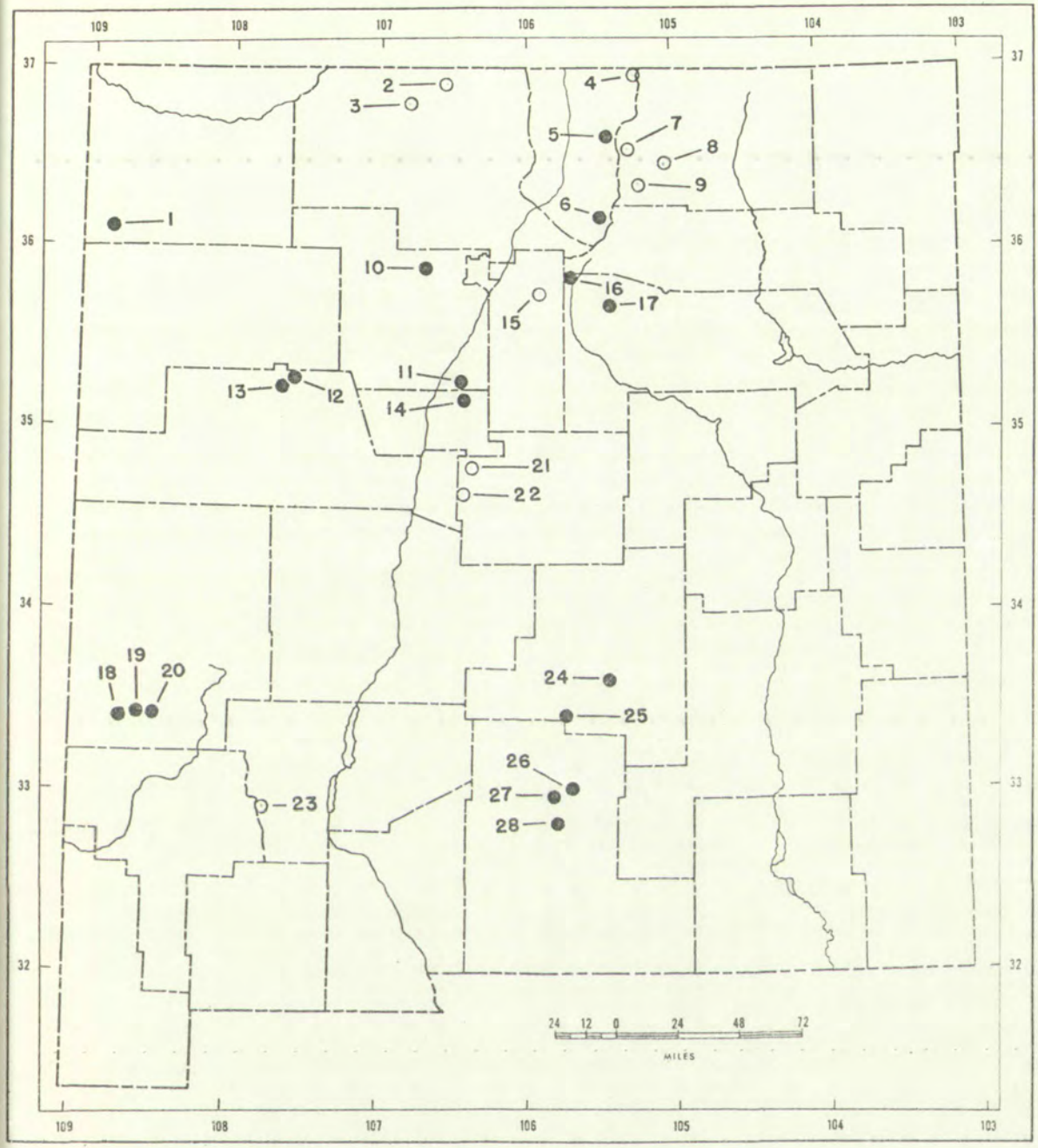

Fig. 75. Microtus longicaudus

Records of occurence (Fig. 76).--

McKinley Co.:

1. Fort Wingate (Bailey, 1900: 56).

2. 1 mi. E McGaffey (UNMCV).

Valencia Co.:

3. Mt. Taylor (Hall and Cockrum, 1953: 433); ½ mi. NE La Mosca Peak, Mt. Taylor (UNMCV).

4. Mirabal Spring, 9000 ft., Mt. Taylor (UNMCV).

5. 4 mi. WSW Cebolleta (Hooper, 1941a: 38).

6. Head of Agua Fria Spring, Zuni Mts. (Bailey, 1931: 204); T10N-R12W, Sec. 27, Agua Fria Creek, Zuni Mts. (UNMCV); T10N-R12W, line between Sec. 21 and Sec. 28, Agua Fria Creek, Zuni Mts. (UNMCV).

Catron Co.:

7. 10 mi. N and 5 mi. W Datil, Datil Mts. (UNMCV); Head of Davenport Canyon, Datil Mts. (UNMCV).

8. Datil Mts. (Bailey, 1931: 204).

9. Near Old Fort Tularosa (Bailey, 1931: 205).

10. W end Luna Valley (Bailey, 1931: 204).

11. Near Elk Mts. (Bailey, 1931: 204).

12. Willow Creek, Mogollon Mts., 10 mi. E Mogollon (UNMCV); Gillito Creek, Mogollon Mts., 10 mi. E Mogollon (UNMCV).

Socorro Co.:

13. Mill Canyon, Magdalena Mts. (UNMCV).

14. Baldy Crossing, Magdalena Mts. (UNMCV).

15. Near Monica Spring, San Mateo Mts. (Bailey, 1931: 204).

16. Hardy Spring, Magdalena Mts. (UNMCV).

17. Mt. Withington, San Mateo Mts. (UNMCV); Bear Trap Canyon, San Mateo Mts., 19 mi. W and 20 mi. S Magdalena (UNMCV).

18. San Mateo Mtn. (Bailey, 1931: 205).

19. Springtime Canyon, San Mateo Mts. (UNMCV).

Torrance Co.:

20. Tajique Canyon, 7800 ft., Manzano Mts. (Clothier, 1957b: 140).

21. 5 mi. W Manzano, New Canyon Camp Ground, Cibola Nat'l Forest (UNMCV); Red Canyon, 4 mi. W and 1 mi. S Manzano (UNMCV).

22. Manzano Peak, 9000 ft., Manzano Mts. (Clothier, 1957b: 140).

Grant Co.:

23. Headwaters of Rio Mimbres (Bailey, 1931: 204).

Sierra Co.:

24. E slope Mimbres Mts. near Kingston (Bailey, 1931: 205).

Lincoln Co.:

25. Capitan Mts., 5 mi. N and 9 mi. E Capitan (UNMCV); Capitan Mts., summit near W end main ridge (Bailey, 1931: 206).

26. Monjeau Peak, 10,000 ft. (UNMCV).

Otero Co.:

27. 7 mi. E and 2½ mi. N Cloudcroft, Sacramento Mts. (UNMCV); 7 mi. E Cloudcroft, Sacramento Mts. (UNMCV).

28. 1 mi. S Cloudcroft (UNMCV); 1 mi. N Cloudcroft, Sacramento Mts. (UNMCV).

29. 10 mi. S Cloudcroft, Sacramento Mts. (UNMCV).

ONDATRA ZIBETHICUS (Linnaeus)

Muskrat

Fiber zibethicus osoyoosensis (Lord).

Fiber zibethicus ripensis Bailey.

Fiber zibethicus pallidus Mearns.

General remarks.--In New Mexico, muskrats are generally to be found along streams within the Lower and Upper Sonoran Life Zones.

Bailey (1931: 210) added the subspecies O. z. pallidus to the state list only provisionally. The subspecies is listed below on the same basis.

The localities of Blanco and Taos are not represented by specimens (see Bailey, 1931: 208). The record from Los Pinos River is based on bone remains.

Subspecies ascribed to New Mexico.--Ondatra zibethicus osoyoosensis (Lord); Ondatra zibethicus ripensis (Bailey); Ondatra zibethicus pallidus (Mearns).

Records of occurence (Fig. 77).--

San Juan Co.:

1. Los Pinos River ½ mi. above confluence with the

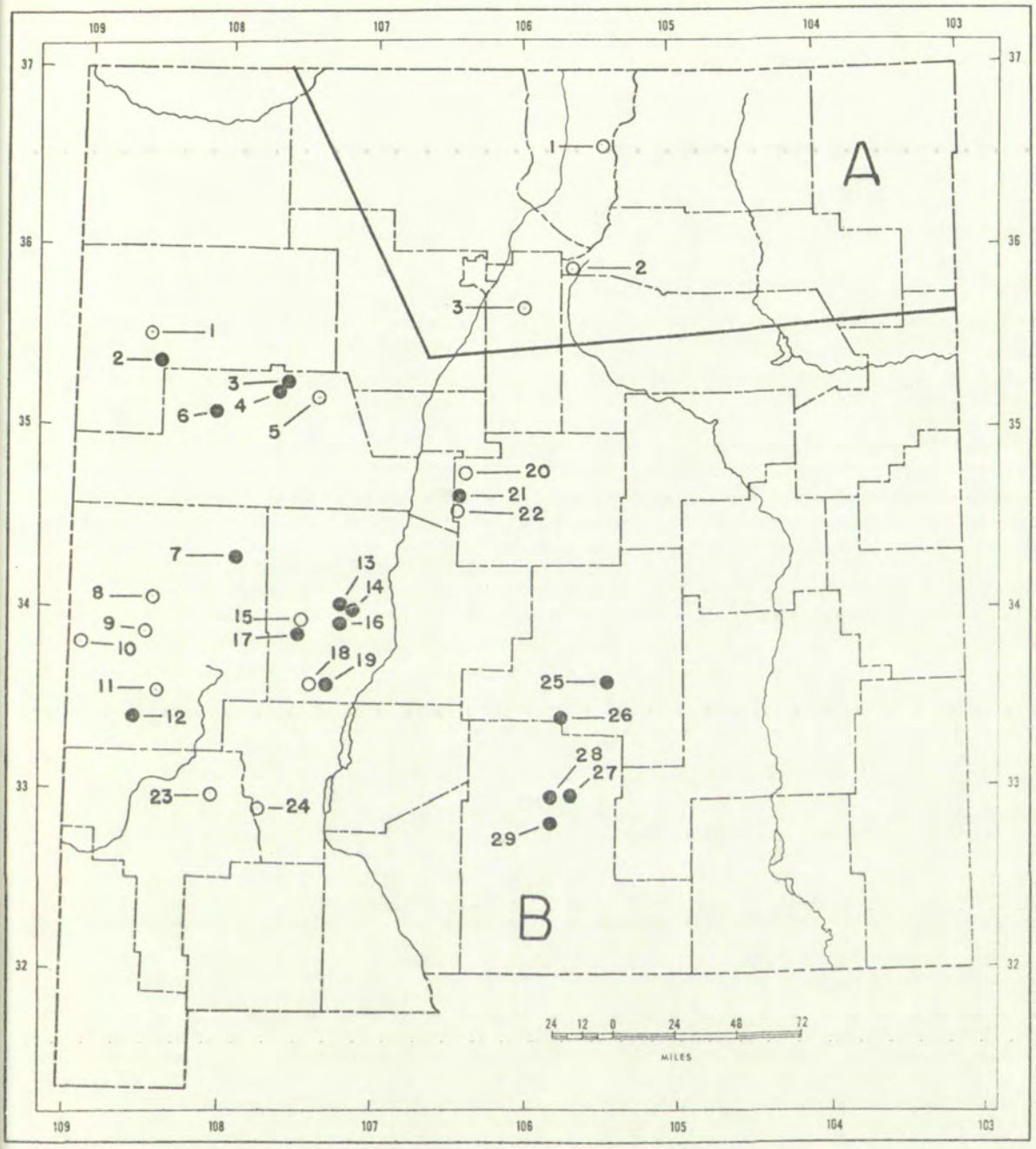

Fig. 76. A. Phenacomys intermedius

B. Microtus mexicanus

San Juan (UNMCV).

2. Farmington (Bailey, 1931: 207).

3. Blanco (Bailey, 1931: 208).

Rio Arriba Co.:

5. Rinconada (Bailey, 1931: 207).

Taos Co.:

4. Costilla River (Bailey, 1931: 207).

6. Taos (Bailey, 1931: 208).

Colfax Co.:

7. 3 mi. SE Cimarron (Hall and Cockrum, 1953: 467-468).

Valencia Co.:

8. San Rafael (Hooper, 1941a: 38).

9. About 4 mi. W McCartys (Hooper, 1941a: 38).

10. ½ mi. E Los Lunas (UNMCV).

Bernalillo Co.:

11. Alameda (UNMCV).

12. Rio Grande, 1 mi. N US Hwy 66 bridge, Albuquerque (UNMCV).

13. W Rio Grande, 2 mi. N Isleta Pueblo (UNMCV).

Catron Co.:

14. Upper Tularosa River (Hollister, 1911: 28).

Socorro Co.:

15. ½ mi. E San Antonio (UNMCV).

Guadalupe Co.:

16. Santa Rosa (Hollister, 1911: 30).

Dona Ana Co.:

17. Fort Thorn (Baird, 1857: 564).

Lincoln Co.:

18. Roswell (Bailey, 1931: 209).

Eddy Co.:

19. Pecos River at Carlsbad (Bailey, 1931: 209).

20. Black River, about 4 mi. S Carlsbad Cavern (Bailey, 1928: 81).

FAMILY MURIDAE

RATTUS RATTUS (Linnaeus)

Black Rat

Rattus alexandrinus (Geoffroy).

General remarks.--Apparently this rat has been taken in New Mexico only in the Lower Sonoran Life Zone.

Subspecies ascribed to New Mexico.--Rattus rattus alexandrinus (Geoffroy-Saint-Hilaire).

Records of occurence (Fig. 78).--

Hidalgo Co.:

1. Lordsburg (Hubbard, 1947: 348).

Dona Ana Co.:

Las Cruces (Bailey, 1931: 134).

RATTUS NORVEGICUS (Berkenhout)

Norway Rat

Rattus norvegicus (Erxleben).

General remarks.--Actual records for the Norway rat

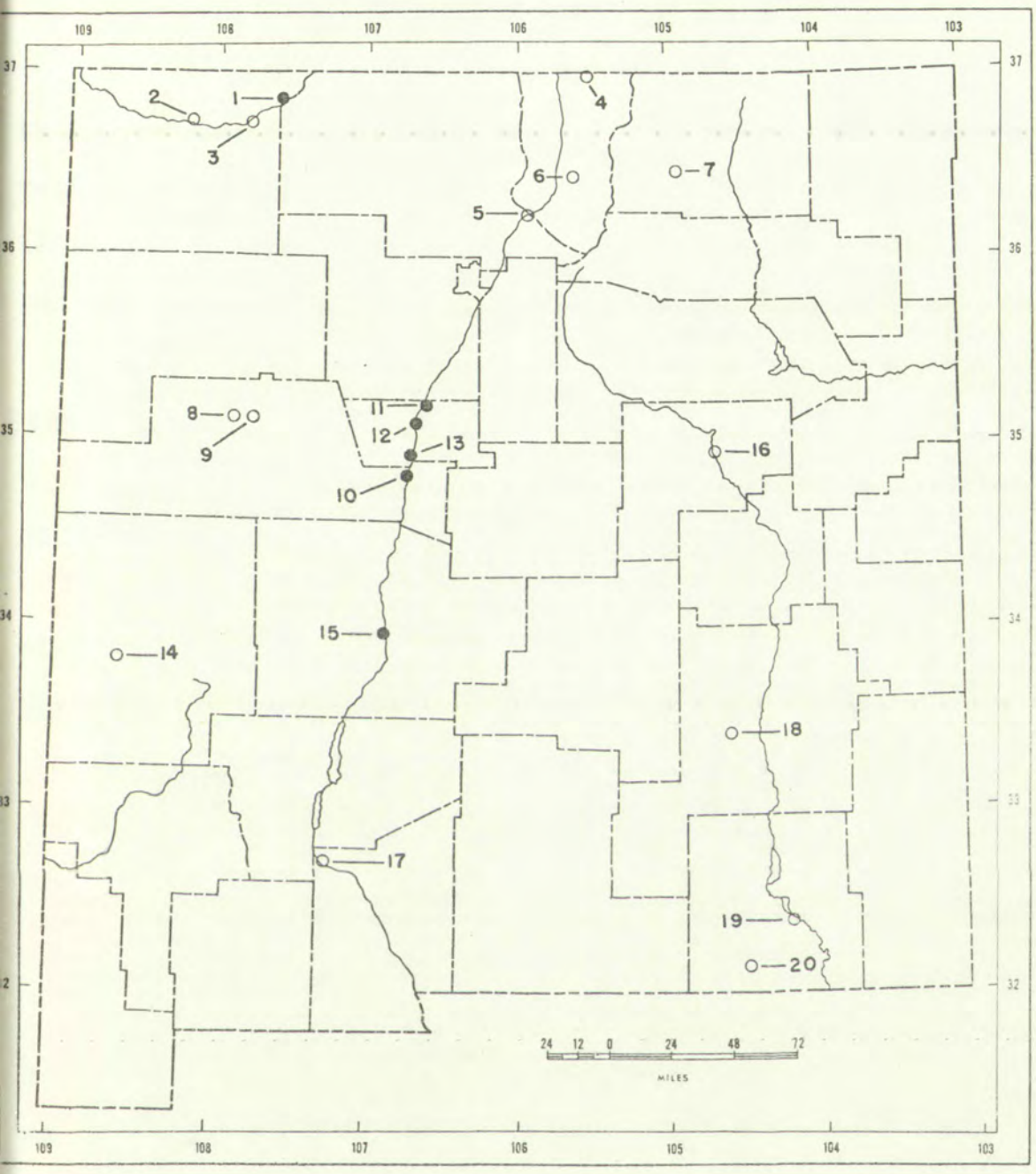

Fig. 77. Ondatra zibethicus

in New Mexico undoubtedly do not reflect the true distribution of the rodent within the state. In 1854, Woodhouse reported that they were to be found in all the white settlements of the state. Such is probably close to the truth today, also.

Subspecies ascribed to New Mexico.--Rattus norvegicus norvegicus (Berkenhout).

Records of occurence (Fig. 78).--

Bernalillo Co.:

1. N Albuquerque in marsh areas (Ivey, 1957: 499); Albuquerque (Bailey, 1931: 133); W bank Rio Grande (UNMCV).

Guadalupe Co.:

2. Santa Rosa (Bailey, 1931: 133).

MUS MUSCULUS Linnaeus

House Mouse

Mus musculus musculus Linnaeus.

General remarks.--The relatively small number of localities for the house mouse in New Mexico is deceiving, as specimens are commonly discarded when captured.

The house mouse is apparently not limited to any great degree by climatic factors in New Mexico. Clothier (1957b: 142) received a report that the house mouse has been taken on Sandia Crest. This locality has not been listed below, but it would indicate tolerance of an altitude in excess of 10,000 feet.

The specimens reported by Mohlhenrich were, for the

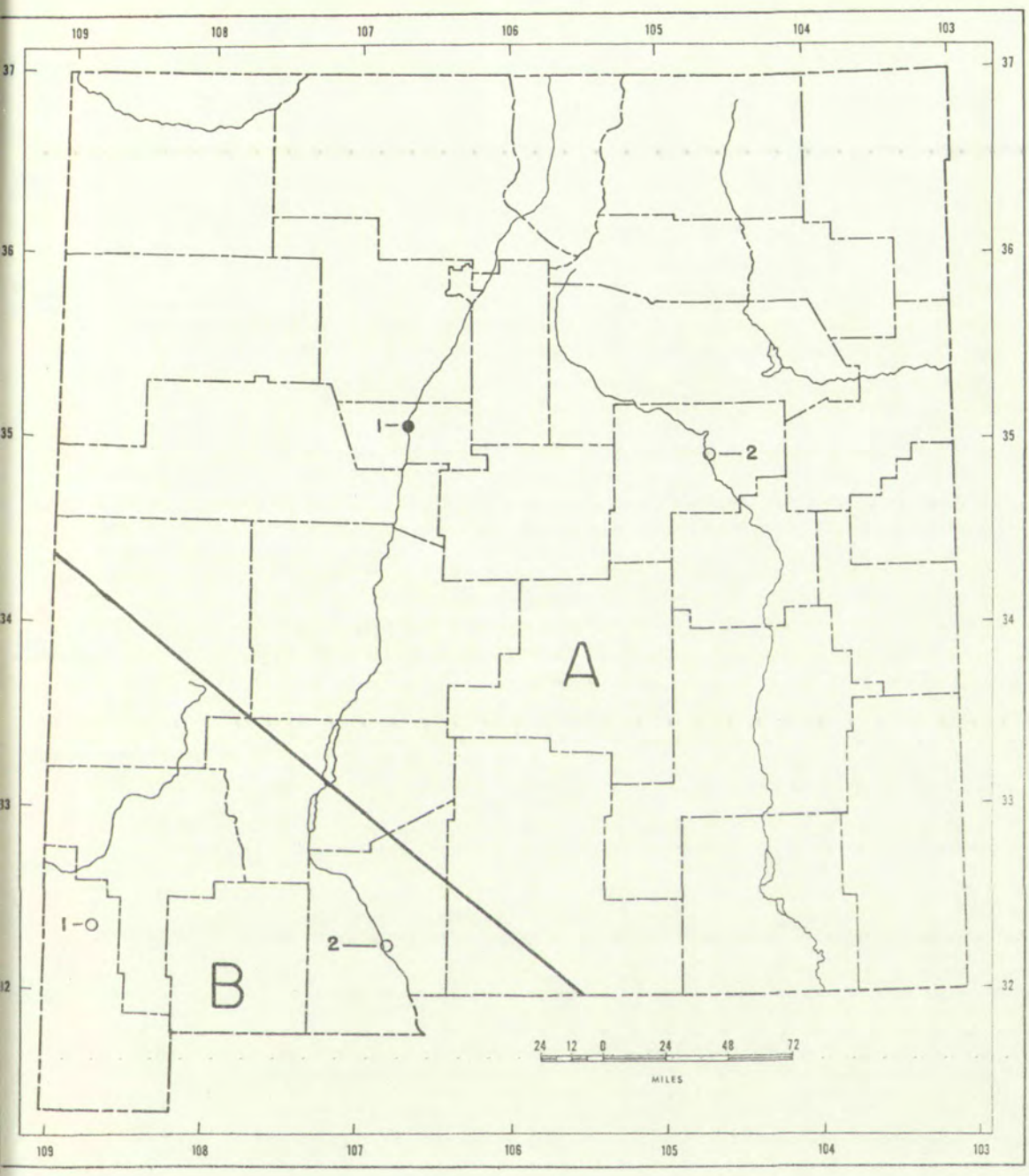

Fig. 78. A. Rattus norvegicus

B. Rattus rattus

most part, discarded in the field.

Subspecies ascribed to New Mexico.--*Mus musculus brevirostris* Waterhouse.

Records of occurence (Fig. 79).--

San Juan Co.:

1. Aztec (Bailey, 1931: 135).
2. Los Pinos River, T30N-R7W, SW ¼ Sec. 8 (UNMCV).
3. Fruitland (Bailey, 1931: 135).
4. Farmington (Bailey, 1931: 135).
5. 1½ mi. W Bloomfield (UNMCV).

