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*** START OF THE PROJECT GUTENBERG EBOOK MAMMALS FROM TAMAULIPAS, MEXICO

Mammals from Tamaulipas, Mexico

 \mathbf{BY}

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Mammals from Tamaulipas, Mexico

By

ROLLIN H. BAKER

Forming the northeastern border of Mexico, Tamaulipas extends in an elongated, north-south direction from the Temperate into the Torrid Zone and contains faunal elements from both the Nearctic and Neotropical regions. The mammals are less known than those from some of the bordering states; for the most part collecting has been limited to a few localities, chiefly along the Pan-American Highway. Accordingly, as a step towards a long-range study of the mammals of Tamaulipas, the Museum of Natural History of the University of Kansas acquired from William J. Schaldach, Jr., a small, but significant, collection of mammals taken in the last month of 1949 and the first four months of 1950.

Collections were made at several places in the vicinity of Ciudad Victoria, including localities along the humid, eastern face of the Sierra Madre Oriental. Many of these specimens were obtained near camps made west of the village of El Carrizo. This small community is on the Pan-American highway, 70 kilometers (by highway) south of Ciudad Victoria. The resulting collections, which are reported upon here, disclose that several tropical mammals range farther northward than previously reported. Funds for financing the field work were made available by a grant from the Kansas University Endowment Association.

ACCOUNTS OF SPECIES

Didelphis mesamericana mesamericana Oken

Central American Opossum

Did[elphys] mes-americana Oken, Lehrbuch d. Naturgesch., pt. 3, vol. 2:1152, 1816. (Type from Northern Mexico.)

Didelphis mes-americana Allen, Bull. Amer. Mus. Nat. Hist., 16:256, August 18, 1902.

Specimens examined, 2 as follows: 36 km. N and 10 km. W Ciudad Victoria, 1 km. E El Barretal, on Río Purificacíon, 1; 12 km. N and 4 km. W Ciudad Victoria, 1.

Philander opossum pallidus (Allen)

Four-eyed Opossum

Metachirus fuscogriseus pallidus Allen, Bull. Amer. Mus. Nat. Hist., 14:215, July 3, 1901. (Type from Orizaba, Veracruz, Mexico.)

Philander opossum pallidus Dalquest, Occ. Papers Mus. Zool., Louisiana State Univ., No. 23:2, July 10, 1950.

Specimens examined, 3 from 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo.

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Remarks.—These three specimens have proportionately longer tails than typical *P. o. pallidus* from central Veracruz; total length and length of tail of two adult males are 575, 295, and 568, 290 respectively.

This marsupial has been previously unrecorded from Tamaulipas or from so northward a locality. The four-eyed opossum evidently ranges northward along the east face of the Sierra Madre Oriental within the humid division of the Upper Tropical Life-zone. These animals, all males, were taken in steel traps baited with the bodies of skinned mice or birds. Sets were made along well-used trails leading from a densely vegetated arroyo into a corn field through openings in a fence of roughly piled logs. The elevation of this locality is approximately 2500 feet.

Desmodus rotundus murinus Wagner/span

Vampire Bat

 ${\it D[esmodus] murinus}$ Wagner, Schreber's Säugthiere, Suppl., 1:377, 1840. (Type from Mexico.)

Desmodus rotundus murinus Osgood, Field Mus. Nat. Hist., publ. 155, zool. ser., 10:63, January 10, 1912.

Specimens examined, 9 as follows: 12 km. W and 8 km. N Ciudad Victoria, 2500 ft., 3; 70 km. [by highway] S Ciudad Victoria and 6 km. W of the [Pan-American] highway [at El Carrizo], 6.

Remarks.—Vampire bats were taken at two caves. At the cave called "Los Troncones", 12

kilometers west and 8 kilometers north of Ciudad Victoria, seven bats were shot down; three were saved. The second cave, south of Ciudad Victoria, was considerably damper than the first. Vampires were found in a small side chamber; nine bats were knocked down. No other kinds of bats were present in either cave.

Sylvilagus floridanus connectens (Nelson)

Florida Cottontail

Lepus floridanus connectens Nelson, Proc. Biol. Soc. Washington, 17:105, May 18, 1904. (Type from Chichicaxtle, Veracruz, Mexico.)