Colfax Co.:

6. SW Colfax Co. (Hill, 1942a: 81).

Sandoval Co.:

7. Algodones (UNMCV); ½ mi. N and ½ mi. E Algodones (Mohlhenrich, 1958-59).
8. Hwy 85, 3.2 mi. N Jct. with Hwy 44 (UNMCV).

Valencia Co.:

9. Hwy 85, 1 mi. N Los Lunas (UNMCV).
10. 5 mi. W and 1 mi. N Belen (UNMCV).

Bernalillo Co.:

11. Albuquerque (Bailey, 1931: 135); Hwy 194, 1.9 mi. N Griegos Rd. (UNMCV).
12. Isleta Pueblo (UNMCV); 2 mi. S and 1½ mi. W Isleta (Mohlhenrich, 1958-59).

Santa Fe Co.:

13. San Pedro, Sandia Mts. (Bailey, 1931: 135).

Socorro Co.:

14. 17 mi. W Bernardo (UNMCV).

Grant Co.:

15. Redrock (Bailey, 1931: 135); 1 mi. E Redrock (UNMCV).

16. Bayard (Mohlhenrich, 1958-59).

Sierra Co.:

17. 1 mi. S and 1 mi. W Winston (Mohlhenrich, 1958-59).

Luna Co.:

18. 1 mi. W Deming (Mohlhenrich, 1958-59).

19. 6½ mi. W Akela (Mohlhenrich, 1958-59).

20. 1 mi. S Akela (Mohlhenrich, 1958-59).

21. Hermanas (Mohlhenrich, 1958-59).

22. 1 mi. E Columbus (Mohlhenrich, 1958-59).

Dona Ana Co.:

23. 12 mi. E Akela (Mohlhenrich, 1958-59).

Chaves Co.:

24. 6.4 mi. E and 2 mi. S Roswell (UNMCV).

Eddy Co.:

25. Bat Cave, Carlsbad Ceverns (Parker, 1932: 70).

ZAPUS PRINCEPS Allen

Western Jumping Mouse

Zapus princeps princeps Allen.

Zapus luteus luteus Miller.

Zapus luteus australis Bailey.

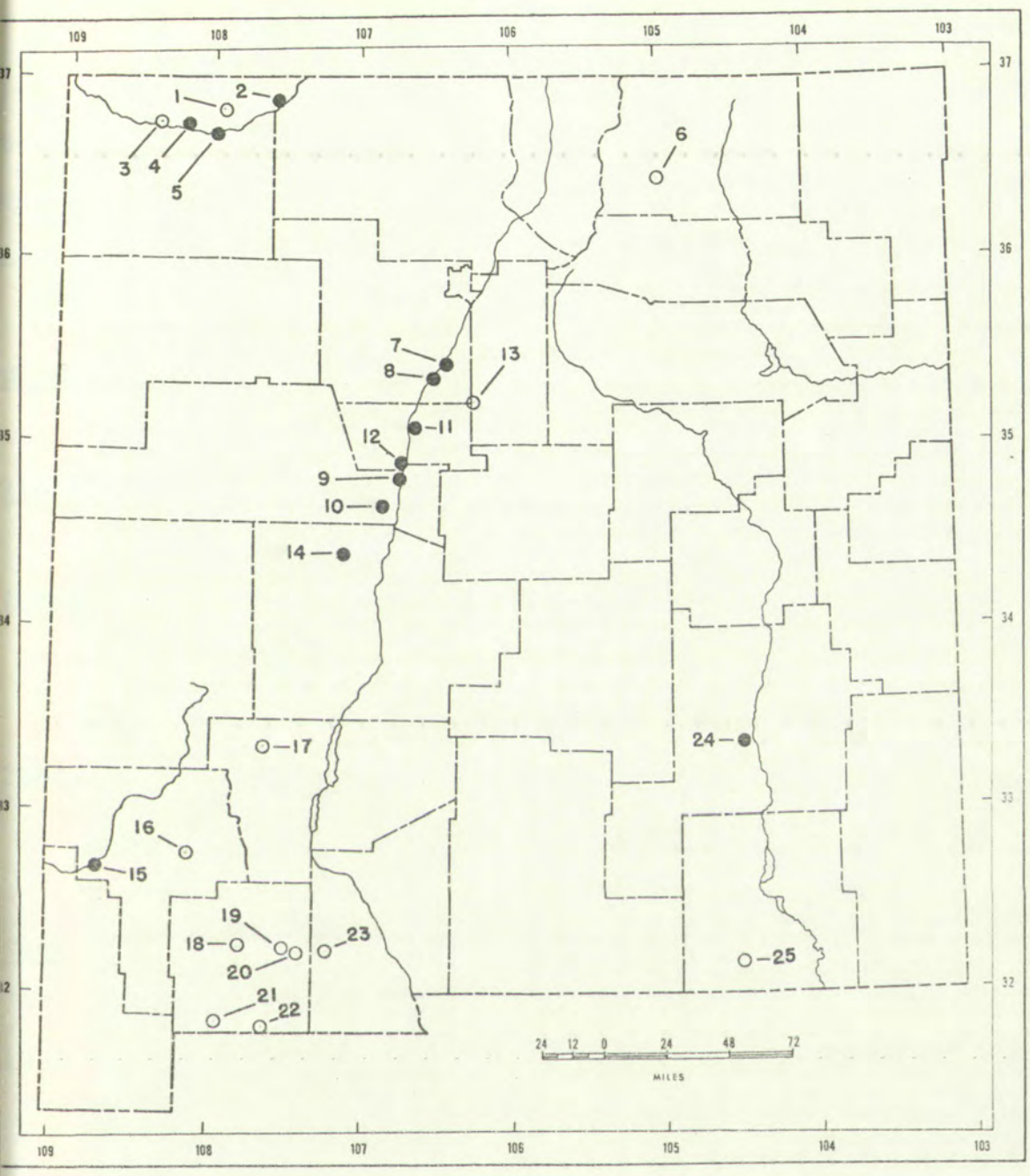

Fig. 79. Mus musculus

General remarks.--The western jumping mouse inhabits the Upper Sonoran, Transition, and Canadian Life Zones in New Mexico and the specimen from Socorro was taken in the Lower Sonoran Life Zone.

Subspecies ascribed to New Mexico.--*Zapus princeps princeps* Allen; *Zapus princeps luteus* Miller.

Records of occurence (Fig. 80).--

Rio Arriba Co.:

1. 10½ mi. E Chama, East Fork Rio Brazos, 10,000 ft. (UNMCV).

2. Tierra Amarilla (Krutzsch, 1954: 416).

3. San Juan Mts., near Tierra Amarilla (Bailey, 1931: 226).

4. 4 mi. NE El Rito, 7000 ft. (Krutzsch, 1954: 407).

5. Espanola, 5000 ft. (Krutzsch, 1954: 407).

Taos Co.:

6. Hondo Canyon, W slope Taos Mts., 8200 ft. (Bailey, 1931: 226).

7. E slope Taos Mts., 8800 ft. (Bailey, 1931: 226).

8. Cantonment Burgwyn (Preble, 1899: 23).

9. Rio la Junta, 2 mi. NE Tres Ritos (UNMCV).

Santa Fe Co.:

10. W slopes Sangre de Cristo Mts., near Santa Fe (Holdenried and Morlan, 1956: 379).

San Miguel Co:

11. 1 mi. NW Cowles (UNMCV).

Socorro Co.:

12. Socorro (Krutzsch, 1954: 407).

Otero Co.:

13. 10 mi. NE Cloudcroft, Sacramento Mts. (Bailey, 1931: 228).

14. Penasco Creek, 12 mi. E Cloudcroft, Sacramento Mts. (Bailey, 1931: 228).

FAMILY ERETHIZONTIDAE

ERETHIZON DORSATUM (Linnaeus)

Porcupine

Erethizon epixanthum epixanthum Brandt.

Erethizon epixanthum couesi Mearns.

General remarks.--Porcupines may be expected in the Upper Sonoran, Transition, Canadian, and Hudsonian Life Zones in New Mexico and even in the Lower Sonoran Zone upon occasion.

Subspecies ascribed to New Mexico.--Erethizon dorsatum epixanthum Brandt; Erethizon dorsatum couesi Mearns.

Records of occurence (Fig. 81).--

San Juan Co.:

1. Laplata (J. A. Allen, 1893: 70).
2. E ½ T31N-R8W (UNMCV).
3. Los Pinos River, T30N-R7W, NE ¼ Sec. 7 (UNMCV).
4. Shiprock (Bailey, 1931: 224).
5. Fruitland (Bailey, 1931: 224).
6. Farmington (Bailey, 1931: 224).

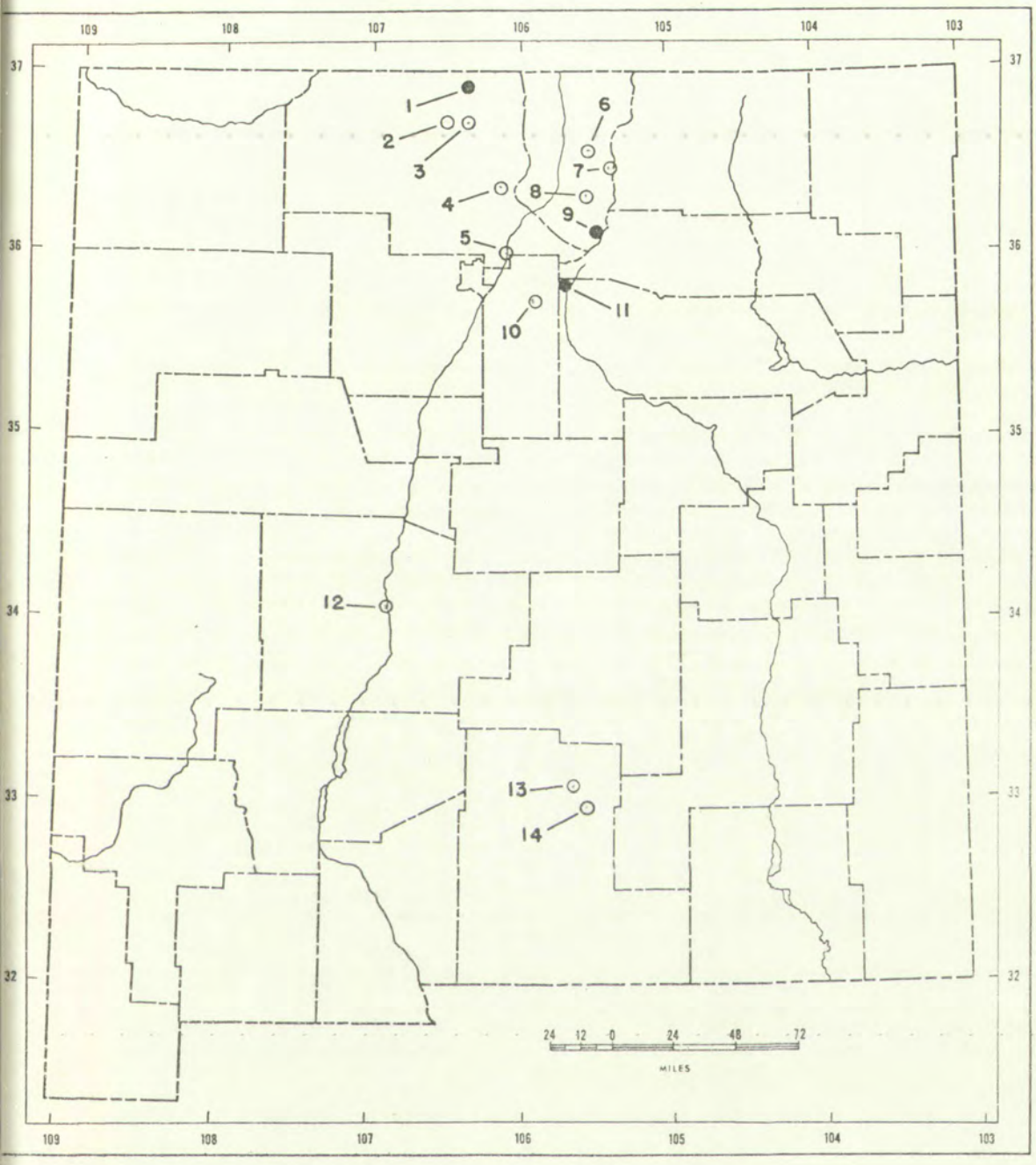

Fig. 80. Zapus princeps

7. Blanco (Bailey, 1931: 224).

8. Kimbetoh Wash (Bailey, 1931: 224).

9. Chuska Mts. (Bailey, 1931: 222).

10. Escavada Wash (Bailey, 1931: 224).

11. Great ridge N Chaco Canyon (Bailey, 1931: 224).

Rio Arriba Co.:

12. Sargeant Ranch, Chama (UNMCV).

13. 10½ mi. E Chama (UNMCV).

14. Near Horse Lake, Jicarilla Indian Reservation (Bailey, 1931: 220).

15. Stinking Spring Lake, Jicarilla Indian Reservation (Bailey, 1931: 220).

16. Cebolla country (Taylor, 1935: 122).

17. Near Vallecitos, Carson Nat'l Forest (Taylor, 1935: 147).

Taos Co.:

18. Head of Lake Fork on the Hondo (Bailey, 1931: 120).

19. Near Questa (Taylor, 1935: 135).

20. Vicinity of Cow Creek Ranger Station, near Tres Piedras (Taylor, 1935: 28).

21. 4 mi. NE Tres Ritos (UNMCV).

Colfax Co.:

22. Hwy N Cimarron (Hill, 1942a: 81).

McKinley Co.:

23. About 20 mi. S Chaco Canyon (Bailey, 1931: 224).

24. Hosta Butte Mts. (Bailey, 1931: 224).

25. Hills N Thoreau (Bailey, 1931: 224).

26. Zuni (Bailey, 1931: 223).

Sandoval Co.:

27. Cuba (Ivey, 1957: 499).

28. Jemez Pueblo (Bailey, 1931: 220).

29. Juan Tabo Canyon, Sandia Mts. (Clothier, 1957b: 146); Juan Tabo Picnic Area, Sandia Mts. (Clothier, 1957b: 146); Las Huertas Picnic Grounds, Sandia Mts. (Clothier, 1957b: 146); Capulin Picnic Grounds, Sandia Mts. (Clothier, 1957b: 146); Juan Tabo, Sandia Mts. (Clothier, 1957b: 146).

Los Alamos Co.:

30. Frijoles Canyon, Santa Fe Nat'l Forest (Taylor, 1935: 68).

Valencia Co.:

31. 4 mi. WSW San Mateo (Hooper, 1941a: 48); 1½ mi. SW San Mateo (Hooper, 1941a: 48).

32. 1 mi. below Mirabal Spring, Mt. Taylor Range (UNMCV).

33. Mt. Taylor (Bailey, 1931: 224).

34. 1 mi. N Cebolleta (Hooper, 1941a: 48).

35. Agua Fria Creek, Zuni Mts., T10N-R12W, line between Sec. 21 and Sec. 28 (UNMCV).

36. Near Flagpole Crater, 17 mi. SW Grants (Hooper, 1941a: 48); Ice Caves SW Grants (UNMCV).

37. Zuni River just above Ariz. line (Bailey, 1931: 223).

38. Point of Malpais, T6N-R11W, Sec. 2 (Hooper, 1941a: 38).

Bernalillo Co.:

39. Sandia Crest (Clothier, 1957b: 145); Jaral Canyon, 6300 ft., Sandia Mts. (Clothier, 1957b: 146).

40. Paako State Monument, San Pedro Valley, E Sandia Mts. (Clothier, 1957b: 146).

41. Doc Long Picnic Grounds, Sandia Mts. (Clothier, 1957b: 146); Bear Canyon, 8000 ft., Sandia Mts. (Clothier, 1957b: 146).

42. Univ. N. Mex., Albuquerque (UNMCV); E Albuquerque (UNMCV).

43. Sedillo, 7000 ft., Manzano Mts. (Clothier, 1957b: 146).

44. Sandia Base, Albuquerque (UNMCV).

45. Hwy 10, S boundary Sandia Div. Cibola Nat'l Forest, Manzano Mts. (Clothier, 1957b: 146).

Santa Fe Co.:

46. Santa Fe Baldy (Ivey, 1957: 499).

47. Santa Fe (Seton, 1932: 169).

48. San Pedro, E Sandia Mts. (Clothier, 1957b: 146).

San Miguel Co.:

49. Just above Willis on head of Pecos River, Pecos River Mts. (Bailey, 1931: 220).

Quay Co.:

52. Earickson Brothers' Ranch, 6 mi. W House (Taylor,

1935: 31).

Catron Co.:

50. Datil Mts. (Bailey, 1931: 223).

51. Largo Canyon (Bailey, 1931: 223).

53. 15 mi. N Luna (Bailey, 1931: 223).

54. Luna Valley, W edge Mogollon Mts. (Bailey, 1931: 223).

55. Mogollon Mts. region (Bailey, 1931: 222).

56. Beaver Lake (Bailey, 1931: 223).

Socorro Co.:

57. 2 mi. E Baldy Crossing, Magdalena Mts. (UNMCV).

58. San Mateo Mts. (Bailey, 1931: 222).

Torrance Co.:

59. Tajique Canyon, 7800 ft., Manzano Mts. (Clothier, 1957b: 146).

60. New Canyon, Manzano Mts., 8400 ft. (Clothier, 1957b: 146); Capillo Peak Picnic Grounds, Manzano Mts. (Clothier, 1957b: 146).

61. 4 mi. NE Corona (UNMCV).

Grant Co.:

62. East Fork of Gila River near head Rio Mimbres (Bailey, 1931: 223); Mimbres Mts. (Bailey, 1931: 223).

Sierra Co.:

63. San Andres Mts. (UNMCV).

Hidalgo Co.:

64. Doubtful Canyon, Peloncillo Mts., 8 mi. N and 2

mi. W Steins (UNMCV).

69. E San Luis Pass (UNMCV).

Otero Co.:

65. Sacramento Mts. near Cloudcroft (Bailey, 1931: 223).

66. White Sands (Blair, 1941: 227).

Chaves Co.:

67. Sacramento Mts., 5 mi. S Elk (Bailey, 1931: 223).

Eddy Co.:

68. Dark Canyon, Guadalupe Mts., 22 mi. S and 31 mi. W Carlsbad (UNMCV).

Not Located:

Liberty (Bailey, 1931: 224).

Indian Butte, San Mateo Mts. (Bailey, 1931: 223).

Pinyon Range (Bailey, 1931: 223).

Crow Creek country, 10 mi. NE Dawson (Taylor, 1935: 122).

FAMILY CAPROMYIDAE

MYOTCASTOR COYPUS (Molina)

Nutria

General remarks.--The nutria has been introduced into New Mexico in at least two localities.

Subspecies ascribed to New Mexico.--*Myocastor coypus bonariensis* (Geoffroy-Saint-Hilaire).

Records of occurence (Not mapped).--

Hidalgo Co.:

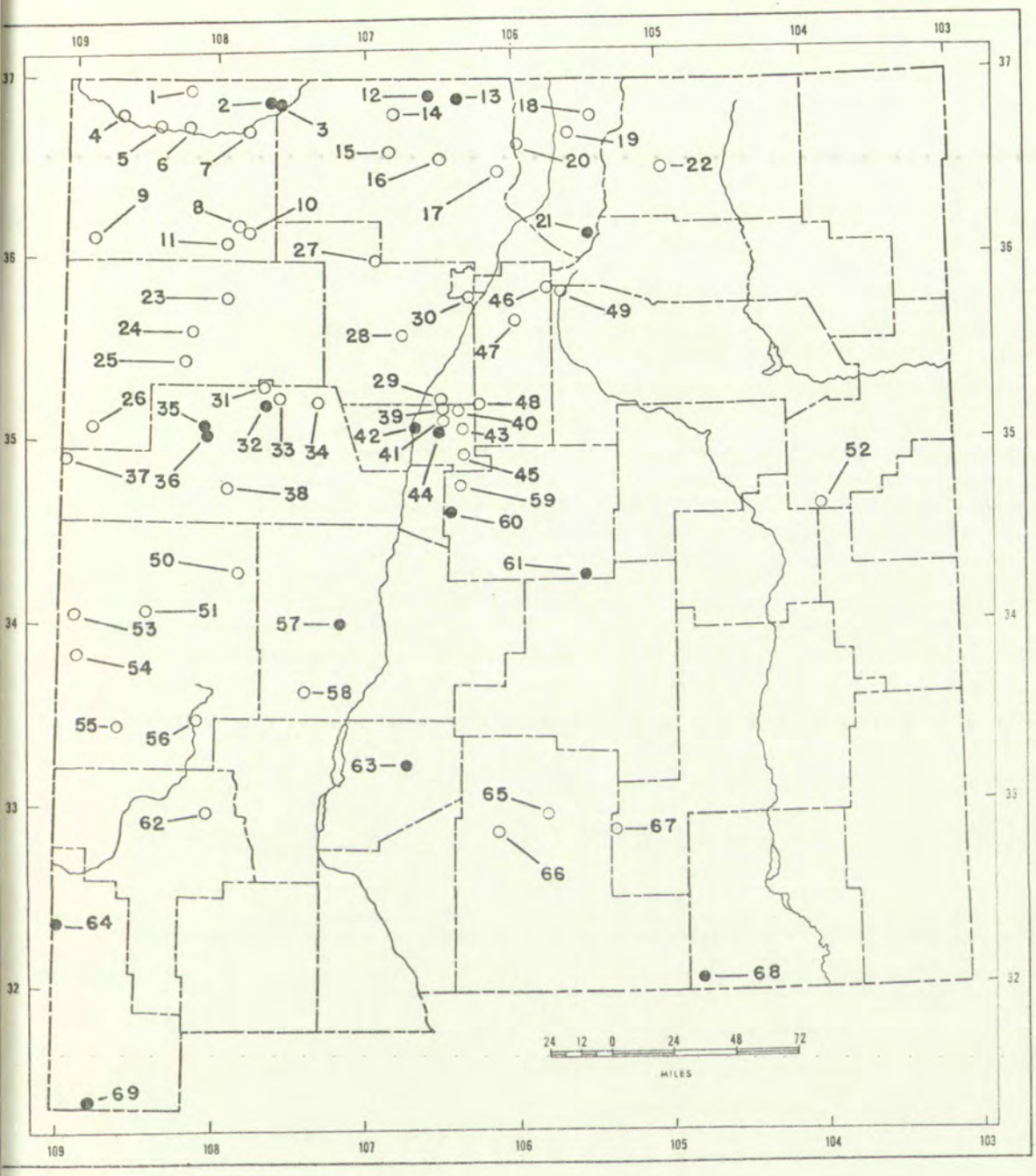

Fig. 81. Erethizon dorsatum

San Simon Cienega (UNMCV).

Chaves Co.:

Bitter Creek, Bitter Lake Nat'l Wildlife Refuge, Roswell (Sooter, 1943: 503).

ORDER CARNIVORA

FAMILY CANIDAE

CANIS LATRANS Say

Coyote

Canis latrans texensis Bailey.

Canis latrans lestes Merriam.

Canis latrans nebracensis Merriam.

Canis latrans estor Merriam.

Canis mearnsi Merriam.

General remarks.--The coyote has been taken in the Lower and Upper Sonoran, Transition, and Canadian Life Zones in New Mexico.

Subspecies ascribed to New Mexico.--Canis latrans latrans Say; Canis latrans lestes Merriam; Canis latrans mearnsi Merriam; Canis latrans texensis Bailey.

Records of occurence (Fig. 82).--

San Juan Co.:

1. Laplata (Bailey, 1931: 316).

2. Fruitland (Bailey, 1931: 318).

4. Largo (Bailey, 1931: 319); Blanco (Bailey, 1931: 319).

5. Barker's Canyon, 40 mi. S and little W Durango (Jackson, 1951: 302).

6. Canyon Blanco (Bailey, 1931: 319).

7. Chuska Mts. (Bailey, 1931: 319).

Rio Arriba Co.:

8. Dulce (Bailey, 1931: 319).

9. Lake La Jara (Bailey, 1931: 319).

10. San Juan Mts. (Bailey, 1931: 316).

11. Stinking Spring Lake (Bailey, 1931: 319).

12. El Vado (Jackson, 1951: 302).

13. Gallinas Mts. (Bailey, 1931: 317).

14. Embudo (Jackson, 1951: 285); Velarde (Jackson, 1951: 285).

15. Abiquiu (Jackson, 1951: 285).

16. Alcalde (Jackson, 1951: 285).

17. 30 mi. NW Porvenir (Jackson, 1951: 285).

18. Vicinity of Espanola (Bailey, 1931: 316).

Taos Co.:

19. Headwaters Costilla River, 9500 ft. (Bailey, 1931: 316).

20. Near Twining (Bailey, 1931: 316).

Colfax Co.:

21. SW Colfax Co. (Hill, 1942a: 77).

22. Moreno Valley at Black Lake (Bailey, 1931: 317).

Union Co.:

23. Des Moines (Jackson, 1951: 262).

24. Clayton (Bailey, 1931: 318).

McKinley Co.:

25. Gallup (Bailey, 1931: 319).

26. Wingate (Bailey, 1931: 319); Fort Wingate (Bailey, 1931: 319).

27. Ramah (Jackson, 1951: 302).

Sandoval Co.:

28. Jemez Mts. (Bailey, 1931: 316).

Mora Co.:

29. Halls Peak (Bailey, 1931: 316).

30. Near Pecos Baldy (Bailey, 1931: 317).

Valencia Co.:

31. Vicinity San Mateo (Hooper, 1941a: 22).

32. Blue Water (Bailey, 1931: 319).

33. Zuni Mts. (Bailey, 1931: 319).

34. Copperton (Bailey, 1931: 319).

35. San Rafael (Bailey, 1931: 319).

36. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 22).

37. Shuman's Ranch, T6N-R10W, Sec. 30 (Hooper, 1941a: 22).

Bernalillo Co.:

38. Juan Tabo, Sandia Mts. (Clothier, 1957b: 53); Near Juan Tabo Ranger Station (Clothier, 1957b: 53); Near Sandia Crest (Clothier, 1957b: 54).

39. 12 mi. NW Albuquerque (UNMCV).

40. Frost (UNMCV).

41. Embudo Canyon (Clothier, 1957b: 53).

42. About Los Alamitos Ranch, Cedro Canyon (Clothier, 1957b: 54).

43. Isleta (Jackson, 1951: 278).

44. Hell Canyon, Manzano Mts. (Clothier, 1957b: 53).

Santa Fe Co.:

45. Pojuaque (sic) (Jackson, 1951: 285).

46. Santa Fe (Holdenried, 1957: 348).

47. Lamy (Jackson, 1951: 278).

San Miguel Co.:

48. Cowles, Pecos River (Jackson, 1951: 278).

49. Pecos (Jackson, 1951: 279).

50. Conchas Creek, about 35 mi. N Santa Rosa (Bailey, 1931: 314).

Quay Co.:

51. Tucumcari (Jackson, 1951: 279).

Catron Co.:

52. Near Quemado (Bailey, 1931: 319).

53. Old Fort Tularosa (Jackson, 1951: 302).

54. Luna (Jackson, 1951: 302).

55. Reserve (Jackson, 1951: 302).

56. Canyon Creek Mtn., Middle Fork Gila River (Gianini, 1935: 229).

57. Doby Station, V + T Ranch, about 30 mi. NW Chloride (Bailey, 1931: 316).

58. Mogollon Mts. (Bailey, 1931: 312).

Socorro Co.:

59. La Joya (UNMCV).

60. Magdalena (Jackson, 1951: 302).

61. Near Socorro (UNMCV).

62. Magdalena Mts. (Jackson, 1951: 302).

63. Carthage (Jackson, 1951: 278).

64. San Mateo Mts. (Jackson, 1951: 302).

Torrance Co.:

65. Tajique (Jackson, 1951: 279).

66. Capillo Peak (Clothier, 1957b: 53).

67. Vicinity of Torrance (UNMCV).

68. Mesa Jumanes, ruins of Gran Quivera (Jackson, 1951: 278).

Guadalupe Co.:

69. Santa Rosa (Bailey, 1931: 312).

Grant Co.:

70. Sapillo Creek, Gila Nat'l Forest (Jackson, 1951: 302).

71. Central (Jackson, 1951: 302).

72. Coppermines (Jackson, 1951: 302).

73. Redrock (Bailey, 1931: 312).

Sierra Co.:

74. Chloride (Jackson, 1951: 302).

75. San Andres Mts., Salinas Peak (Jackson, 1951: 279).

76. Hermosa (Jackson, 1951: 302).

Lincoln Co.:

77. Gallo Canyon, 40 mi. SE Corona (Bailey, 1931: 317).

78. Jicarilla Mts. (Jackson, 1951: 278).

De Baca Co.:

79. McKenzie Ranch, Pecos Valley (Bailey, 1931: 315).

80. Fort Sumner (Bailey, 1931: 312).

81. 50 mi. above Roswell on Pecos River (Bailey, 1931: 315).

Roosevelt Co.:

82. Portales (Bailey, 1931: 315).

Hidalgo Co.:

83. Lordsburg (Bailey, 1931: 321).

84. Animas Valley (Bailey, 1931: 321).

85. Indian Canyon, Animas Mts. (Jackson, 1951: 302).

86. Pratt (Bailey, 1931: 321).

87. Hidalgo Co., Lat. 31 47'N (Jackson, 1951: 302).

88. Hatchet Ranch, 16 mi. S Hachita (Jackson, 1951: 302).

89. Playas Valley (Bailey, 1931: 321).

90. San Luis Mts. (Jackson, 1951: 302).

91. San Luis Springs (Jackson, 1951: 302).

Luna Co.:

92. Near Columbus (UNMCV).

113. Monument 15, Mex. Boundary line (Jackson, 1951: 302).

Dona Ana Co.:

93. Ash Canyon, T19S-R4E, Sec. 21 (Halloran, 1946: 159).

94. Near Parker Lake, flats E Organ Mts. (Bailey, 1931: 313).

95. Organ Mts. (Jackson, 1951: 279).

96. Mesilla Valley (Baird, 1857: 120).

97. Cois Ranch, 35 mi. NW El Paso (Jackson, 1951: 203).

98. Strauss (Borell and Bryant, 1942: 17).

99. Mex. Boundary line, 15 mi. W El Paso (Jackson, 1951: 302).

Otero Co.:

100. White Sands, 10 mi. W Tularosa (Benson, 1933: 22).

101. Tularosa (Jackson, 1951: 279).

102. 4 mi. NE Alamogordo (Dice, 1930: 22).

103. Sacramento Mts. (Bailey, 1931: 312).

104. 12 mi. W Alamogordo (Benson, 1933: 22); 14 mi. W Alamogordo (Benson, 1933: 22).

105. 18 mi. SW Alamogordo (Benson, 1933: 22).

106. Escondida (Benson, 1933: 22).

107. Jarilla (Bailey, 1931:313).

108. 35 mi. E Las Cruces (Borell and Bryant, 1942: 17).

109. Cienega (Jackson, 1951: 278).

Eddy Co.:

110. Near Artesia (Borell and Bryant, 1942: 17).

111. Carlsbad (Bailey, 1931: 312).

112. About Carlsbad Cavern (Bailey, 1928: 98).

Not Located:

Martinez (Bailey, 1931: 316).

Bartlett Ranch, Colfax Co. (Bailey, 1931: 317).

Salt Valley, N end Guadalupe Mts., Eddy Co. (Jackson, 1951: 279).

Salt Creek, Socorro Co. (Jackson, 1951: 279).

Lee Ranch, Hidalgo Co. (Jackson, 1951: 302).

Liberty, San Juan Co. (Jackson, 1951: 302).

San Bernardino Ranch, Hidalgo Co. (Jackson, 1951: 302).

Turkey Spring, Hidalgo Co. (Jackson, 1951: 302).

CANIS LUPUS Linnaeus

Gray Wolf

Canis lycaon baileyi Nelson and Goldman.

Canis lycaon nubilus Say.

General remarks.--The gray wolf has been exterminated over most of New Mexico. Occasional reports, mainly from the southwestern corner of the state, are still received, however.

Subspecies ascribed to New Mexico.--Canis lupus baileyi Nelson and Goldman; Canis lupus mogollonensis Goldman; Canis lupus youngi Goldman; Canis lupus monstra-

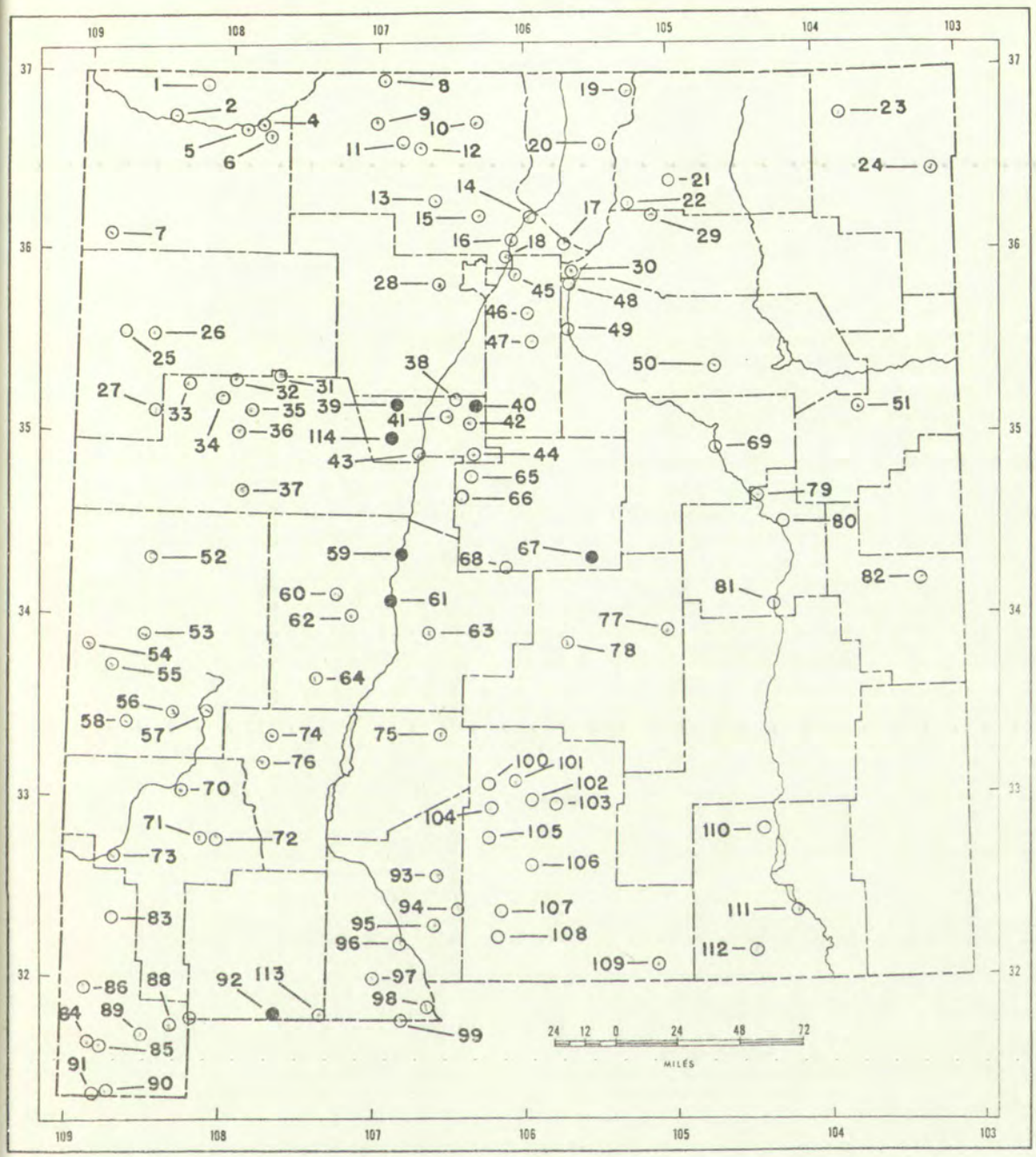

Fig. 82. Canis latrans

bilis Goldman; Canis lupus nubilus Say.

Records of occurence (Fig. 83).--

San Juan Co.:

1. Laplata (Goldman, 1944: 463).

2. Chuska Mts. (Bailey, 1931: 310).

Rio Arriba Co.:

3. La Jara (Bailey, 1931: 310).

4. Tusas (Goldman, 1944: 463).

5. 35 to 45 mi. SW Dulce (Goldman, 1944: 463).

6. Canjilon (Goldman, 1944: 463).

7. El Rito (Goldman, 1944: 463).

8. 20 mi. S El Vado (Goldman, 1944: 463).

9. Abiquiu (Goldman, 1944: 463).

Taos Co.:

10. Tres Piedras region (Bailey, 1931: 310).

11. S 5 mi. up a creek from San Fernandez de Taos, then about 8 mi. up the east fork of the creek (Coues, 1898: 138).

Union Co.:

12. Currumpaw (Seton, 1929: 292).

McKinley Co.:

13. Cebolleta Grant, Mt. Taylor region (Bailey, 1931: 311).

Sandoval Co.:

14. Cuba (Goldman, 1944: 463).

15. Jemez Mts. (Goldman, 1944: 463).

16. Jemez (Goldman, 1944: 463).

Mora Co.:

17. Mts. around head Pecos River (Bailey, 1931: 309).

Valencia Co.:

18. San Mateo (Goldman, 1944: 463).

19. Vicinity lava beds near Mt. Taylor (Hooper, 1941a: 22).

Santa Fe Co.:

20. Lamy (Goldman, 1944: 463).

Catron Co.:

21. Datil Mts. (Bailey, 1931: 308).

22. Largo Canyon, S Quemado (Bailey, 1931: 309).

23. Datil (Goldman, 1944: 466).

24. S. A. Creek, 10 mi. NW Luna (Goldman, 1937: 43).

25. San Augustin Plains (Bailey, 1931: 308).

26. 20 mi. NW Reserve (Goldman, 1944: 466).

27. Luna (Goldman, 1944: 466).

28. Reserve (Bailey, 1931: 303); High mesa E Reserve (Bailey, 1931: 304); Negrito Creek Valley (Bailey, 1931: 304).

29. Mesa E Elk Mts. (Bailey, 1931: 304).

30. 20 mi. NW Chloride (Goldman, 1937: 43).

32. Mogollon Mts. (Nelson and Goldman, 1929: 166).

33. Negrito (Bailey, 1931: 303).

34. Upper Gila River (Bailey, 1931: 303).

35. Diamond Creek (Bailey, 1931: 303).

Socorro Co.:

36. Gallina country (Bailey, 1931: 309).

37. Bear Spring Mts. (Bailey, 1931: 309).

38. Magdalena (Goldman, 1944: 466).

39. Carthage (Goldman, 1944: 445).

Torrance Co.:

40. Mountainair (Goldman, 1944: 445).

41. Mesa Jumanes (Bailey, 1931: 309).

Guadalupe Co.:

42. 18 mi. N Santa Rosa (Goldman, 1944: 445).

43. About 5 mi. S Santa Rosa (Bailey, 1931: 309).

Grant Co.:

44. Black Canyon (Bailey, 1931: 303).

45. Sapello Creek (Bailey, 1931: 304); Rocky Creek (Bailey, 1931: 304).

69. 25 mi. SW Alma (Goldman, 1944: 466).

46. Head of Mimbres (Bailey, 1931: 303).

47. Silver City (Goldman, 1944: 466).

48. Hurley (Goldman, 1944: 466).

49. Hachita (Nelson and Goldman, 1929: 166).

Sierra Co.:

50. About 15 mi. NW Chloride (Bailey, 1931: 306).

51. Monticello (Goldman, 1944: 466).

52. Black Range (Goldman, 1944: 466).

Lincoln Co.:

53. Gallo Canyon, 40 mi. SE Corona (Bailey, 1931: 308).

54. Capitan Mts. (Bailey, 1931: 308).

Roosevelt Co.:

55. Near Portales (Bailey, 1931: 309).

Hidalgo Co.:

56. Animas (Nelson and Goldman, 1929: 166); Animas Valley (Nelson and Goldman, 1929: 166).

57. Animas Mts. (Bailey, 1931: 307).

58. Cloverdale (Nelson and Goldman, 1929: 166).

59. San Luis Mts. (Bailey, 1931: 303).

Dona Ana Co.:

60. Hatch (Nelson and Goldman, 1929: 166); Near Hatch (UNMCV).

61. Organ Mts., ranch of Emmett Isaacks (Halloran, 1946: 159).

62. Fort Fillmore, 40 mi. N El Paso (Bailey, 1931: 303).

Otero Co.:

63. Mescalero (Nelson and Goldman, 1929: 166).

64. Sacramento Mts. (Nelson and Goldman, 1929: 166).

65. Mayhill (Goldman, 1944: 468).

Chaves Co.:

66. 20 mi. W Roswell (Bailey, 1931: 309).

67. Elk (Goldman, 1944: 468).

Eddy Co.:

68. 3 mi. from Carlsbad (Bailey, 1931: 309); E Carlsbad (Bailey, 1931: 311).

Not Located:

Lee Ranch, Hidalgo Co. (UNMCV).

Mule Spring (Bailey, 1931: 303).

Near Black River (Bailey, 1931: 304).

Ranges of Adams-Bartlett Co. and Rich Brothers, Colfax Co. (Baca, 1914: 61).

San Mateo Mts. (Goldman, 1944: 463).

Haynes (Goldman, 1944: 463).

Senorito (Goldman, 1944: 463).

VULPES FULVA (Desmarest)

Red Fox

Vulpes macrourus Baird.

General remarks.--The red fox is, in New Mexico, most common in the Canadian and Transition Life Zones, but is occasionally to be found in the Upper Sonoran, also.

Clothier gives two records which are listed below and which are based on apparently reliable reports. These records have been marked by asterisks.

Bailey (1931: 297) mentions foxes in the Jemez Mountains near the head of Santa Clara Creek and in the Mogollon Mountains near the head of Willow Creek. In view of his uncertainty regarding the species, the records are not listed below.

Subspecies ascribed to New Mexico.--Vulpes fulva macroura Baird.

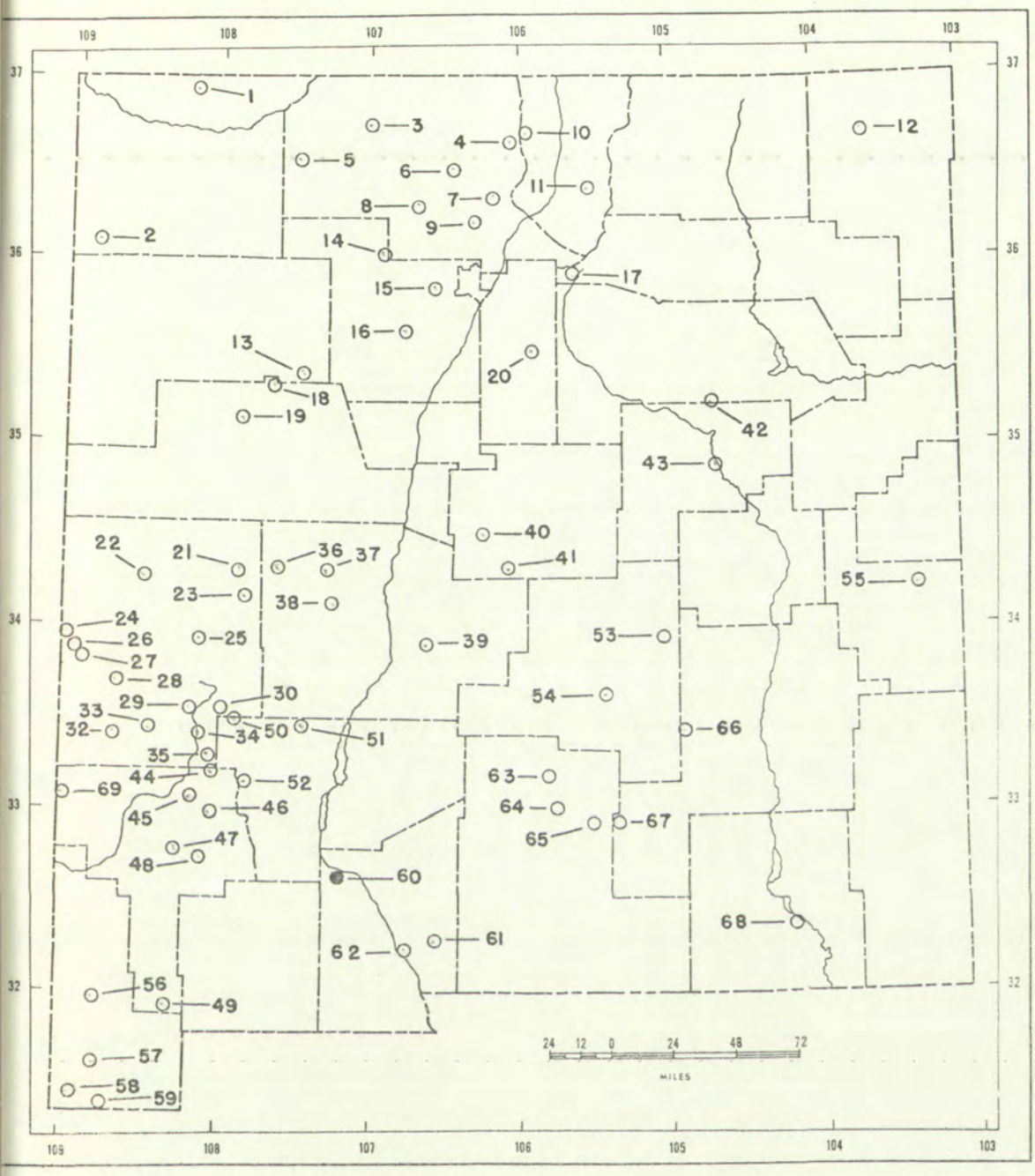

Fig. 83. Canis lupus

Records of occurence (Fig. 84).--

San Juan Co.:

1. Shiprock (Bailey, 1931: 297).

2. Fruitland (Bailey, 1931: 297).

3. Farmington (Bailey, 1931: 297).

Rio Arriba Co.:

4. 10½ mi. E Chama (UNMCV).

Taos Co.:

5. W slope Wheeler Peak (Bailey, 1931: 297); Twining (Bailey, 1931: 297).

6. Higher mts. back of Taos Pueblo (Bailey, 1931: 296).

Sandoval Co.:

8. *Between Capulin Campground and Sandia Crest, Sandia Mts. (Clothier, 1957b: 48).

Mora Co.:

7. Pecos Baldy (Bailey, 1931: 296); Truchas Peaks (Bailey, 1931: 297).

Bernalillo Co.:

9. *Between Cedar Crest and Sandia Crest, Sandia Mts. (Clothier, 1957b: 48).