Sylvilagus floridanus connectens Lyon and Osgood, Catal. Type spec. Mamm. U. S. Nat. Mus., Bull. 62:32, January 28, 1909.

Specimens examined, 2 from 70 km. [by highway] S. Ciudad Victoria and 2 km. W $\,$ El Carrizo.

Sciurus aureogaster aureogaster F. Cuvier

[Pg 211]

Red-bellied Squirrel

[*Sciurus*, by implication] *aureogaster* F. Cuvier, Hist. nat. mammifères, vol. 6, livr. 59, pl. with text, September, 1829. Binomial published at end of work only, vol. 7, tabl. generale et méthodique, p. 4, 1842. (Type from "California" = eastern Mexico.)

Specimens examined, 13 as follows: 43 km. S Ciudad Victoria, 1; 70 km. [by highway] S Ciudad Victoria, and 6 km. W of [Pan-American] highway [at El Carrizo], 3; 70 km. [by hwy.] S Victoria and 2 km. W El Carrizo, 9.

Remarks.—These colorful squirrels were taken in thick timber and brush, and locally are referred to as "ardilla pinta" or "ardilla colorada." One female obtained on January 22 is black. Local hunters state that these squirrels are most active early in the morning and late in the afternoon. Two squirrels were seen in copulation on January 19.

Sciurus negligens Nelson

Little Gray Squirrel

Sciurus negligens Nelson, Proc. Biol. Soc. Washington, 12:147, June 3, 1898. (Type from Alta Mira, Tamaulipas, Mexico.)

Specimens examined, 17 as follows: 70 km. [by highway] S of Ciudad Victoria and 6 km. W of the [Pan-American] highway [at El Carrizo], 5; 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo, 12.

Remarks.—Referred to as "ardilla chica" locally, these squirrels were most frequently seen in the dense forest of the lower, elevations. Active both in trees and on the ground, these animals were reported as being destructive to corn crops. Females taken in January were lactating.

Heterogeomys hispidus concavus Nelson and Goldman

Hispid Pocket Gopher

Heterogeomys hispidus concavus Nelson and Goldman, Proc. Biol. Soc. Washington, 42:148, March 30, 1929. (Type from Pinal de Amoles, Queretaro, Mexico.)

Specimens examined, 5 as follows: 70 km. [by highway] S Ciudad Victoria and 5 km. W El Carrizo, 4; 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo, 1.

Remarks.—These gophers have been compared with specimens of *H. h. hispidus* from Veracruz (5 km. N Jalapa and 4 km. WNW Fortin) and with specimens of *H. h. concavus* from San Luis Potosí (Xilitla and vicinity and 3 mi. NW Pujal); the latter were examined through the courtesy of Dr. George H. Lowery, Jr., of the Museum of Zoology at Louisiana State University. These five specimens are assigned to *H. h. concavus* and resemble in every way this subspecies except: slightly smaller, somewhat darker, and skull with lambdoidal crest less inclined forward. In the latter feature, the single skull available seems to resemble most closely that of *H. h. hispidus*. Unfortunately, all but one skull, that of a subadult female, were destroyed in the field.

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This is the first known record of this genus in Tamaulipas and the most northern locality from which specimens have been taken. At this latitude, the gopher appears to be restricted to the humid belt on the east face of the Sierra Madre Oriental. These large gophers were difficult to trap by ordinary means; Schaldach got two by using large-sized Macabee traps but the others

were taken at night either with the aid of a dog or by natives with slingshots.

Liomys irroratus texensis Merriam

Spiny Pocket Mouse

Liomys texensis Merriam, Proc. Biol. Soc. Washington, 15:44, March 5, 1902. (Type from Brownsville, Cameron County, Texas.)

Liomys irroratus texensis Goldman, N. Amer. Fauna, 34:59, September 7, 1911.

Specimens examined, 15 as follows: 7 km. S and 2 km. W San Fernando, 8; 36 km. N and 10 km. W Ciudad Victoria, 1 km. E El Barretal, on Río Purificacíon, 1; 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo, 6.