Dona Ana Co.:

10. Ash Canyon, San Andres Mts. (Halloran, 1946: 158); Lostman Canyon, San Andres Mts. (Halloran, 1946: 158).

11. Organ Mts. (Halloran, 1946: 158).

Otero Co.:

12. Point of Sands, Tularosa Basin, San Andres Mts. (Halloran, 1946: 158).

Chaves Co.:

13. Cross B Ranch, 1 mi. S Railroad Mtn. (UNMCV).

Not Located:

Liberty (Bailey, 1931: 296).

VULPES MACROTIS Merriam

Kit Fox

Vulpes macrotis neomexicana Merriam.

General remarks.--Kit foxes inhabit both the Upper and Lower Sonoran Life Zones in New Mexico.

Bailey (1931: 298) mentions reports of this fox from near Fruitland, near Shiprock, and near Liberty, but apparently feels that specimens are needed to substanciate these records.

Subspecies ascribed to New Mexico.--Vulpes macrotis neomexicana Merriam.

Records of occurence (Fig. 85).--

Bernalillo Co.:

1. T11N-R1W, Sec. 9 (UNMCV).

2. Albuquerque (Bailey, 1931: 299).

Socorro Co.:

3. About 12 mi. NW Monica Spring, San Augustin Plains (Bailey, 1931: 299).

Grant Co.:

6. Near Cliff (Bailey, 1931: 298).

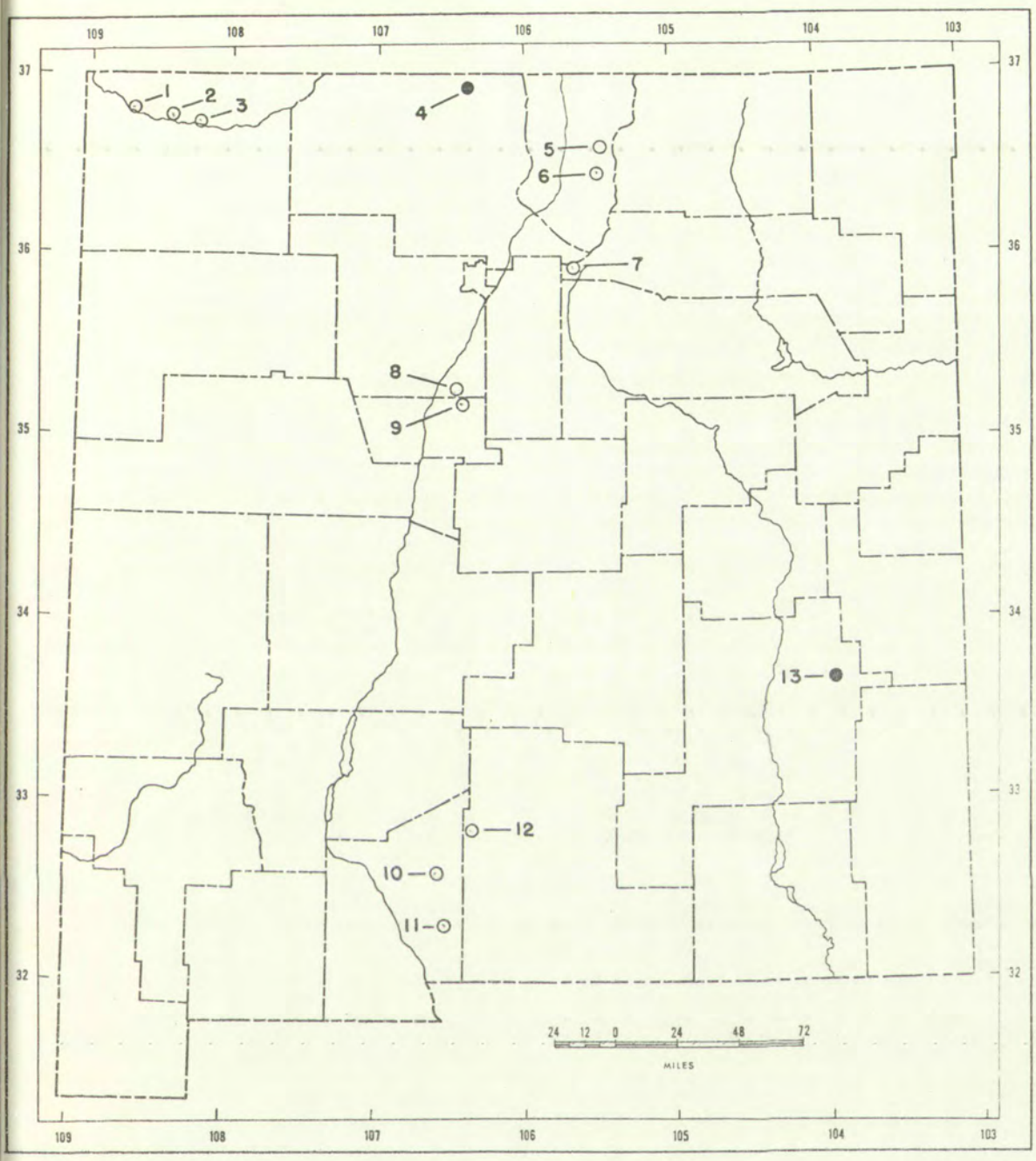

Fig. 84. Vulpes fulva

7. Faywood (Bailey, 1931: 298).

Sierra Co.:

8. Couple mi. W Engle (Bailey, 1931: 298).

Lincoln Co.:

4. Loveless Lake, 10 mi. N Capitan Mts. (Bailey, 1931: 298).

Hidalgo Co.:

9. Playas Valley (Bailey, 1931: 298).

10. Cloverdale Ranch, Animas Valley (Bailey, 1931: 298).

11. S end Animas Valley near boundary (Bailey, 1931: 299).

Luna Co.:

12. Deming (Bailey, 1931: 298).

Dona Ana Co.:

17. Baird's Ranch, San Andres Mts. (Halloran, 1946: 158); ¼ mi. E South Well, Jornada Experimental Range (Halloran, 1946: 158).

18. Parker Lake, E slope San Andres Mts. (Bailey, 1931: 298).

Otero Co.:

13. Tularosa (Bailey, 1931: 298).

14. White Sands, 10 mi. SW Tularosa (Benson, 1933: 21).

15. 9 mi. S Tularosa (Bailey, 1931: 299).

16. Jarilla (Bailey, 1931: 298).

Eddy Co.:

19. Carlsbad (Bailey, 1931: 298).

VULPES VELOX (Say)

Swift Fox

Vulpes velox velox (Say).

General remarks.--The swift fox probably is limited to the Upper Sonoran Life Zone in New Mexico.

Subspecies ascribed to New Mexico.--Vulpes velox velox (Say).

Records of occurence (Fig. 85).--

Union Co.:

1. Clayton (Seton, 1929: 554).

Quay Co.:

3. 23 mi. NW Melrose (UNMCV).

Curry Co.:

2. 5 mi. NE Clovis (UNMCV).

UROCYON CINEREOARGENTEUS (Schreber)

Gray Fox

Urocyon cinereoargenteus scottii Mearns.

General remarks.--In New Mexico, the gray fox generally inhabits the Upper Sonoran and Transition Life Zones, only occasionally being found in the Lower Sonoran.

Clothier's records are based on reports of sightings and are marked with asterisks.

Subspecies ascribed to New Mexico.--Urocyon cinereo-

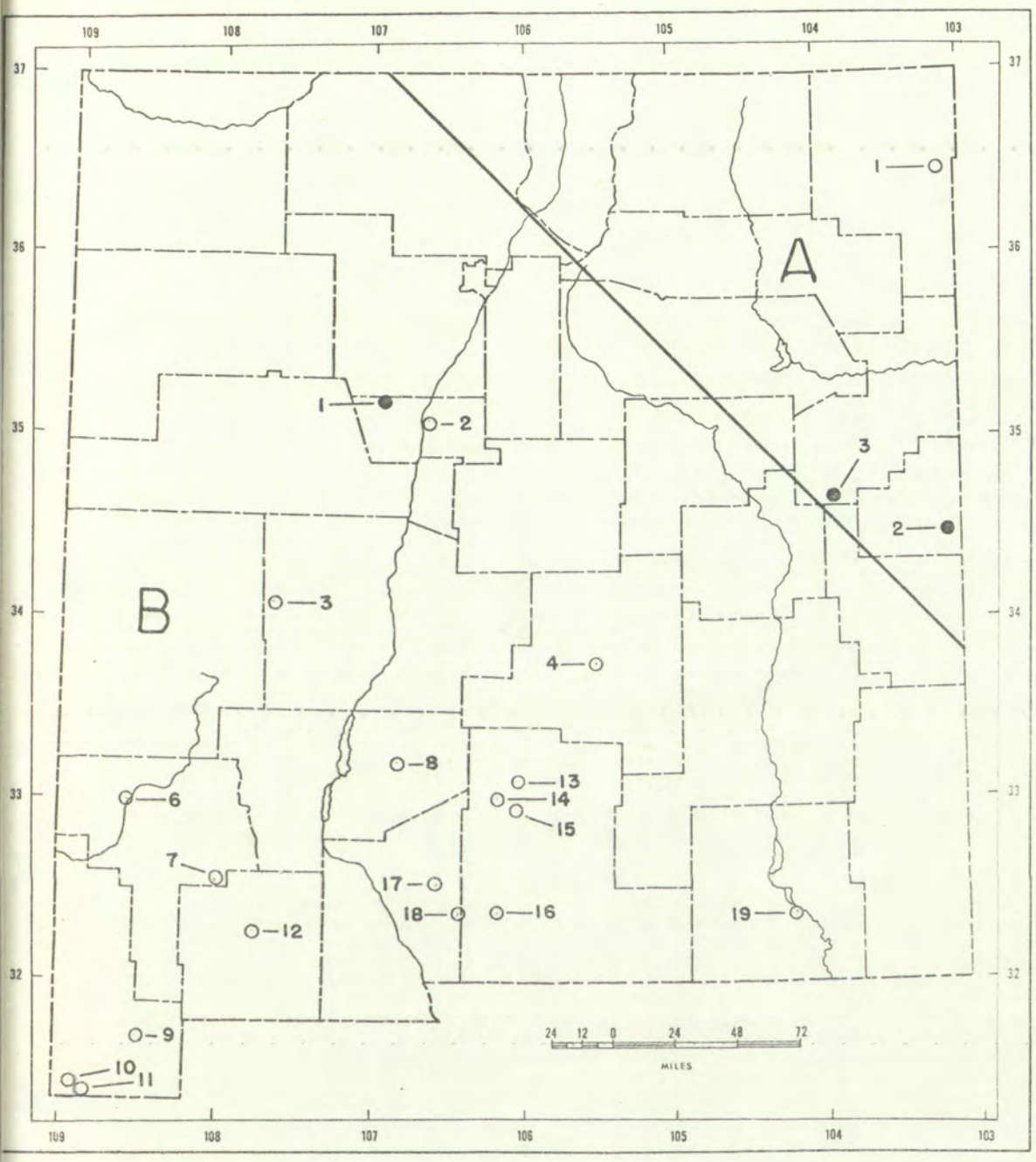

Fig. 85. A. Vulpes velox

B. Vulpes macrotis

argenteus scottii Mearns.

Records of occurence (Fig. 86).--

San Juan Co.:

1. Blanco (Bailey, 1931: 302).

2. Chuska Mts. (Bailey, 1931: 301).

Rio Arriba Co.:

3. San Juan River, T30N-R7W, Sec. 8 (UNMCV).

Taos Co.:

4. Taos (Coues and Yarrow, 1875: 57).

Sandoval Co.:

5. 3 mi. N and 2 mi. W La Ventana (UNMCV).

6. 6 mi. W La Ventana (UNMCV); 5½ mi. W La Ventana (UNMCV).

7. Jemez Mts. (Bailey, 1931: 301).

Valencia Co.:

8. Zuni Mts. (Bailey, 1931: 301).

9. 1½ mi. S Grants (Burt and Hooper, 1941: 6).

10. 8 mi. SE Paxton (Burt and Hooper, 1941: 6).

Bernalillo Co.:

11. *Just inside nat'l forest boundary on road above Sandia Park (Clothier, 1957b: 51).

12. *Los Alamitos Ranch, Cedro Canyon, Manzano Mts. (Clothier, 1957b: 51).

Catron Co.:

13. Datil Mts. (Bailey, 1931: 302).

14. Black Range, head of Mimbres (Bailey, 1931: 302).

15. Mogollon Mts. (Bailey, 1931: 301).

Torrance Co.:

16. Vicinity of Torrance (UNMCV).

Grant Co.:

17. Canyon of the Mimbres (Bailey, 1931: 302).

18. Near Redrock (Bailey, 1931: 302).

Sierra Co.:

19. Kingston (Bailey, 1931: 303).

Lincoln Co.:

20. Red Cloud Canyon, Gallinas Mts., 3 mi. S and 8½ mi. W Corona (UNMCV).

21. 4 mi. W Alto (UNMCV).

Hidalgo Co.:

22. Steins (UNMCV).

23. T34S-R21W, Sec. 6 (UNMCV).

Dona Ana Co.:

24. Ropes Springs, T19S-R4E, Sec. 8, San Andres Mts. (Halloran, 1946: 158).

28. St. Nicholas Canyon, Ash Springs, San Andres Mts. (Halloran, 1946: 158).

25. Soledad Canyon, Organ Mts. (Benson, 1933: 15).

Otero Co.:

26. Sacramento Mts. (Bailey, 1931: 301).

Eddy Co.:

27. About Carlsbad Cavern (Bailey, 1928: 95); Guadalupe Mts. (Bailey, 1931: 301).

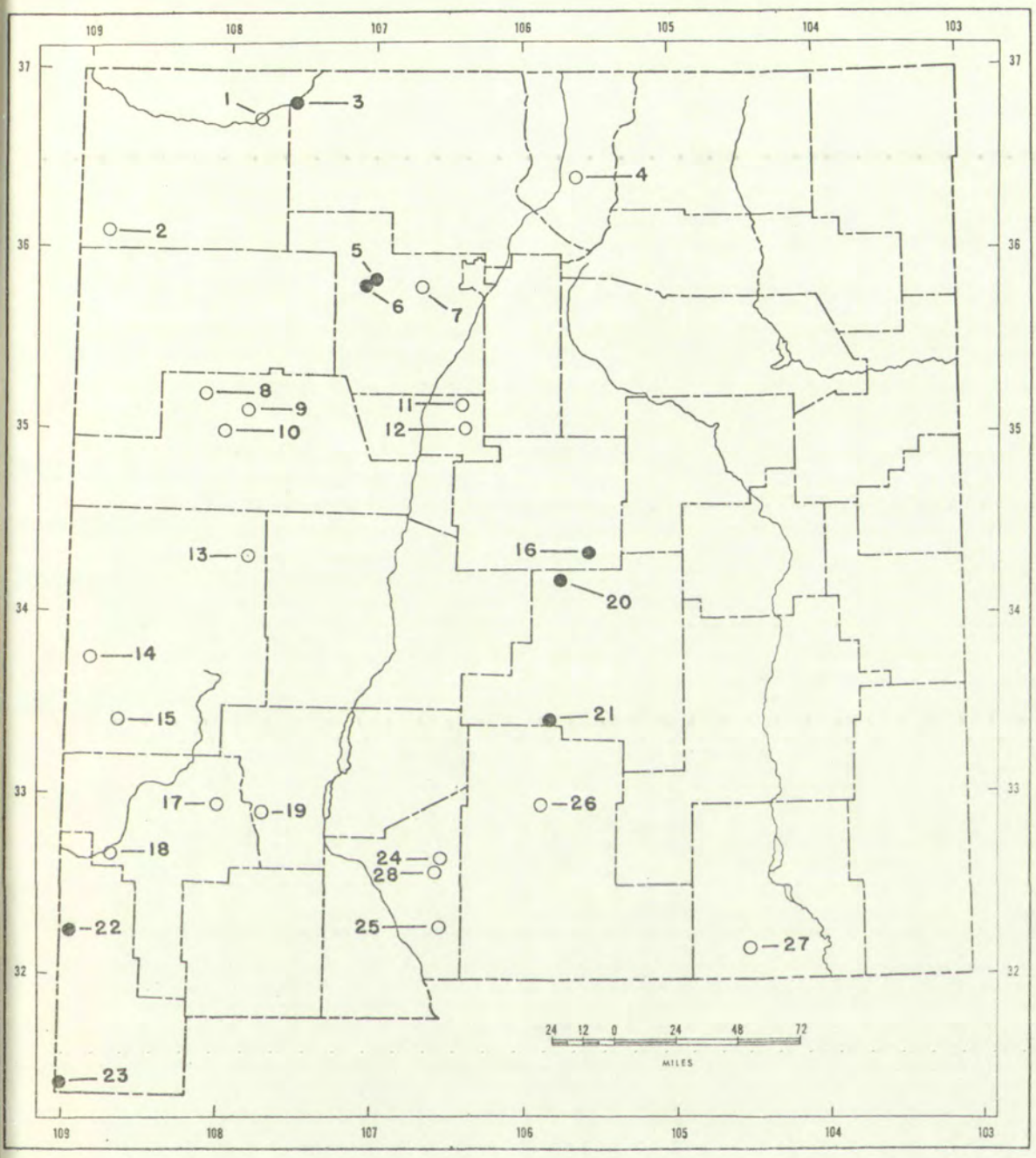

Fig. 86. Urocyon cinereoargenteus

FAMILY URSIDAE

URSUS AMERICANUS Pallas

Black Bear

Euarctos americanus amblyceps (Baird).

General remarks.--Black bears are still to be found in many, perhaps most, of the mountain ranges of the state.

The author believes that a list of specific localities would be of little significance in the case of this species and so records of occurence and distribution map have been omitted.

Subspecies ascribed to New Mexico.--Ursus americanus amblyceps Baird.

URSUS HORRIBILUS Ord

Grizzly Bear

Ursus arizonae Merriam.

Ursus nelsoni Merriam.

Ursus texensis texensis Merriam.

Ursus texensis navaho Merriam.

Ursus perturbans Merriam.

Ursus apache Merriam.

Ursus horriaeus Baird.

General remarks.--There are six named species of grizzly bear ascribed to New Mexico. These species are treated in one account for two reasons. First, the grizzly bear is extinct in New Mexico and, secondly, there is serious doubt that more than one true species is

represented among the six nominal species. In writing of the 87 named North American kinds of bear in the subgenus Ursus, Hall and Kelson (1959: 869) sum up the feelings of many mammalogists in stating that, "It seems almost certain that the majority of these are at most subspecifically distinct....the relationships of many of the named kinds probably never will be understood fully, at least for those kinds which formerly occurred in those parts of the United States where the grizzly now is extinct."

The present author prefers to use the first name (Ursus horribilus Ord) which was applied to the grizzly bears of North America, since there is but little doubt that only one species is represented. There is also some doubt that the North American grizzly bears are specifically distinct from Ursus arctos of the Old World and they have been considered conspecific in at least one study (Erdbrink, 1953).

The former distribution of the grizzly bears in New Mexico has been documented by other workers and so records of occurence and distribution map have been omitted.

Species and subspecies ascribed to New Mexico.--Ursus nelsoni Merriam; Ursus texensis texensis Merriam; Ursus texensis navaho Merriam; Ursus arizonae Merriam; Ursus perturbans Merriam; Ursus apache Merriam; Ursus horriaeus Baird.

FAMILY PROCYONIDAE

BASSARISCUS ASTUTUS (Lichtenstein)

Ringtail

Bassariscus astutus flavus Rhoads.

General remarks.--In New Mexico, the ringtail inhabits the Upper Sonoran and, to some extent, the Transition and Lower Sonoran Life Zones.

Clothier's records, except for the record at the Juan Tabo Ranger Station, are based on reports of sight records and have been marked with asterisks. To these may be added a sight record by the author from approximately 4 miles south of Tijeras, Bernalillo Co.

Subspecies ascribed to New Mexico.--Bassariscus astutus flavus Rhoads; Bassariscus astutus arizonensis Goldman.

Records of occurence (Fig. 87).--

Colfax Co.:

1. SW Colfax Co. (Hill, 1942a: 78).

Sandoval Co.:

2. *Road N Las Huertas Ranch, Sandia Mts. (Clothier, 1957b: 37).

3. *Capulin Spring, Sandia Mts. (Clothier, 1957b: 37); Sandia Cave (Ivey, 1957: 500).

Valencia Co.:

4. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 21).

5. Near Point of Malpais, T6N-R11W (Hooper, 1941a: 21).

Bernalillo Co.:

6. W side Sandia Mts. (UNMCV); Juan Tabo Ranger Station, Sandia Mts. (Clothier, 1957b: 36); *Cedar Crest, Sandia Mts. (Clothier, 1957b: 37); *Cole Springs, Sandia Mts. (Clothier, 1957b: 37); *Near San Antonio (Clothier, 1957b: 37).

7. *Los Alamitos Ranch, Cedro Canyon, Manzano Mts. (Clothier, 1957b: 38).

Catron Co.:

8. Mogollon Mts. (Bailey, 1931: 346).

Grant Co.:

10. Redrock (Goldman, 1932a: 88); Box Canyon, about 3 mi. above Redrock (Bailey, 1931: 347).

Sierra Co.:

11. Foothills of Black Range (Bailey, 1931: 346).

Lincoln Co.:

9. Capitan Mts. (UNMCV).

Dona Ana Co.:

12. San Andres Mts., Ash Canyon (Halloran, 1946: 157).

13. Soledad Canyon, Organ Mts. (Benson, 1933: 15).

Otero Co.:

14. Sacramento Mts. (Bailey, 1931: 346).

15. Near Jarilla (Bailey, 1931: 346).

Eddy Co.:

16. 25 mi. SW Carlsbad (UNMCV).

17. Carlsbad Cavern (Bailey, 1928: 105); Walnut Canyon (Bailey, 1928: 107).

18. Slaughter Canyon (Bailey, 1928: 107).

PROCYON LOTOR (Linnaeus)

Raccoon

Procyon lotor mexicanus Baird.

General remarks.--In New Mexico, raccoons are found along waterways in the Lower and Upper Sonoran and in the Transition Life Zones.

The record from Los Pinos River is based on skeletal material.

Subspecies ascribed to New Mexico.--Procyon lotor mexicanus Baird; Procyon lotor pallidus Merriam.

Records of occurence (Fig. 88).--

San Juan Co.:

1. Los Pinos River, T30N-R7W, SW ¼ Sec. 8 (UNMCV); San Juan River Valley (Bailey, 1931: 348).

Rio Arriba Co.:

2. Velarde (Goldman, 1950: 54).

3. Rinconada (Goldman, 1950: 54).

4. Alcalde (Goldman, 1950: 54).

Colfax Co.:

5. Bear Canyon, Raton Range (Bailey, 1931: 349).

6. Cimarron River, 6300 ft. (Hill, 1942a: 77).

Valencia Co.:

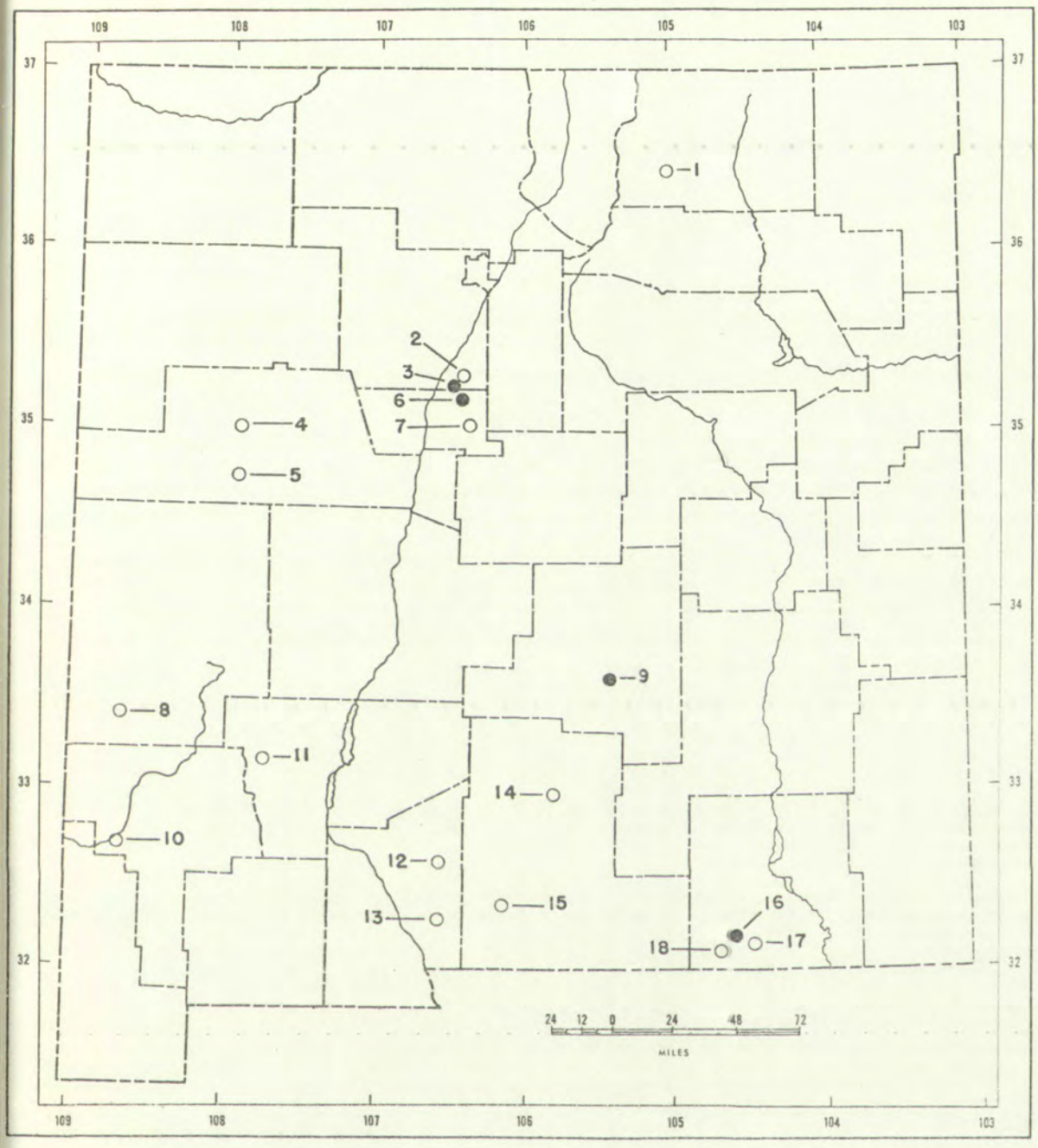

Fig. 87. Bassariscus astutus

7. San Mateo Mts. (Hooper, 1941a: 21).

Bernalillo Co.:

8. Rio Grande bottom (Ivey, 1957: 500).

Socorro Co.:

9. Mouth of Water Canyon, Magdalena Mts. (Bailey, 1931: 349).

Guadalupe Co.:

10. Santa Rosa (Goldman, 1950: 54).

Grant Co.:

11. Gila Nat'l Forest (Goldman, 1950: 54).

12. Redrock (Goldman, 1950: 54).

Sierra Co.:

13. Chloride (Goldman, 1950: 54).

Luna Co.:

14. Deming, along Mimbres River (Bailey, 1931: 349).

Eddy Co.:

15. Carlsbad (Bailey, 1931: 348).

16. Black River (Bailey, 1928: 105).

Not Located:

Senega (Bailey, 1931: 349).

NASUA NARICA (Linnaeus)

Coati

Nasua narica pallida Allen.

General remarks.--Of the records given below, those from Pine Canyon and from the vicinity of Heart Bar Ranch are associated with specimens.

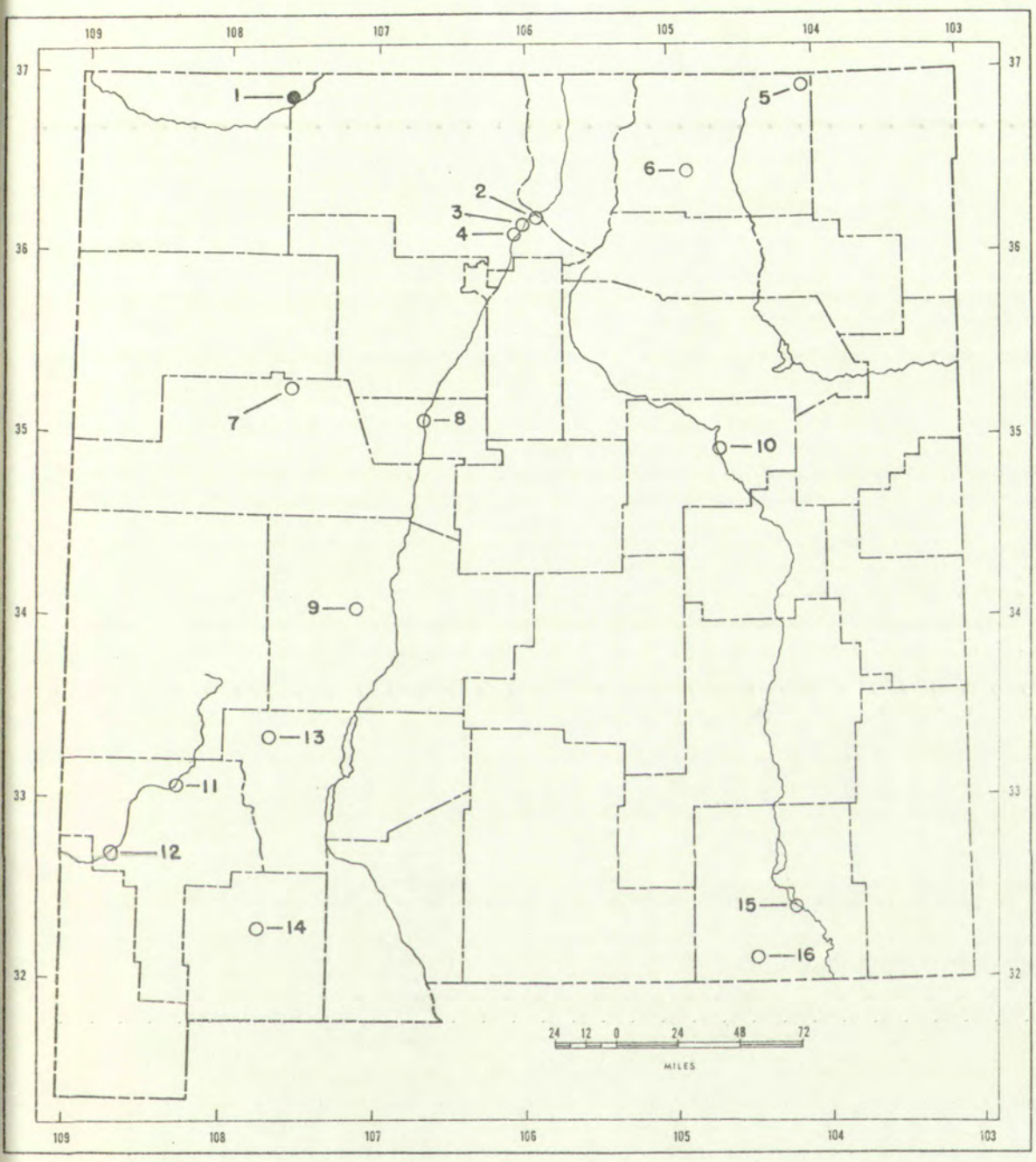

Fig. 88. Procyon lotor

To the records listed below, the author can add a report of a coati killed on the Pendleton Ranch at Cloverdale, Hidalgo Co., probably sometime in the spring of 1957.

Subspecies ascribed to New Mexico.--Nasua narica molaris Merriam.

Records of occurence (Fig. 89).--

Grant Co.:

1. Little Creek, near Heart Bar Ranch (Personal communication from Homer Pickens to James S. Findley).

Hidalgo Co.:

2. O.K. Camp of Victoria Land and Cattle Co., about 25 mi. S and E Animas (Taylor, 1934: 318).

3. Yarber Ranch, 4 mi. SE Culberson's Ranch, S end Animas Valley (Bailey, 1931: 347).

Not Located:

Pine Canyon, Animas Mts. (Taber, 1940: 13).

FAMILY MUSTELIDAE

MARTES AMERICANA (Turton)

Marten

Martes caurina origenes (Rhoads).

General remarks.--The marten appears to be limited fairly strictly to the Canadian Life Zone in New Mexico.

Subspecies ascribed to New Mexico.--Martes americana origenes (Rhoads).

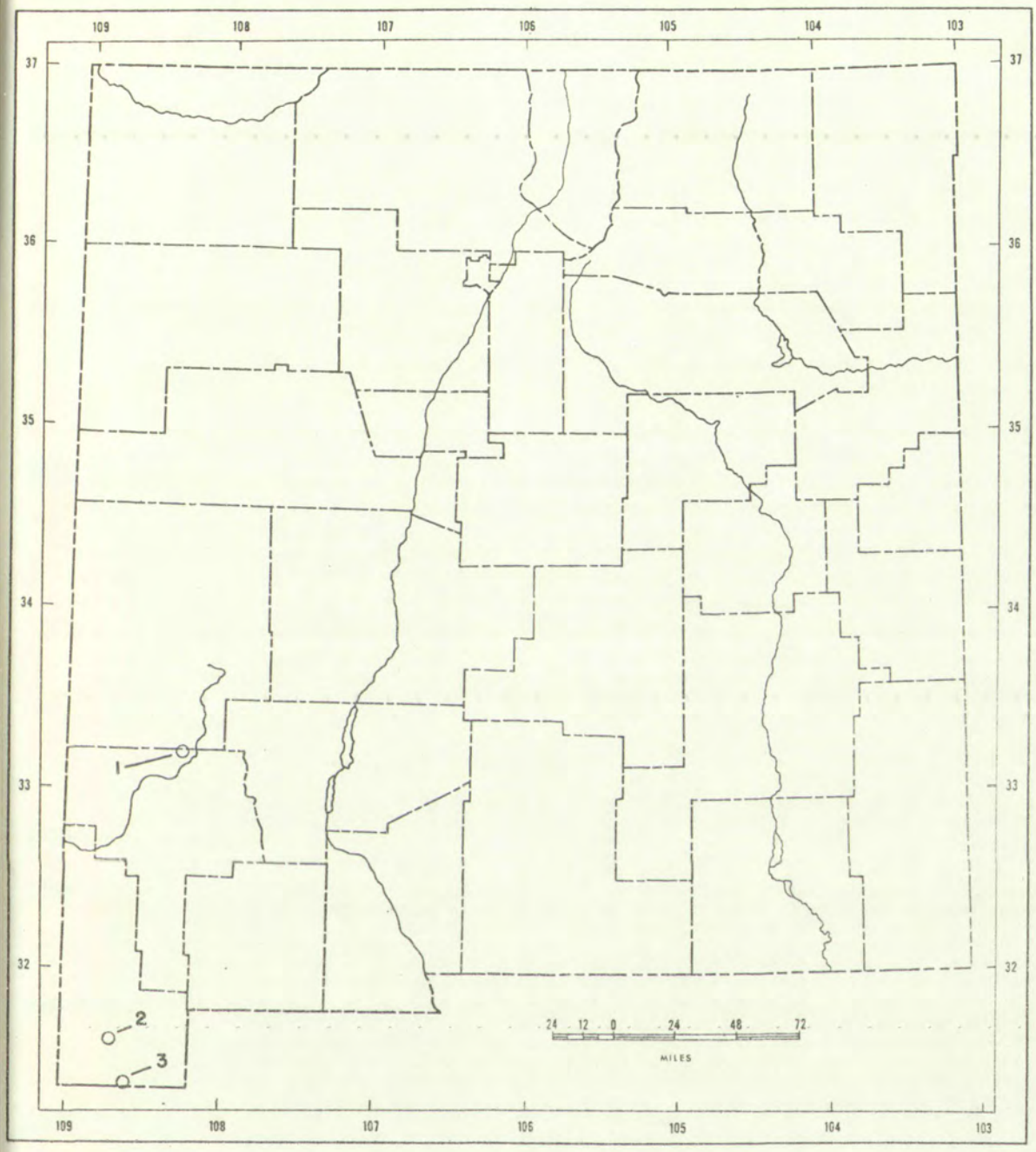

Fig. 89. Nasua narica

Records of occurence (Fig. 90).--

Rio Arriba Co.:

1. Near Chama, just S Colo. line in San Juan Mts. (Bailey, 1931: 322).

Taos Co.:

2. Twining (Bailey, 1931: 322).

3. Taos (Bailey, 1931: 322).

Mora Co.:

4. Near Truchas Peaks (Bailey, 1931: 322).

MUSTELA ERMINEA Linnaeus

Ermine

Mustela cicognanii leptus (Merriam).

General remarks.--In New Mexico, the ermine may be presumed to inhabit the Canadian Life Zone and, probably, the Hudsonian.

Ivey's record is based on an observation, not on a captured specimen.

Subspecies ascribed to New Mexico.--Mustela erminea muricus (Bangs).

Records of occurence (Fig. 91).--

Taos Co.:

1. A few mi. E Twining (Bailey, 1931: 329); Twining, 10,700 ft. (Hall, 1951: 164).

Sandoval Co.:

2. 9 mi. E Cuba, 9000 ft. (Hall, 1951: 164).

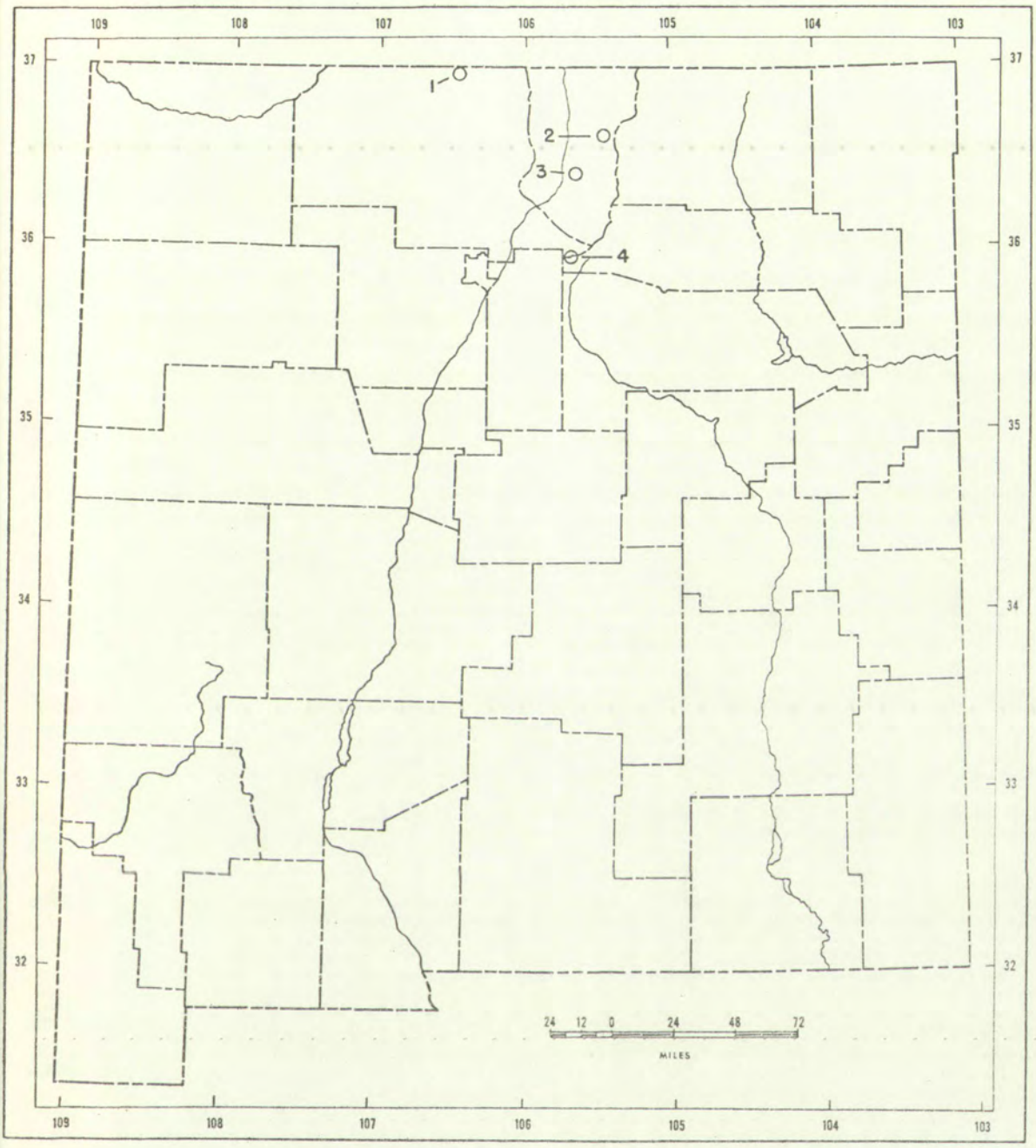

Fig. 90. Martes americana

Bernalillo Co.:

3. *Sandia Mts. (Ivey, 1957: 500).

Santa Fe Co.:

4. Saddle S Santa Fe Baldy, 11,000 ft., Santa Fe Range (Hall, 1951: 164).

MUSTELA FRENATA Lichtenstein

Long-tailed Weasel

Mustela frenata neomexicana (Barber and Cockerell).

Mustela arizonensis (Mearns).

General remarks.--The long-tailed weasel may be expected in the Lower and Upper Sonoran, Transition, and Canadian Life Zones in New Mexico.

A number of the records given below are based on reports of local residents or on sightings only. Such records are marked with an asterisk.

Subspecies ascribed to New Mexico.--Mustela frenata arizonensis (Mearns); Mustela frenata neomexicanus (Barber and Cockerell); Mustela frenata nevadensis Hall.

Records of occurence (Fig. 92).--

San Juan Co.:

1.. *Shiprock (Bailey, 1931: 328).

2. *Fruitland (Bailey, 1931: 328).

3. Near Farmington (Bailey, 1931: 328).

Taos Co.:

4. Twining (Bailey, 1931: 328); 2 mi. N Twining (Hall, 1951: 290).

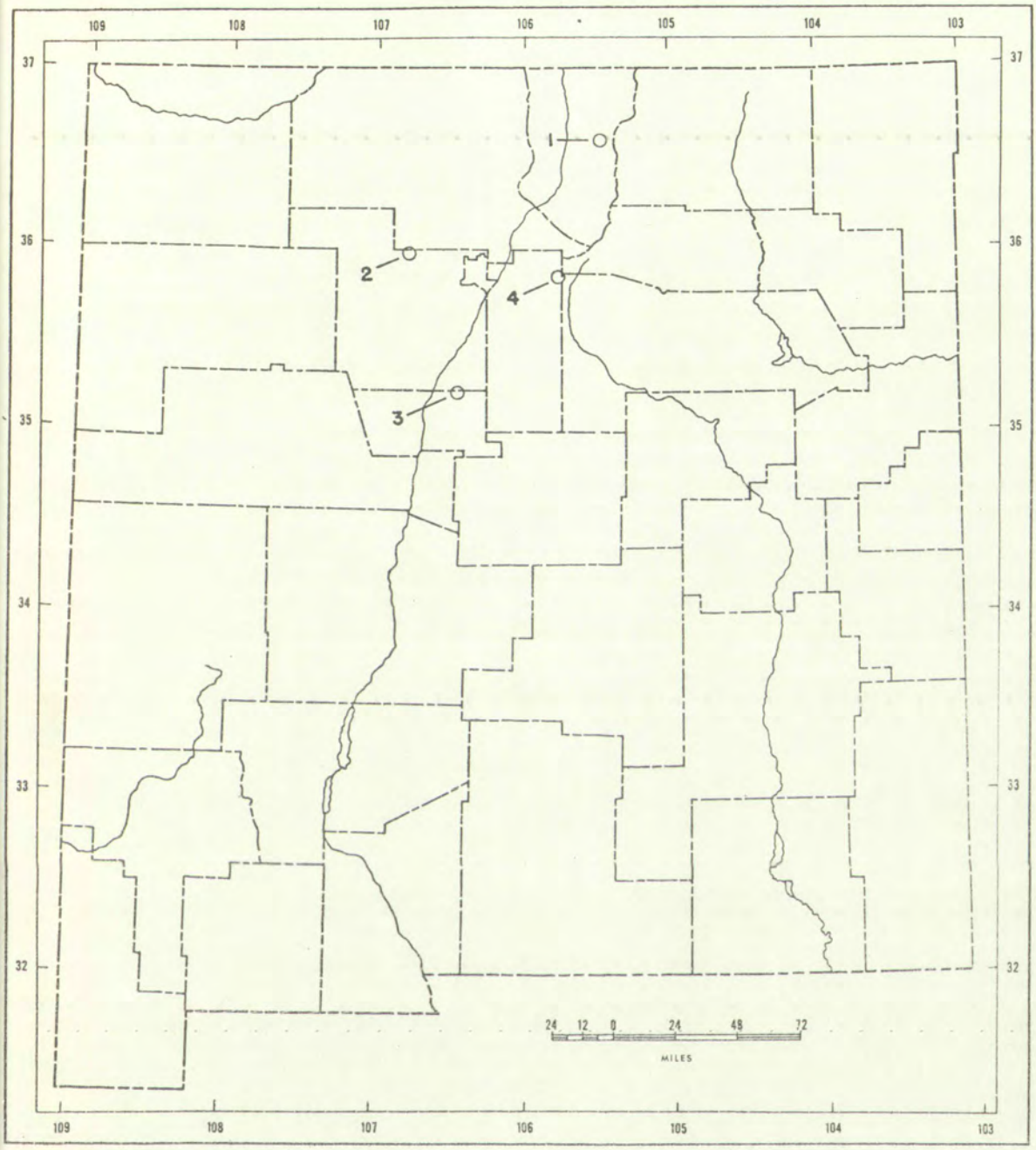

Fig. 91. Mustela erminea

5. Taos (Hall, 1951: 290).

Colfax Co.:

6. SW Colfax Co. (Hill, 1942a: 78).

Mora Co.:

7. Pecos Baldy (Bailey, 1931: 328).

Valencia Co.:

8. Vicinity lava beds near Mt. Taylor (Hooper, 1941a: 21).

Bernalillo Co.:

9. Alameda, W bank Rio Grande (UNMCV).

10. 3 mi. NW Albuquerque (Hall, 1951: 338); Albuquerque (UNMCV).

Santa Fe Co.:

11. Santa Fe Ski Basin (Holdenried and Morlan, 1956: 379).

12. *5 mi. due S Santa Fe (Seton, 1931: 166).