Remarks.—Most of these mice were taken in densely vegetated fallow fields, where both grass and brush were found. Many of the mice were captured at their burrow openings, some of which were found to be plugged and others not plugged.

Reithrodontomys fulvescens intermedius Allen

Fulvous Harvest Mouse

Reithrodontomys mexicanus intermedius Allen, Bull. Amer. Mus. Nat. Hist., 7:136, May 21, 1895. (Type from Brownsville, Cameron County, Texas.)

Reithrodontomys fulvescens intermedius Howell, N. Amer. Fauna, 36:47, June 5, 1914

Specimen examined, 1 from 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo.

Baiomys taylori (Thomas)

Pygmy Mouse

Hesperomys (Vesperimus) taylori Thomas, Ann. and Mag. Nat. Hist, ser. 5, 19:66, January, 1887. (Type from San Diego, Duval County, Texas.)

Baiomys taylori Mearns, Mamm. Mex. Bound., Bull. 56:381, April 13, 1907.

Specimens examined, 2 from 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo.

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Remarks.—Specimens were captured in runways in dense grass and weeds at the edge of a corn field.

Peromyscus leucopus texanus (Woodhouse)

White-footed Mouse

Hesperomys texana Woodhouse, Proc. Acad. Nat. Sci. Philadelphia, 6:242, 1853. (Type probably from the vicinity of Mason, Mason County, Texas.)

Peromyscus leucopus texanus Osgood, N. Amer. Fauna, 28:127, April 17, 1909.

Specimens examined, 8 as follows: 7 km. S and 2 km. W San Fernando, 1; 12 km. N and 4 km. W Ciudad Victoria, 2; 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo, 4.

Peromyscus ochraventer new species

Brown-bellied Wood Mouse

Type.—Female, adult, skin and skull; no. 36958, Univ. Kansas Mus. Nat. Hist.; 70 km. [by highway] S Ciudad Victoria and 6 km. W of the [Pan-American] highway [at El Carrizo], Tamaulipas, Mexico; 12 January 1950; obtained by William J. Schaldach, Jr., original no. 566.

Range.—Known only from the type locality; probably found in other localities along the humid, east face of the Sierra Madre Oriental in Tamaulipas.

Diagnosis.—Size medium (see measurements); upper parts near Ochraceous Tawny (capitalized color terms after Ridgway, Color Standards and Color Nomenclature, Washington, D. C., 1912), brighter on sides and duller on back; cheeks, sides of neck, shoulders and upper forelegs lighter, between Ochraceous Buff and Ochraceous Orange; eye ring dark; underparts light Cinnamon Buff,

breast patch brighter; ears dusky, sparsely covered with hairs colored like back; feet white; tail scaly in appearance, indistinctly bicolored with short dark hairs above and short pale hairs below; skull without beaded or ridged supraorbital border; rostrum expanded anteriorly with sides almost parallel; teeth with strongly developed outer accessory cusps on the first and second upper molar teeth; anteriormost loph (parastyle-protoconule of Goldman, N. Amer. Fauna, 43:11, September 23, 1918) of the first upper molar large, almost as broad as greatest breadth of tooth.

Comparisons.—Peromyscus ochraventer has been compared with P. difficilis (specimens from Veracruz), P. boylei (Veracruz), P. banderanus (Guerrero), P. mexicanus (Veracruz), P. furvus (Veracruz), and P. latirostris (San Luis Potosí). From P. difficilis, P. ochraventer differs in having underparts distinctively brownish, rostrum expanded anteriorly with sides almost parallel, anteriormost loph of the first upper molar larger, and auditory bulla smaller. From P. boylei, P. ochraventer differs in having underparts distinctively brownish, tail less distinctly bicolored, rostrum expanded anteriorly with sides almost parallel, and anteriormost loph of the first upper molar larger. From P. banderanus, P. ochraventer differs in having underparts distinctively brownish, tail less distinctly bicolored, rostrum expanded anteriorly with sides almost parallel, anteriormost loph of the first upper molar larger, auditory bulla smaller, and in lacking a beaded or ridged supraorbital border. From P. mexicanus, P. ochraventer differs in having underparts distinctively brownish, tail not irregularly blotched with dusky, rostrum expanded anteriorly with sides almost parallel, anteriormost loph of the first upper molar larger, and in lacking a beaded or ridged supraorbital border. From P. furvus and P. latirostris, P. ochraventer differs in being smaller, having underparts distinctively brownish, tail not irregularly blotched with dusky, rostrum proportionately shorter, and interpterygoid space relatively narrower.