13. Near Santa Fe Municipal Airport (Holdenried and Morlan, 1956: 379); 11 mi. SW Santa Fe (Holdenried and Morlan, 1956: 379).

San Miguel Co.:

14. 8000 ft., above Willis, Pecos River, Forest Reserve (Hall, 1951: 290); Willis, Upper Pecos (Bailey, 1931: 328).

15. Ribera, Upper Pecos (Bailey, 1931: 328).

Catron Co.:

16. Willow Creek, 8500 ft., Mogollon Mts. (Bailey,

1931: 326).

Grant Co.:

17. *Redrock (Bailey, 1931: 326).

Sierra Co.:

18. *Kingston (Bailey, 1931: 326).

Lincoln Co.:

19. South Fork Eagle Creek, White Mts. (Hall, 1951: 338).

Dona Ana Co.:

20. *Garfield (Bailey, 1931: 326).

21. Armstrong's Lake, near Mesilla (Bailey, 1931: 326); *Las Cruces (Bailey, 1931: 326); Mesilla Park (Bailey, 1931: 326).

22. Berino (Bailey, 1931: 326).

Otero Co.:

23. Cloudcroft (Hall, 1951: 338).

Chaves Co.:

24. Pecos River, 10 mi. E Roswell (Hall, 1951: 338).

25. Dexter (Hall, 1951: 338).

Eddy Co.:

26. Near Carlsbad Cavern (Bailey, 1928: 97).

Not Located:

Liberty (Bailey, 1931: 328).

Eden Creek, 7800 ft., White Mts. (Bailey, 1931: 326).

MUSTELA NIGRIPES (Audubon and Bachman)

Black-footed Ferret

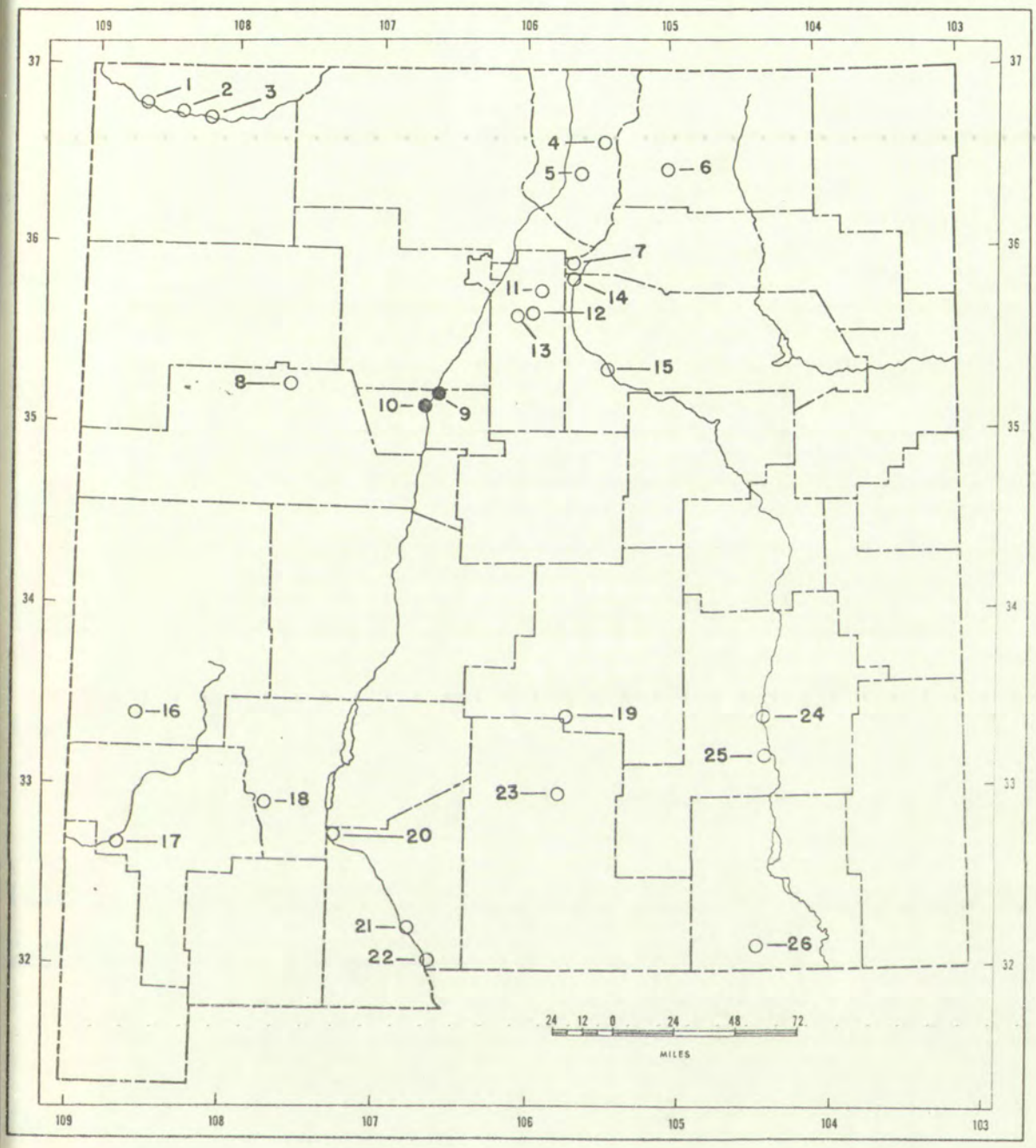

Fig. 92. Mustela frenata

Mustela nigripes (Audubon and Bachman).

General remarks.--The black-footed ferret is extremely rare and possibly extinct in New Mexico.

Those record stations marked with an asterisk have been recorded on the basis of reports or sight records.

Subspecies ascribed to New Mexico.--Mustela nigripes is a monotypic species.

Records of occurence (Fig. 93).--

McKinley Co.:

1. *Near Old Fort Wingate (Bailey, 1931: 326).

Valencia Co.:

2. Near San Mateo, 10 mi. NE (sic) Mt. Taylor (Bailey, 1931: 326).

3. 2 mi. N Bluewater (Bailey, 1931: 326).

4. Agua Fria (Hooper, 1941a: 21); Near Agua Fria (Aldous, 1940: 23).

Catron Co.:

5. *14 mi. N Luna (Bailey, 1931: 326).

6. 15 mi. N Reserve (Bailey, 1931: 326); *Centerfire Creek, 10 mi. NE Luna (Bailey, 1931: 326).

7. Garcias Ranch, 75 mi. SW Magdalena (Bailey, 1931: 326).

Guadalupe Co.:

8. Santa Rosa (Bailey, 1931: 326).

MUSTELA VISON Schreber

Mink

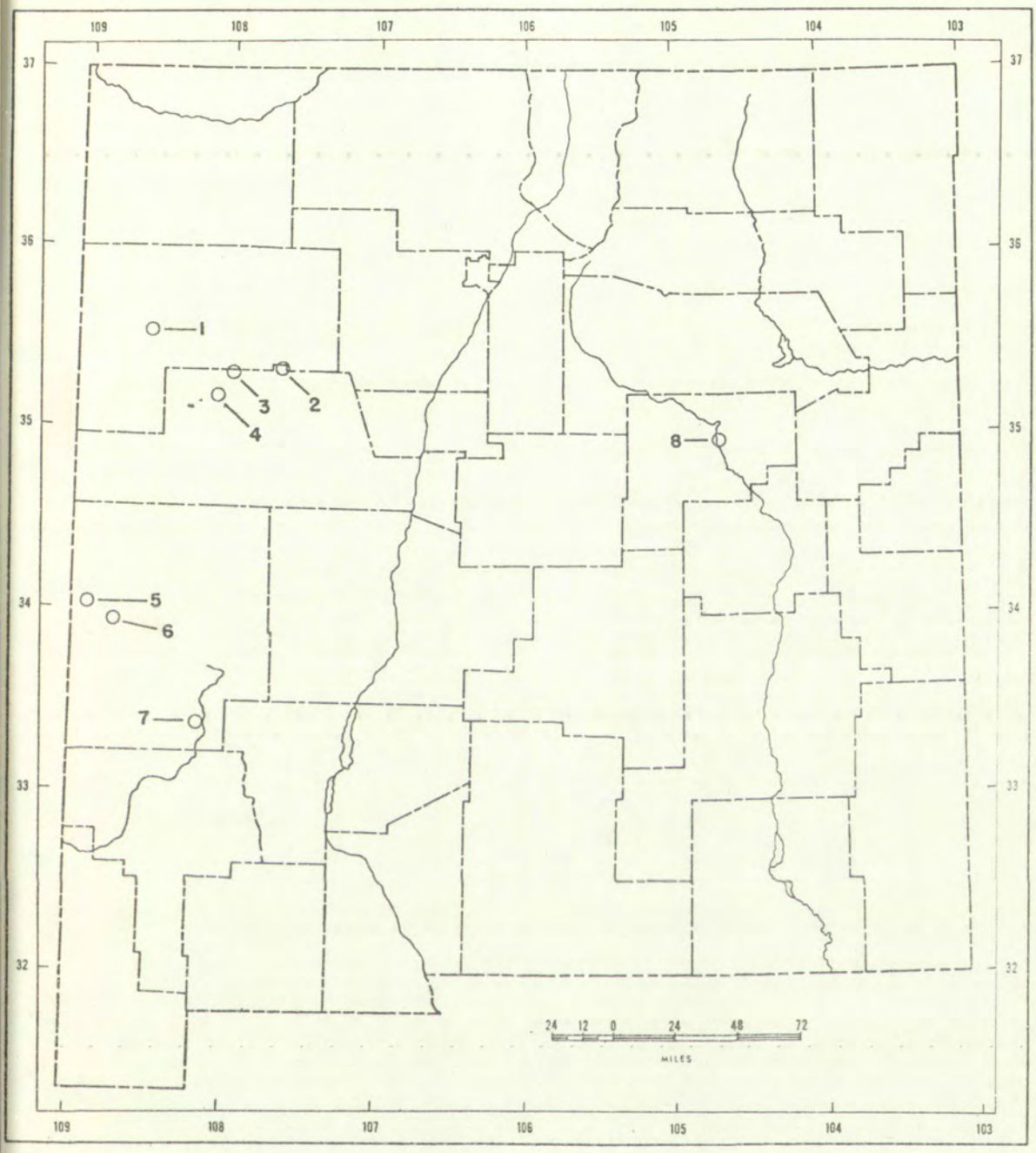

Fig. 93. Mustela nigripes

Lutreola vison energumenos (Bangs).

General remarks.--In New Mexico, mink have apparently been taken in the Upper Sonoran and Transition Life Zones and probably also in the Canadian Life Zone.

A number of Bailey's records are not based on specimens. These localities have been marked with asterisks.

Subspecies ascribed to New Mexico.--Mustela vison energumenos (Bangs).

Records of occurence (Fig. 94).--

San Juan Co.:

1. *Vicinity of Laplata (Bailey, 1931: 325).

2. *Fruitland (Bailey, 1931: 325).

3. Animas and San Juan Rivers, near Farmington (Bailey, 1931: 325).

Taos Co.:

4. *Near Costilla (Bailey, 1931: 324).

5. Costilla River, 9600 ft., Sangre de Cristo Mts. (Bailey, 1931: 324).

Colfax Co.:

6. SW Colfax Co. (Hill, 1942a: 78).

Santa Fe Co.:

7. Rio Grande, above Santa Fe (Bailey, 1931: 324).

San Miguel Co.:

8. Upper Pecos River, Willis (Bailey, 1931: 324); *Pecos River Mts. (Bailey, 1931: 324).

9. Las Vegas (Stone and Rehn, 1903: 25).

Not Located:

*Liberty (Bailey, 1931: 325).

GULO LUSCUS (Linnaeus)

Wolverine

Gulo luscus (Linnaeus).

General remarks.--There are no specimens to attest to the presence of the wolverine in New Mexico, either at present or in historic times.

TAXIDEA TAXUS (Schreber)

Badger

Taxidea taxus berlandieri Baird.

General remarks.--According to Bailey (1931: 343), the badger may be present, at least seasonally, in any of the life zones of New Mexico.

Although some of the records given below are based on observations, etc., they have not been set aside from records based on specimens collected because of the ease with which the badger may be identified.

Subspecies ascribed to New Mexico.--Taxidea taxus berlanieri Baird.

Records of occurence (Fig. 95).--

San Juan Co.:

1. M.A. Lucero Ranch, W side Los Pinos River near confluence with the San Juan (UNMCV).

2. Throughout the San Juan Valley (Bailey, 1931: 345).

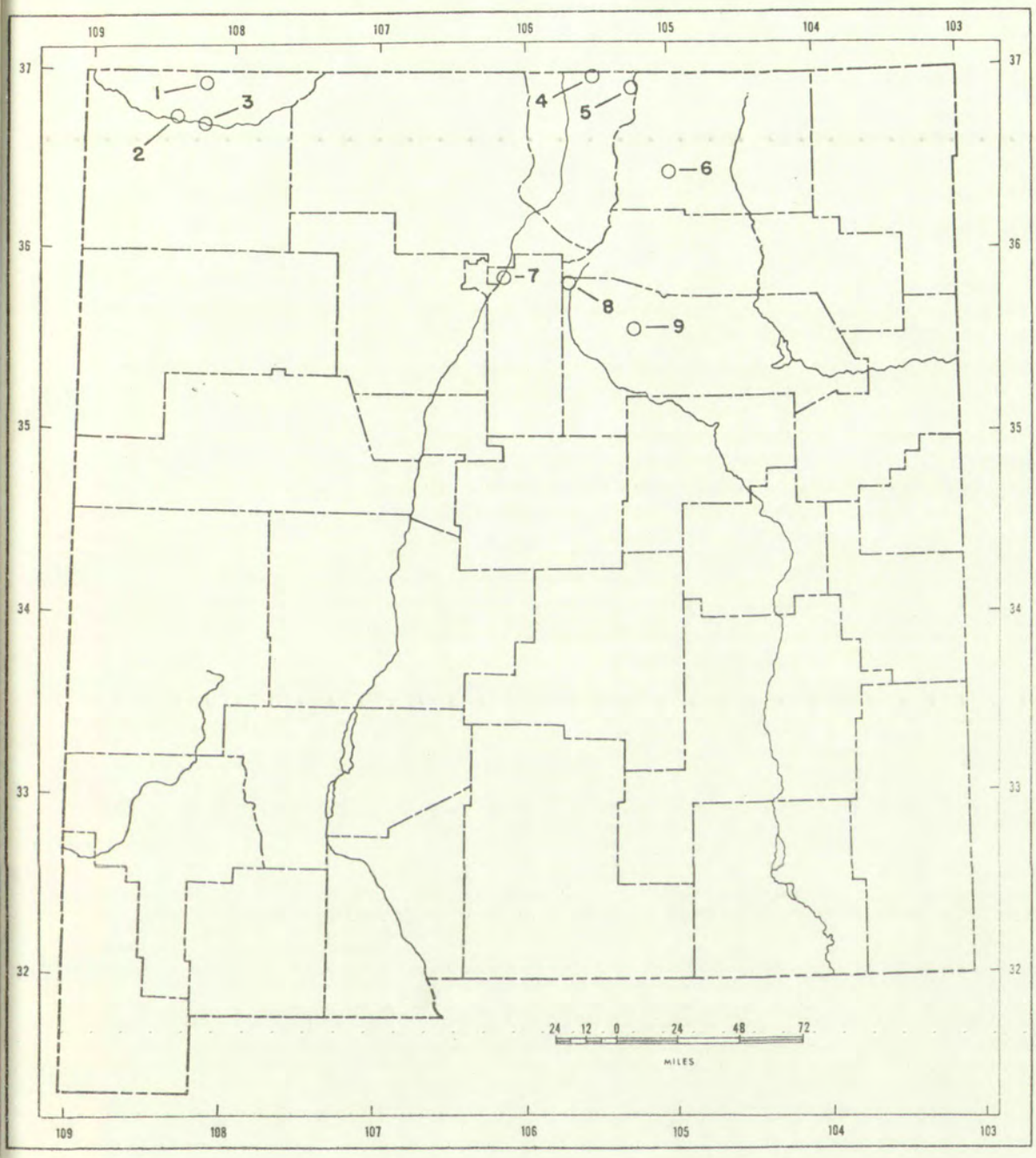

Fig. 94. Mustela vison

Rio Arriba Co.:

3. Lake Burford (Bailey, 1931: 345).

Taos Co.:

4. Cantonment Burgwyn (Mearns, 1891: 240).

Colfax Co.:

5. SW Colfax Co. (Hill, 1942a: 78).

McKinley Co.:

6. Wingate (Bailey, 1931: 345).

7. 10 mi. N San Mateo (Hooper, 1941a: 22).

Sandoval Co.:

8. Near Juan Tabo (Clothier, 1957b: 46).

Bernalillo Co.:

9. Alluvial slope W Albuquerque (Ivey, 1957: 501).

10. NE Albuquerque, near edge of town (Ivey, 1957: 501).

30. Hwy 66 near Santa Fe Co. line (Ivey, 1957: 501).

Santa Fe Co.:

11. Santa Fe (Holdenried, 1957: 348).

Catron Co.:

12. Jewett Gap, Datil Mts. (Bailey, 1931: 344).

Torrance Co.:

13. Manzano Mts. (Clothier, 1957b: 46).

14. 10 mi. E and 2 mi. S Willard (UNMCV).

15. 15 mi. NE Corona (UNMCV).

Guadalupe Co.:

16. Near Cuervo (Bailey, 1931: 345).

Sierra Co.:

17. Fairview (Bailey, 1931: 344).

18. 2½ mi. S Truth or Consequences (UNMCV).

19. Lake Valley (Bailey, 1931: 343).

Lincoln Co.:

20. Hunt's Ranch, base Capitan Mts. (Bailey, 1931: 345).

Hidalgo Co.:

21. Vicinity Rodeo (Cahalane, 1939: 425).

22. 2 mi. S Cloverdale, Animas Valley (Harris, 1957).

23. 2 mi. W San Luis Pass, 1 mi. S Hwy 79 (UNMCV).

Dona Ana Co.:

24. San Andres Canyon, San Andres Mts., T18S-R4E (Halloran, 1946: 158).

25. St. Nicholas Canyon, San Andres Mts. (Halloran, 1946: 158).

Otero Co.:

26. 10 mi. SW Tularosa (Benson, 1933: 21).

27. 10 mi. W Alamogordo (Dice, 1930: 22).

28. White Sands, 18 mi. SW Alamogordo (Benson, 1933: 21).

Eddy Co.:

29. Near Carlsbad (Bailey, 1931: 344).

Not Located:

Washington Ranch, Eddy Co. (UNMCV).

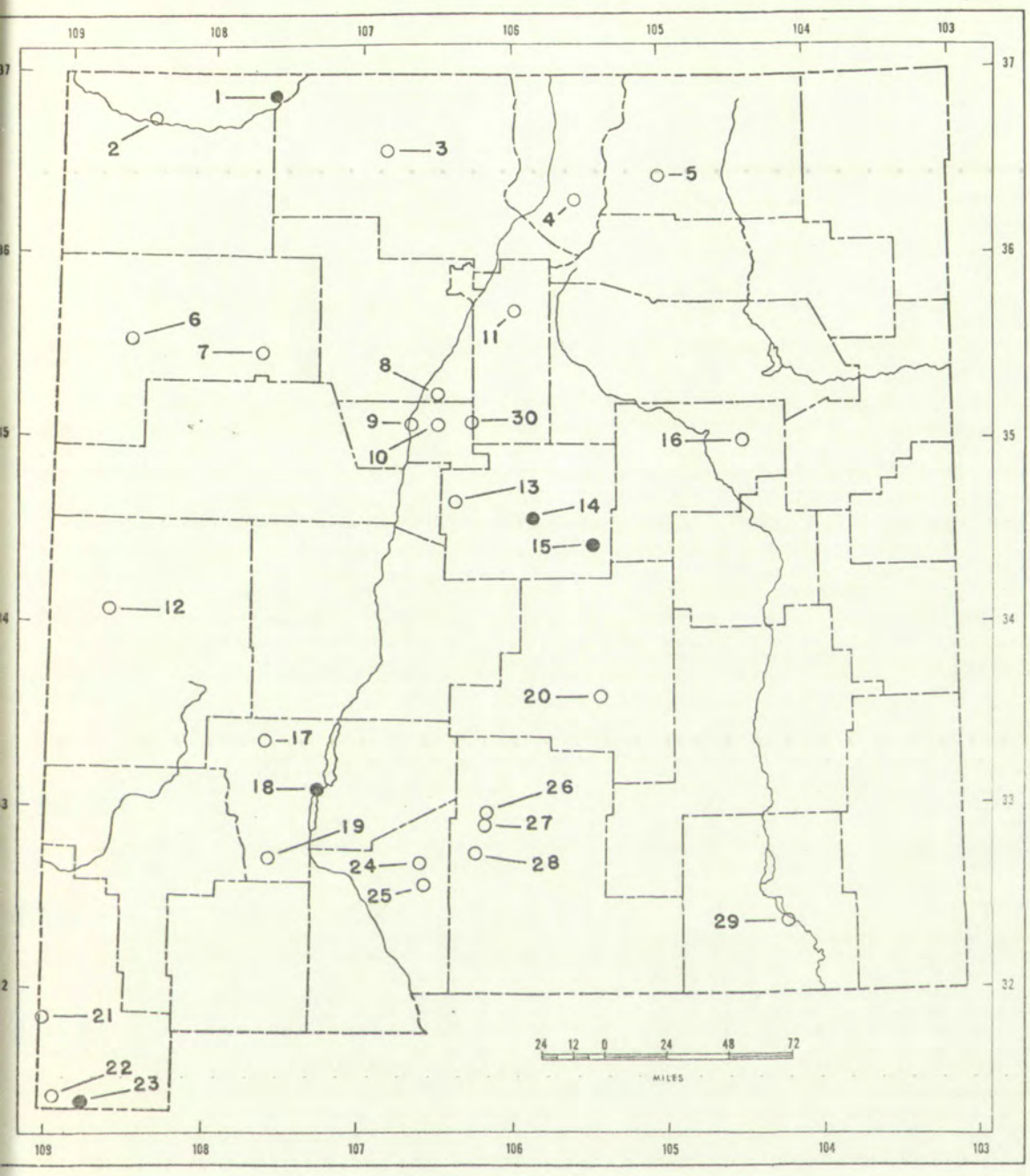

Fig. 95. Taxidea taxus

SPILOGALE GRACILIS Merriam

Western Spotted Skunk

Spilogale arizonae Mearns.

Spilogale leucoparia Merriam.

Spilogale tenuis Howell.

Spilogale ambigua Mearns.

General remarks.--Spilogale gracilis occurs in the Lower and Upper Sonoran Life Zones and probably also the Transition Life Zone in New Mexico.

Subspecies ascribed to New Mexico.--Spilogale gracilis gracilis Merriam; Spilogale gracilis tenuis Howell.

Records of occurence (Fig. 96).--

San Juan Co.:

1. Los Pinos River, T30N-R7W, NW ¼ Sec. 7 (UNMCV).

Rio Arriba Co.:

2. Chama (Bailey, 1931: 342).

Colfax Co.:

3. Bear Canyon, near Trinchera Pass (Bailey, 1931: 341).

4. SW Colfax Co. (Hill, 1942a: 78).

Union Co.:

5. Oak Canyon, 5 mi. N Folsom (Howell, 1906: 22).

6. E base Sierra Grande (Bailey, 1931: 341).

Catron Co.:

7. Glenwood (Bailey, 1931: 339).

Torrance Co.:

8. 4 mi. NE Corona (UNMCV).

Grant Co.:

9. Cliff (Bailey, 1931: 339).

10. Head of Rio Mimbres (Bailey, 1931: 339).

11. Burro Mts. (Bailey, 1931: 339).

12. Redrock (Bailey, 1931: 339).

13. Hachita (Bailey, 1931: 338).

Hidalgo Co.:

14. Animas Peak (Bailey, 1931: 339).

Luna Co.:

15. Deming (Bailey, 1931: 338).

16. Little Florida Mts. (Bailey, 1931: 339).

Otero Co.:

17. Malpais Spring, Tularosa Basin (Halloran, 1946: 157).

18. Tularosa (Howell, 1906: 21).

Eddy Co.:

19. Carlsbad Cavern (Bailey, 1928: 101).

MEPHITIS MEPHITIS (Schreber)

Striped Skunk

Mephitis mesomelas varians Gray.

Mephitis mesomelas estor Merriam.

Mephitis hudsonica Richardson.

General remarks.--In New Mexico, the striped skunk inhabits the Lower and Upper Sonoran, Transition, and, to some degree, Canadian Life Zones.

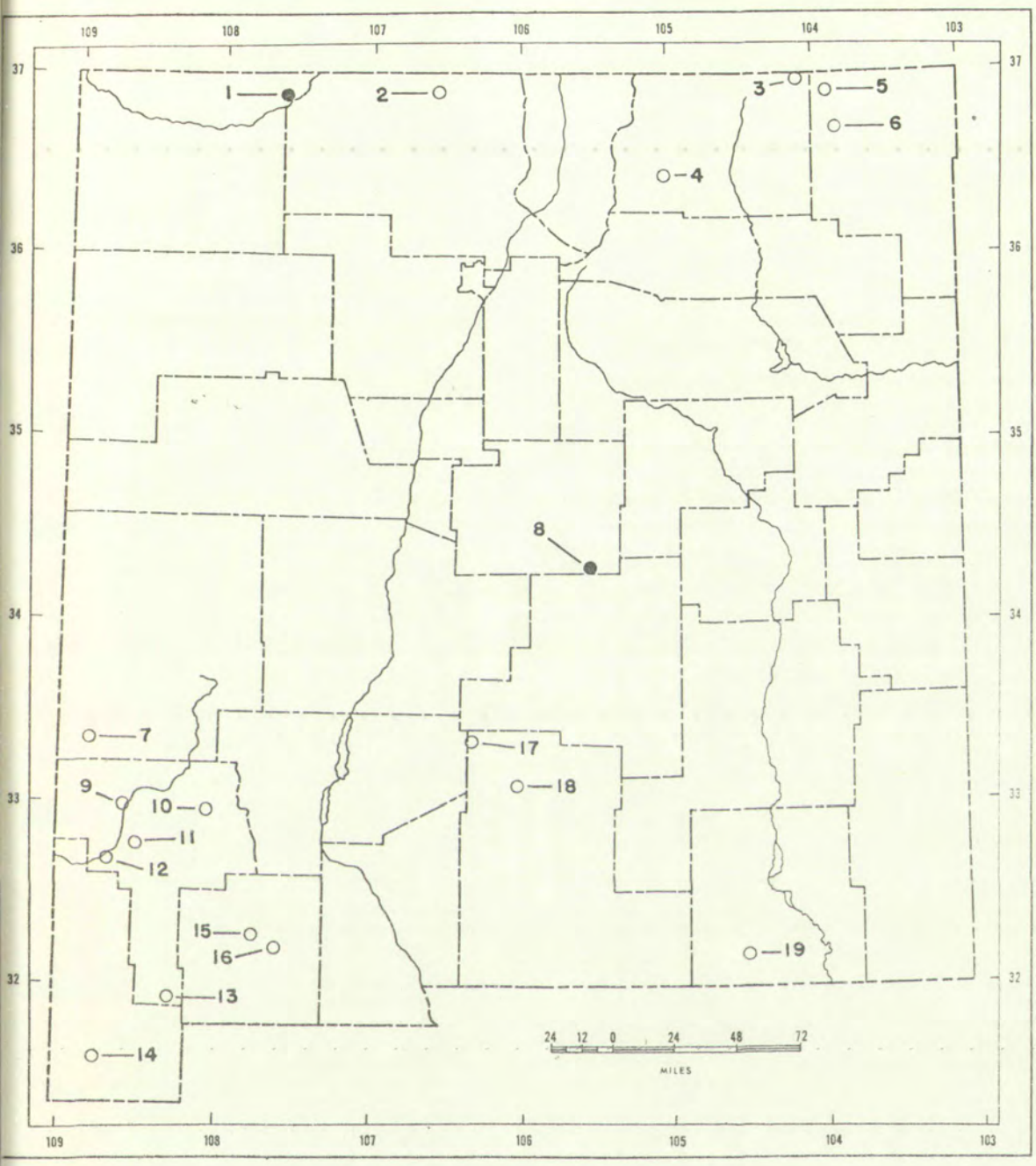

Fig. 96. Spilogale gracilis

Several of Bailey's records are based on reports and are marked by asterisks.

Subspecies ascribed to New Mexico.--*Mephitis mephitis estor* Merriam; *Mephitis mephitis hudsonica* Richardson; *Mephitis mephitis varians* Gray.

Records of occurence (Fig. 97).--

San Juan Co.:

1. Los Pinos River, T30N-R7W, NW ¼ Sec. 7 (UNMCV); Los Pinos River, T30N-R7W, SW ¼ Sec. 8 (UNMCV).

2. Shiprock (Bailey, 1931: 333).

3. Fruitland (Bailey, 1931: 332).

4. Blanco (Bailey, 1931: 333).

5. Chuska Mts. (Bailey, 1931: 333).

Rio Arriba Co.:

6. *San Juan Mts. (Bailey, 1931: 335).

7. Lake Burford (Bailey, 1931: 335).

Colfax Co.:

8. Moreno Valley, 7800 ft., E slope Taos Pass (Bailey, 1931: 335).

9. Plains near Cimarron (Hill, 1942a: 78).

McKinley Co.:

10. Wingate (Bailey, 1931: 338).

Sandoval Co.:

11. *Jemez Mts. (Bailey, 1931: 335).

Mora Co.:

12. Halls Peak (Howell, 1901: 32).

Valencia Co.:

13. ½ mi. NE La Mosca Peak, Mt. Taylor (UNMCV).

14. Zuni Mts. (Bailey, 1931: 332).

15. San Raphael (Bailey, 1931: 333).

16. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 22).

17. Foot of lava bluffs 2 mi. W and 1½ mi. S Los Lunas (UNMCV).

Bernalillo Co.:

18. E side Rio Grande Bridge, Alameda (UNMCV).

19. San Antonio, Sandia Mts. (Clothier, 1957b: 41); Near Cedar Crest, Sandia Mts. (Clothier, 1957b: 40); Near La Madera, Sandia Mts. (Clothier, 1957b: 40).

20. Mesa E Albuquerque, 3/4 mi. W base Sandia Mts. (Clothier, 1957b: 41).

21. About 2 mi. W Rio Grande (UNMCV); 2 mi. N Albuquerque on Rio Grande (UNMCV).

San Miguel Co.:

22. *Near headwaters of the Pecos (Bailey, 1931: 335).

Catron Co.:

23. Luna Valley (Bailey, 1931: 333).

24. Joseph (Bailey, 1931: 333).

25. Mogollon Mts. (Bailey, 1931: 332).

26. Alma (Bailey, 1931: 333).

27. Pleasanton (Bailey, 1931: 333); Glenwood (Bailey, 1931: 333).

28. Dry Creek (Bailey, 1931: 333).

Socorro Co.:

29. Water Canyon, Magdalena Mts. (Bailey, 1931: 331).

Torrance Co.:

30. Tajique Canyon, Manzano Mts. (Clothier, 1957b: 41).

31. 10 mi. E and 2 mi. S Willard (UNMCV).

Grant Co.:

32. Burro Mts. (Bailey, 1931: 333).

Sierra Co.:

33. Salinas Peak, N slope (Bailey, 1931: 332).

Lincoln Co.:

34. Capitan Mts. (Bailey, 1931: 335).

Hidalgo Co.:

35. Animas Mts. (Bailey, 1931: 332).

36. E San Luis Pass (UNMCV).

Luna Co.:

37. Deming, along Mimbres River (Bailey, 1931: 333).

Dona Ana Co.:

38. Refuge Headquarters, San Andres Experimental Range, 13 mi. W San Andres Mts. (Halloran, 1946: 157).

39. Near Little Well, T19S-R4E, Sec. 31 (Halloran, 1946: 157); Mtn. Tank, St. Nicholas Canyon (Halloran, 1946: 157).

40. Parker Lake (Bailey, 1931: 331).

41. W slope Organ Mts. (Bailey, 1931: 331-332).

42. Soledad Canyon, Organ Mts. (Benson, 1933: 15).

Otero Co.:

43. Vicinity Tularosa (Bailey, 1931: 332).

44. *Sacramento Mts. (Bailey, 1931: 335).

Chaves Co.:

45. 10 mi. E Roswell (Borell and Bryant, 1942: 15).

Eddy Co.:

46. Carlsbad (Bailey, 1931: 331).

47. Carlsbad Cavern (Bailey, 1928: 97); 25 mi. SW Carlsbad (UNMCV).

Not Located:

16 mi. N and 8 mi. W Vaqueros Ranger Station, Jicarilla Dist., Rio Arriba Co. (UNMCV).

Datil Mts. (Bailey, 1931: 332).

MEPHITIS MACROURA Lichtenstein

Hooded Skunk

Mephitis macroura milleri Mearns.

General remarks.--The hooded skunk has been taken in both the Lower and the Upper Sonoran Life Zones in New Mexico.

Subspecies ascribed to New Mexico.--Mephitis macroura milleri Mearns.

Records of occurence (Fig. 98).--

Grant Co.:

1. Gila (Bailey, 1931: 336).

2. About 7 mi. above Mimbres Post Office (Bailey,

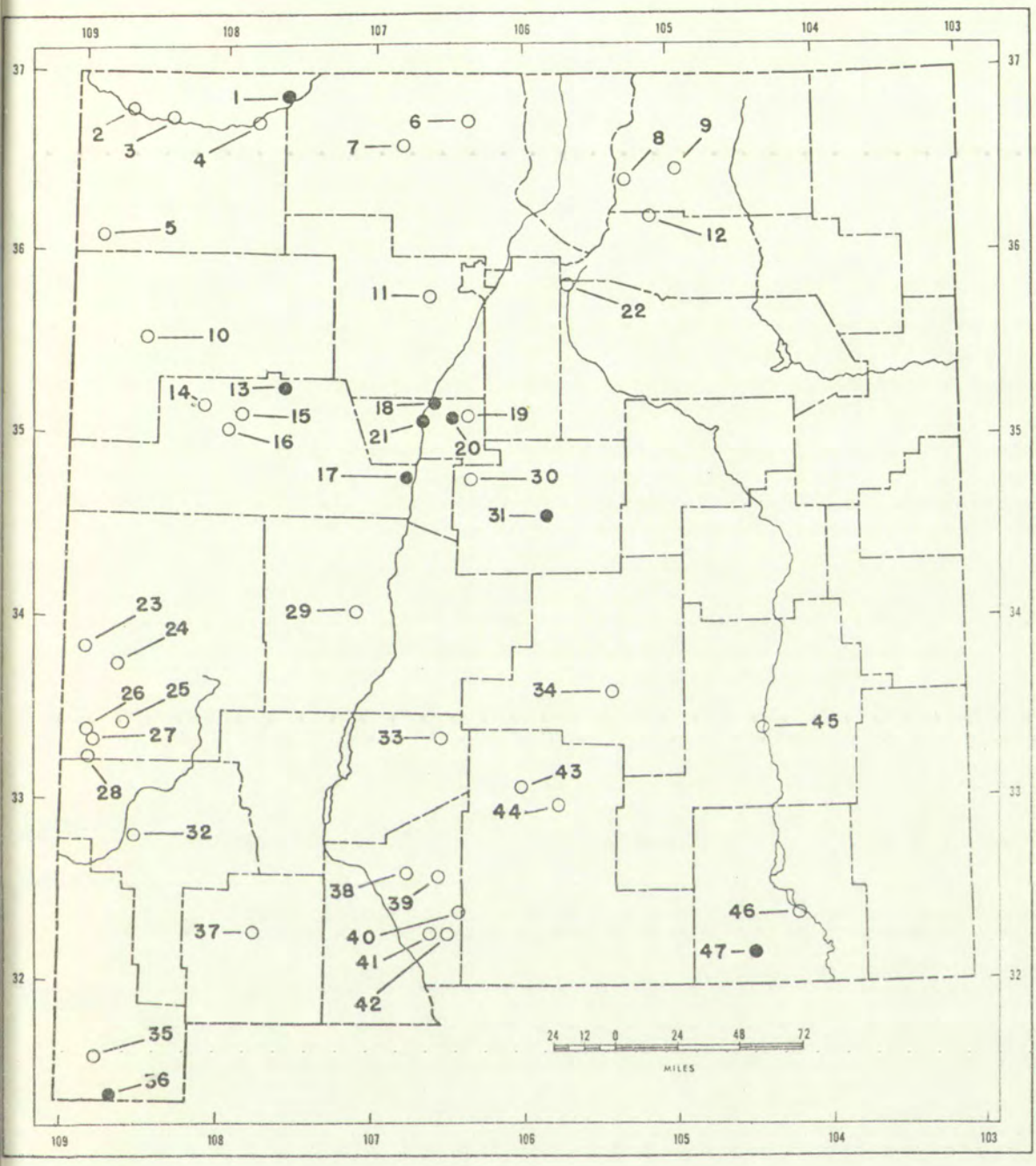

Fig. 97. Mephitis mephitis

1931: 336).

3. Redrock (Bailey, 1931: 336).

Hidalgo Co.:

4. Cloverdale Ranch, Animas Valley (Bailey, 1931: 336).

CONEPATUS MESOLEUCUS (Lichtenstein)

Hog-nosed Skunk

Conepatus mesoleucus mearnsi Merriam.

Conepatus mesoleucus venaticus Goldman.

General remarks.--In New Mexico, the hog-nosed skunk inhabits the Lower and Upper Sonoran Life Zones and probably enters the Transition Zone upon occasion.

Subspecies ascribed to New Mexico.--Conepatus mesoleucus mearnsi Merriam; Conepatus mesoleucus venaticus Goldman.

Records of occurence (Fig. 99).--

Valencia Co.:

1. Porter's Ranch, 8 mi. SE Paxton (Hooper, 1941a: 22).

Bernalillo Co.:

2. Domingo Baca Canyon, W side Sandia Mts., 18 mi. E Albuquerque (Barber, 1902: 192).

Catron Co.:

3. Dry Creek (Bailey, 1931: 338).

4. Diamond Creek (Bailey, 1931: 337).

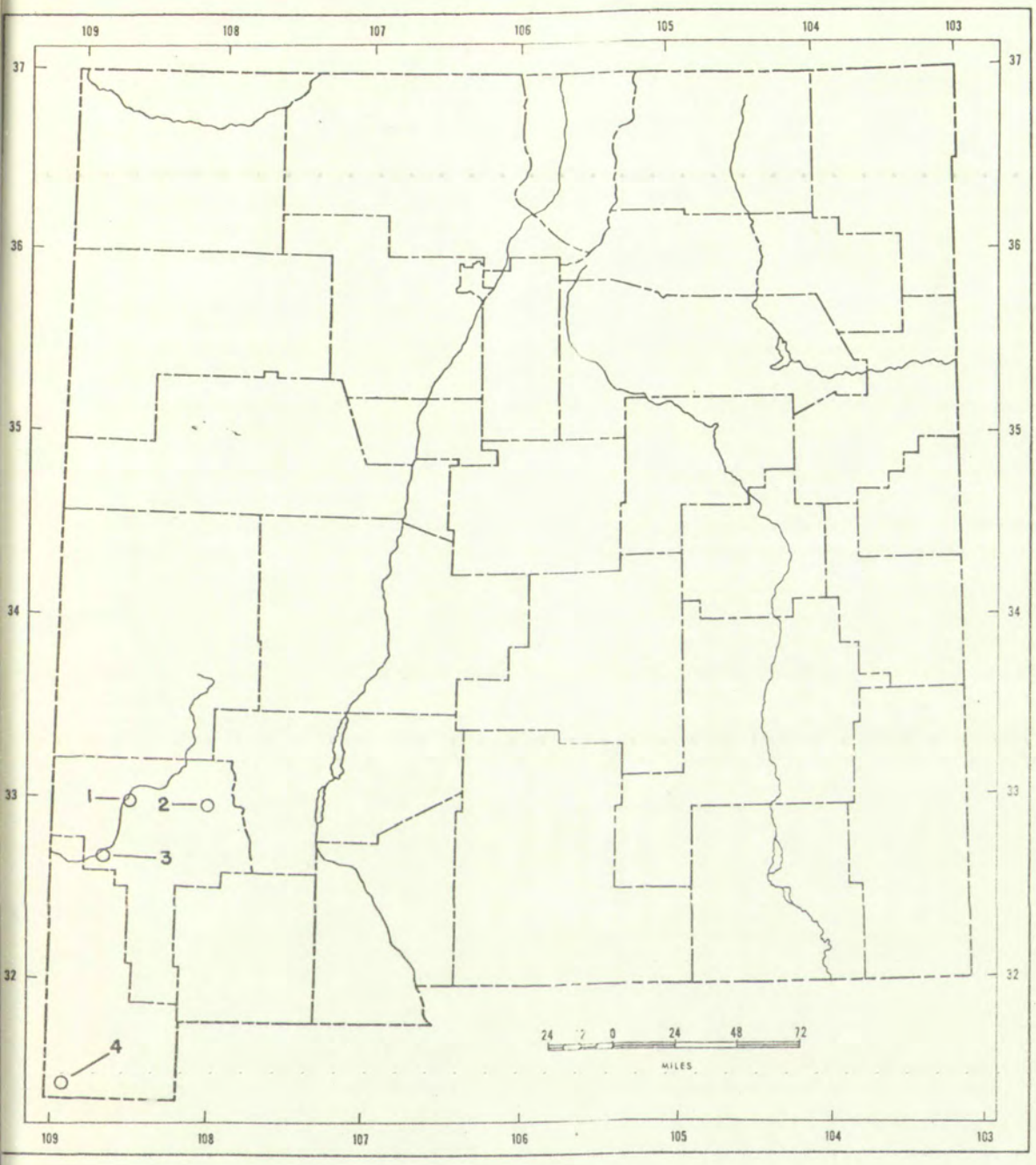

Fig. 98. Mephitis macroura

Socorro Co.:

5. US Hwy 85, 1 mi. W and 5 mi. N San Antonio (UNMCV).

6. Big Rosa Canyon, San Mateo Mts. (UNMCV).

Grant Co.:

7. Head of Mimbres (Bailey, 1931: 337).

Sierra Co.:

8. Hillsboro (Bailey, 1931: 337).

9. Lake Valley (Bailey, 1931: 337).

Lincoln Co.:

10. NW foothills Jicarilla Mts. (Bailey, 1931: 337).

11. Capitan Mts. (Bailey, 1931: 337).

Hidalgo Co.:

12. Indian Creek, Animas Mts. (UNMCV).

13. T33S-R19W, Sec. 29 (UNMCV).

Dona Ana Co.:

14. Ash Canyon, San Andres Mts. (Halloran, 1946: 157).

15. Bear Canyon, San Andres Mts. (Halloran, 1946: 157).

16. Soledad Canyon, Organ Mts. (Benson, 1933: 15).

Eddy Co.:

17. Walnut Canyon, 1½ mi. from Carlsbad Cavern (Bailey, 1928: 98).

LUTRA CANADENSIS (Schreber)

River Otter

Lutra canadensis sonora Rhoads.

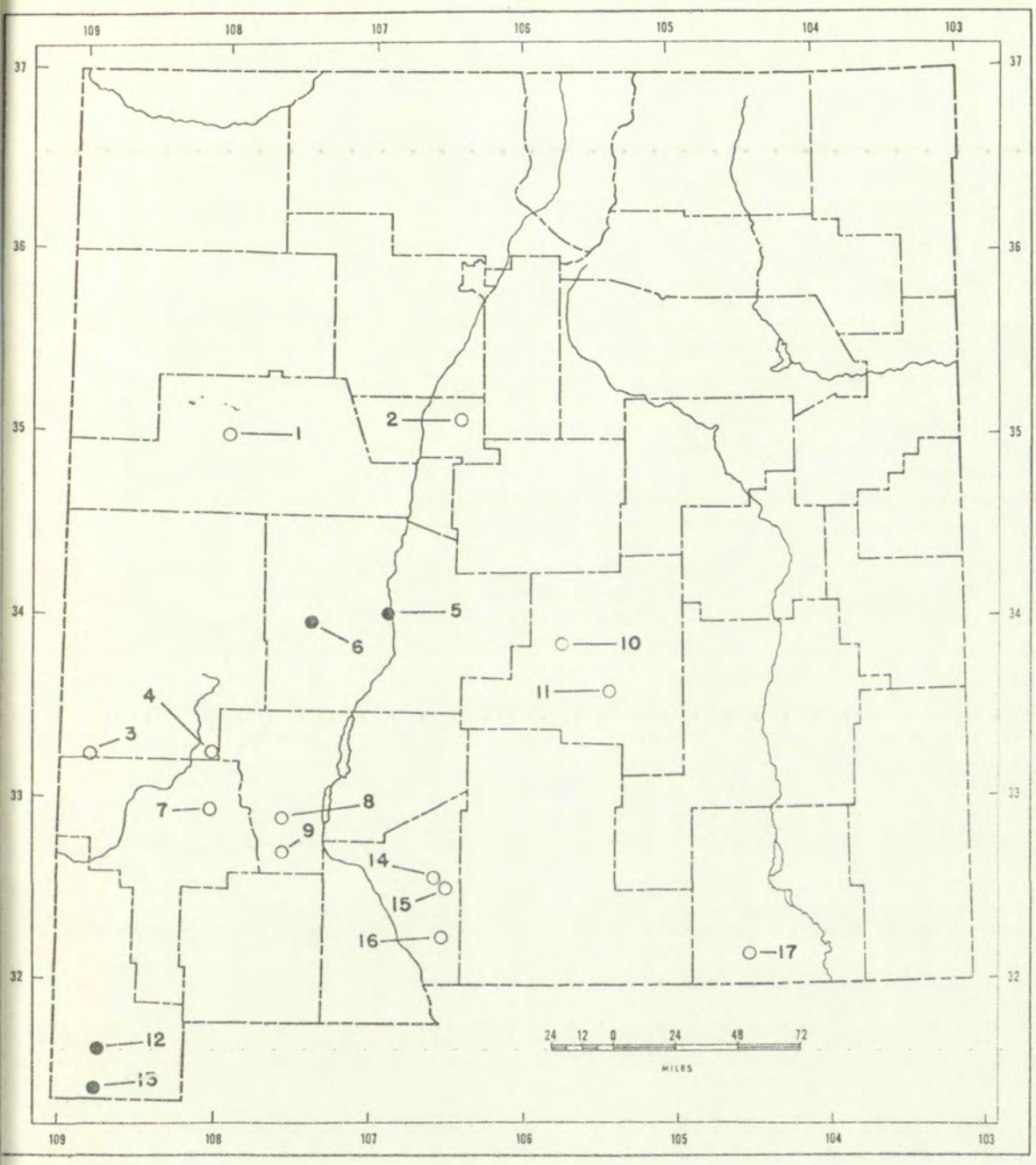

Fig. 99. Conepatus mesoleucus

General remarks.--The river otter apparently is represented by a single extant specimen from New Mexico--that reported by McClellan. The other records given below are based on reports of captures or reports of local inhabitants.

Subspecies ascribed to New Mexico.--*Lutra canadensis sonora* Rhoads.

Records of occurence (Fig. 100).--

Rio Arriba Co.:

1. Near Rinconada (Bailey, 1931: 324).

2. Near Espanola (Bailey, 1931: 324).

Taos Co.:

3. Near Cienequilla (Bailey, 1931: 324).

San Miguel Co.:

4. Near mouth Mora River (Bailey, 1931: 324).

Grant Co.:

5. N of where Lobo Canyon enters Gila River and 1 mi. S Cliff (McClellan, 1954: 443).

Hidalgo Co.:

6. Along Gila River near Ariz.-N. Mex. line (Bailey, 1931: 323).

FAMILY FELIDAE

FELIS ONCA Linnaeus

Jaguar

Felis onca hernandesii (Gray).

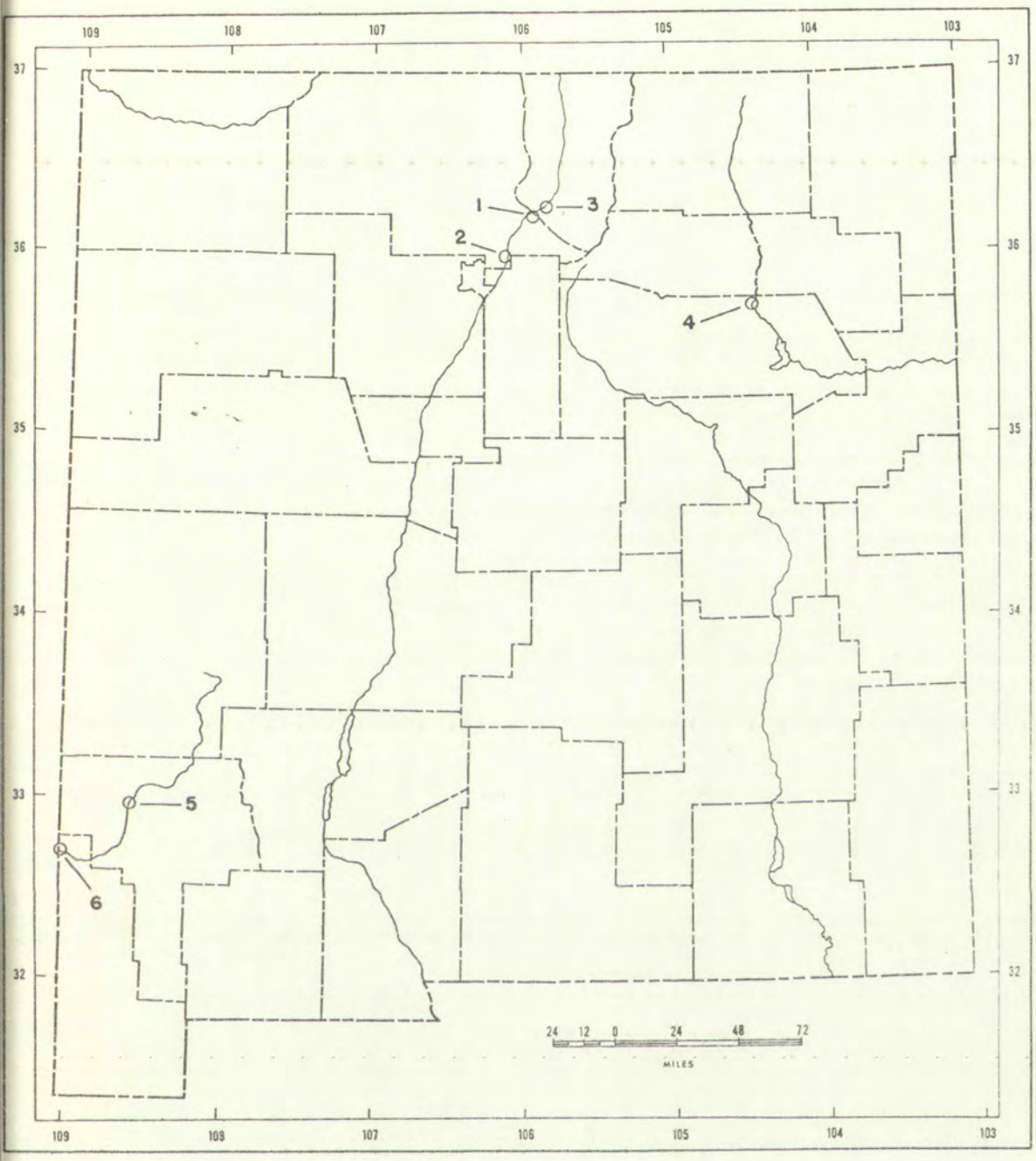

Fig. 100. Lutra canadensis

General remarks.--Most of the New Mexican records of the jaguar are from the mountainous areas of the state.

Subspecies ascribed to New Mexico.--*Felis onca arizonensis* Goldman.

Records of occurence (Fig. 101).--

Colfax Co.:

1. Near Springer (Hock, 1955: 325).

Santa Fe Co.:

2. Santa Fe (Bailey, 1931: 283).

Catron Co.:

3. Datil Mts., 12 mi. NW Datil (Bailey, 1931: 284).

4. Near Grafton on Taylor Creek (Bailey, 1931: 283).

Sierra Co.:

5. W slope Sierra de los Caballos (Bailey, 1931: 284).

Hidalgo Co.:

6. Clanton Canyon, about 6 mi. W Gray's Ranch (Bailey, 1931: 284).

7. Guadalupe Canyon, in or near SW corner N. Mex. (Bailey, 1931: 283).

Dona Ana Co.:

8. San Andres Mts. (Bailey, 1931: 284).

Otero Co.:

9. Sacramento Mts. (Bailey, 1931: 284).

Not Located:

Ute Creek, San Miguel Co. (Bailey, 1931: 284).

Region of Cow Springs, a few mi. SW Fulton (Bailey, 1931: 284).

FELIS CONCOLOR Kerr

Mountain Lion

Felis concolor hippolestes Merriam.

Felis concolor aztecus Merriam.

General remarks.--In New Mexico, Felis concolor is now essentially limited to regions of broken topography. Its distribution does not appear to be controlled directly by climate or vegetation.

It has not been considered advisable to record the localities from which this cat has been reported.

Subspecies ascribed to New Mexico.--Felis concolor hippolestes Merriam; Felis concolor aztecus Merriam.

LYNX RUFUS (Schreber)

Bobcat

Lynx rufus baileyi Merriam.

Lynx rufus uinta Merriam.

General remarks.--Lynx rufus is most common in the Upper Sonoran and Transition Life Zones in New Mexico. It also may be found to greater or lesser degrees in the Lower Sonoran and Canadian Life Zones.

Subspecies ascribed to New Mexico.--Lynx rufus baileyi Merriam.

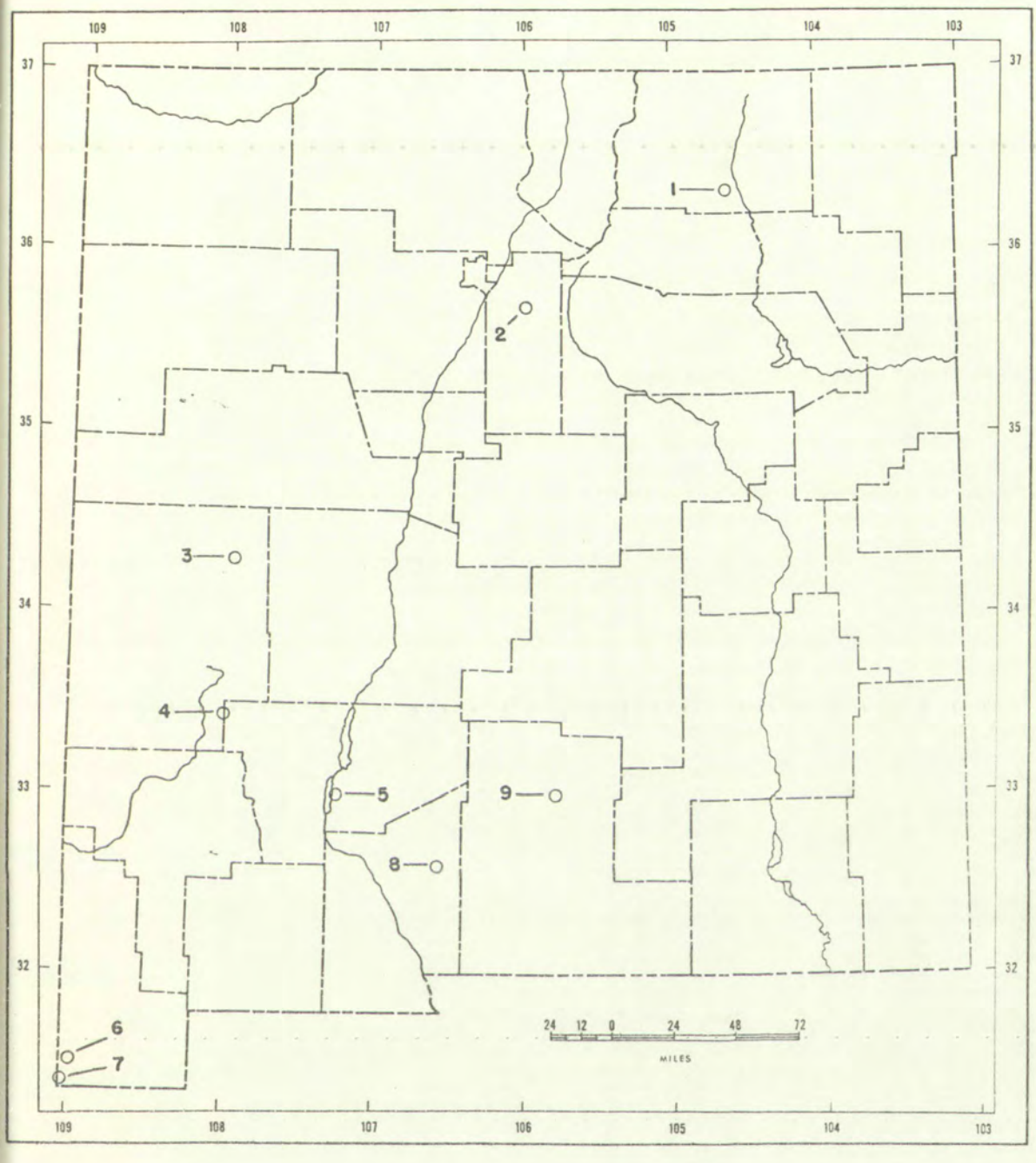

Fig. 101. Felis onca

Records of occurence (Fig. 102).--

San Juan Co.:

1. Fruitland (Bailey, 1931: 291).

2. Chaco Canyon (UNMCV).

Rio Arriba Co.:

3. Dulce (Bailey, 1931: 294).

4. Chama (Bailey, 1931: 294).

5. La Jara Lake (Bailey, 1931: 294).

6. Gallinas Mts. (Bailey, 1931: 294).

7. Embudo (Bailey, 1931: 291).

8. Velarde (Bailey, 1931: 294).

Taos Co.:

9. Tres Piedras (Bailey, 1931: 294).

10. Taos Pueblo (Bailey, 1931: 295).

Colfax Co.:

11. Near Cimarron (Hill, 1942a: 78).

Union Co.:

12. Oak Canyon, Raton Range (Bailey, 1931: 295).

Sandoval Co.:

13. Bluebird Mesa, about 3½ mi. NW Red Fox (?) Lookout Station (UNMCV).

14. Jemez Mts. (Bailey, 1931: 295).

15. 1 mi. E San Luis (UNMCV).

16. Juan Tabo region, Sandia Mts. (Clothier, 1957b: 58).

Mora Co.:

17. Coyote Creek, E slope Taos Mts. (Bailey, 1931: 295).

18. Halls Peak (Bailey, 1931: 294).

Valencia Co.:

19. NW Mt. Taylor (Hooper, 1941a: 23).

20. Zuni Canyon (Hooper, 1941a: 23).

21. 3 mi. E and 18 mi. S Grants (UNMCV).

22. Acoma (Coues and Yarrow, 1875: 43).

23. Shuman's Ranch, T6N-R10W, Sec. 30 (Hooper, 1941a: 23).

Bernalillo Co.:

16. Near Sandia Crest (Clothier, 1957b: 58).

24. Near Cedar Crest (Clothier, 1957b: 58).

25. Tijeras Ranger Station (Clothier, 1957b: 58).

Santa Fe Co.:

26. Caja del Rio Grant (UNMCV).

Catron Co.:

27. Dalgar Ranch, just below Joseph on the Tularosa River (Bailey, 1931: 293).

28. Pleasanton (Bailey, 1931: 293).

Socorro Co.:

29. La Jova (UNMCV).

30. Magdalena Nat'l Forest (Bailey, 1931: 293).

Torrance Co.:

31. Box Spring, Manzano Mts. (Bailey, 1931: 295).

32. Vicinity Torrance (UNMCV).

33. 7 mi. NE Corona (Hall and Kelson, 1959: 969).

Guadalupe Co.:

34. 2 mi. W and 12 mi. S Conchas Dam (Hall and Kelson, 1959: 969).

35. Near Cuervo (Bailey, 1931: 295).

36. Near Santa Rosa (Bailey, 1931: 295).

Grant Co.:

37. Near Hachita (Bailey, 1931: 292).

Lincoln Co.:

40. Base Jicarilla Mts. (Bailey, 1931: 295).

41. Capitan Mts. (Bailey, 1931: 294).

De Baca Co.:

42. Pecos Valley, 50 mi. N Roswell (Bailey, 1931: 296).

Dona Ana Co.:

38. Dona Ana (Baird, 1857: 96).

39. Near Globe Spring, Organ Mts. (Bailey, 1931: 293).

Otero Co.:

43. Malpais Spring (Benson, 1933: 22).

44. Sacramento Mts., E Tularosa (Bailey, 1931: 294).

45. Guadalupe Ranch (J. A. Allen, 1903: 590).

Chaves Co.:

46. Pecos Valley 35 mi. above Roswell (Bailey, 1931: 294).

Eddy Co.:

47. Carlsbad Cavern (Bailey, 1928: 94).

Not Located:

Conejos River (Bailey, 1931: 294).

Cienega (Bailey, 1931: 294).

San Mateo Nat'l Forest (Bailey, 1931: 293).

Bartlett Ranch, Colfax Co. (Bailey, 1931: 295-296).

ORDER ARTIODACTYLA

Distribution maps and record stations have been omitted for members of this order. Many of the hooved mammals have had their ranges radically altered during the historic period--to the point of extinction within the state in some cases. Works are available which give these early ranges and the present ranges are of little importance from a zoogeographic or systematic viewpoint.

Those hooved mammals which retain a semblance of their earlier ranges or which have been introduced into New Mexico also are of little importance to "pure" biology and current information is easily obtainable from the New Mexico Department of Game and Fish.

FAMILY TAYASSIDAE

TAYASSU TAJACU (Linnaeus)

Collared Peccary

Pecari angulatus angulatus (Cope).

Pecari angulatus sonoriensis (Mearns).

General remarks.--The peccary is not limited to any one life zone in New Mexico. During some part of the year,

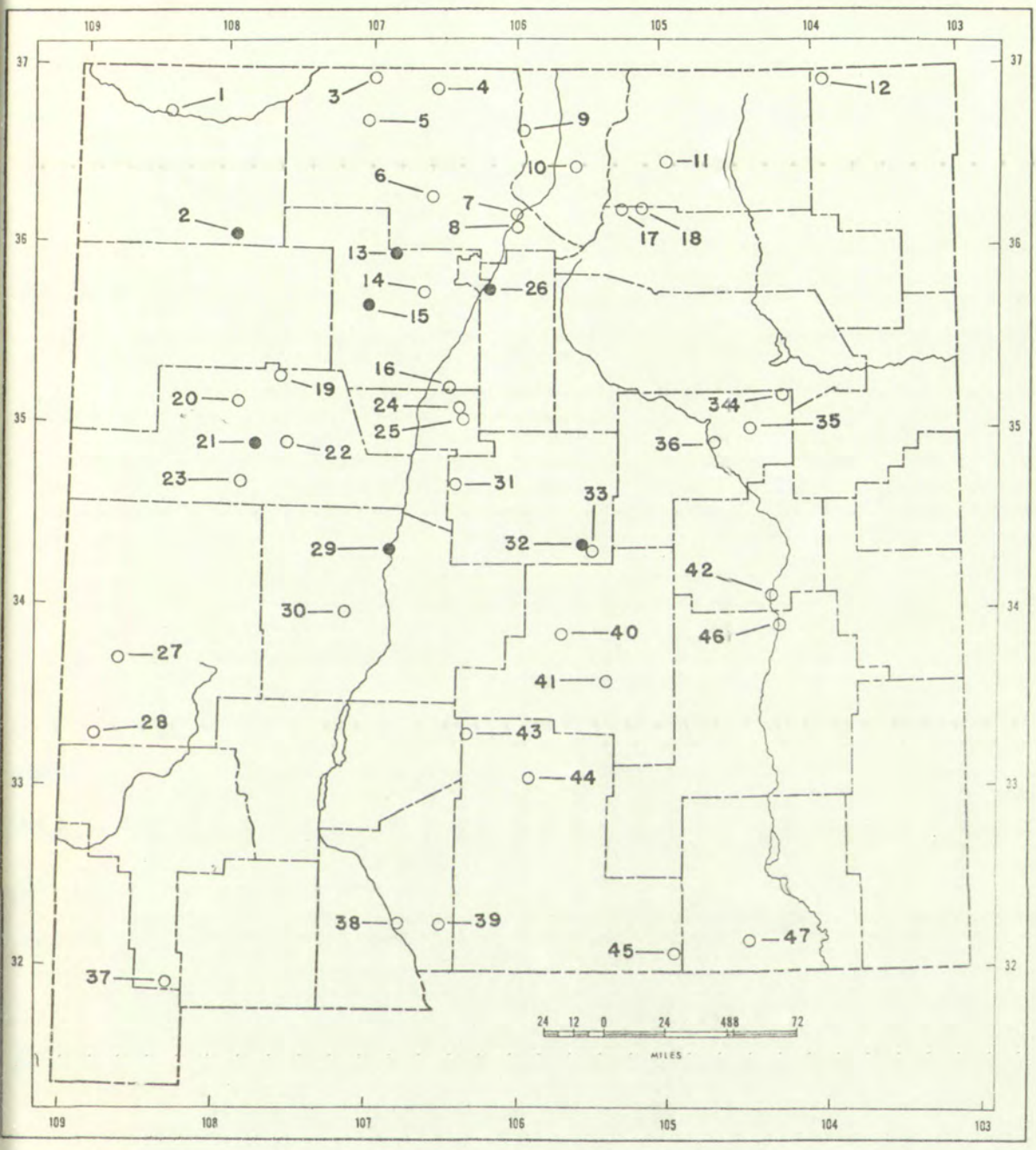

Fig. 102. Lynx rufus

they may be found in almost any life zone present within their range in New Mexico--Lower Sonoran, Upper Sonoran, Transition, and near-Canadian.

Tayassu tajacu angulatus probably no longer occurs in New Mexico.

Subspecies ascribed to New Mexico.--Tayassu tajacu sonoriensis (Mearns); Tayassu tajacu angulatus (Cope).

FAMILY CERVIDAE

CERVUS CANADENSIS (Erxleben)

Wapiti

Cervus canadensis Erxleben.

General remarks.--Originally occuring in the high mountains of north central New Mexico (Bailey, 1931: 39-41), the wapiti has been introduced widely in other areas of the state, primarily in those areas once occupied by Merriam's elk.

Subspecies ascribed to New Mexico.--Cervus canadensis nelsoni Bailey.

CERVUS MERRIAMI Nelson

Merriam's Elk

Cervus merriami Nelson.

General remarks.--Merriam's elk is now extinct. Although its true status probably never will be determined, it is quite possible that Merriam's elk was actually a subspecies of Cervus canadensis rather than a

distinct species.

Subspecies ascribed to New Mexico.--The species was considered to be monotypic.

ODOCOILEUS HEMIONUS (Rafinesque)

Mule Deer

Odocoileus hemionus macrotis (Say).

Odocoileus hemionus canus Merriam.

Odocoileus crooki (Mearns).

General remarks.--The mule deer in New Mexico has a wide zonal range. Although most common in the Transition Zone and in the woodland portion of the Upper Sonoran Zone, it is not entirely restricted to these zones. Seasonal changes in altitudinal distribution occur regularly.

Lang (1957:8) gives the current distribution of these deer within New Mexico.

Subspecies ascribed to New Mexico.--Odocoileus hemionus hemionus (Rafinesque); Odocoileus hemionus crooki (Mearns).

ODOCOILEUS VIRGINIANUS (Zimmermann)

White-tailed Deer

Odocoileus virginianus macrourus (Rafinesque).

Odocoileus couesi (Coues and Yarrow).

General remarks.--As with the mule deer, the white-tailed deer is but little limited zonally.

Recent distribution within New Mexico is given in

Deer of New Mexico (Lang, 1957: 19).

Subspecies ascribed to New Mexico.--Odocoileus virginianus couesi (Coues and Yarrow); Odocoileus virginianus texanus (Mearns).

FAMILY ANTILOCAPRIDAE

ANTILOCAPRA AMERICANA (Ord)

Pronghorn

Antilocapra americana americana (Ord).

Antilocapra americana mexicana Merriam.

General remarks.--As is the case with most of the other big game animals of the state, the distribution of the pronghorn has been greatly altered by civilization.

FAMILY BOVIDAE

BISON BISON (Linnaeus)

Bison

Bison bison bison (Linnaeus).

General remarks.--As in other states, the range of the bison has been greatly restricted in New Mexico. The few remaining in the state can hardly be considered as more than cattle and live under much the same restrictions.

In view of apparent error in Hall and Kelson's account of the bison, the author prefers to follow Miller and Kellogg (1955: 818) in the matter of subspecies to be found in New Mexico.

Subspecies ascribed to New Mexico.--Bison bison bison (Linnaeus).

OVIS CANADENSIS Shaw

Mountain Sheep

Ovis canadensis canadensis Shaw.

Ovis canadensis texiana Bailey.

Ovis canadensis mexicana Merriam.

General remarks.--The mountain sheep was originally found in many of the mountain ranges of New Mexico. Excessive hunting, diseases contracted from domestic animals, etc., have exterminated these animals from many areas. Under game management programs, some of these areas have been restocked, generally with animals from further north.

Subspecies ascribed to New Mexico.--Ovis canadensis canadensis Shaw; Ovis canadensis mexicana Merriam.

AMMOTRAGUS LERVIA Pallas

Barbary Sheep

General remarks.--The Barbary sheep recently has been introduced into the Canadian River area of northeastern New Mexico by the New Mexico Department of Game and Fish. Since its introduction several years ago, the Barbary sheep has apparently increased its range and its numbers.

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