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Remarks.—Peromyscus ochraventer is considered to be a distinct species showing little evident relationship with other Mexican Peromyscus. In the shape of the skull, especially the anterior expansion of the rostrum, P. ochraventer seems to be related to P. furvus and P. latirostris, a series of the latter being made available for examination by Dr. George G. Lowery, Jr., of the Museum of Zoology at Louisiana State University. However, the rostrum of these two larger species is proportionately longer than the rostrum of P. ochraventer. In size, coloration and most cranial features, P. ochraventer resembles P. mexicanus, although the absence, instead of presence, of a supraorbital bead or ridge, the almost parallel-sided, instead of more pointed, rostrum and the larger, instead of smaller, interiormost loph of the first upper molar in P. ochraventer are well-marked differences. The baculum of P. ochraventer is much shorter with a proportionately heavier base and shaft than the baculum of P. mexicanus mexicanus (from Veracruz) and P. m. saxatilis (from Costa Rica). The geographic range of Peromyscus ochraventer is not known to meet that of *P. mexicanus*; the nearest place to the type locality of *P. ochraventer* from which P. mexicanus has been taken is at Xilitla approximately 225 kilometers to the southward in San Luis Potosí (Dalquest, Occ. Papers Mus. Zool., Louisiana State Univ., No. 28:8, July 10, 1950).

The brown coloring on the underparts is a distinctive feature of *P. ochraventer*; in adults this color differs in shade. In some specimens patches of whitish hair give the tail a splotched appearance. Eleven of the twenty-eight skulls and lower jaws examined have bone eroded away from around the cheek-teeth exposing part of the roots. Most of the fully adult animals have this condition. One adult female, no. 36959, has the upper third molar on the right side missing, possibly as a result of bone erosion.

These mice were taken in junglelike forest, in rocks and adjacent to logs. Schaldach writes that "Their burrows go back under the large limestone blocks, and each burrow where I caught a mouse has a pile of excavated earth, like a tiny gopher mound." The trapping area was at an elevation of approximately 2800 feet on the steep sides of a small hill on top of which the field camp was situated. Schaldach indicated that this locality was transitional between arid tropical and humid tropical conditions. On January 13, 1950, a female taken was lactating and had five recent placental scars; another taken the same day also had five placental scars.

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Measurements.—Average and extreme measurements of seven adult males and six adult females of P. ochraventer from the type locality are, respectively, as follows: Total length, 238.0 (227-249), 236.5 (226-248); length of tail, 124.4 (117-127), 122.2 (116-128); length of hind foot, 25.6 (24-26), 25.5 (25-26); length of ear from notch, 20.9 (20-21), 20.7 (20-21); greatest length of skull, 31.0 (30.6-31.9), 30.8 (30.5-31.0); basilar length, 23.3 (22.7-23.8), 23.4 (23.0-23.9); zygomatic breadth, 15.1 (14.6-15.7), 15.0 (14.9-15.2); post palatal length, 10.6 (10.5-10.9), 10.9 (10.5-11.2); interorbital breadth, 4.7 (4.5-4.9), 4.7 (4.6-4.8); mastoidal breadth, 12.8 (12.4-13.2), 12.8 (12.6-12.9); length of nasals, 11.6 (10.8-12.0), 11.6 (11.2-11.7); length of shelf of bony palate, 4.7 (4.5-4.8), 4.6 (4.5-4.7); length of palatine slits, 6.3 (6.0-6.5), 6.2 (6.0-6.4); length of diastema, 8.2 (8.0-8.5), 8.2 (8.1-8.4); alveolar length of upper molariform tooth-row, 4.4 (4.3-4.6), 4.4 (4.3-4.5).

Specimens examined, 28, from the type locality.

Coues Rice Rat

Oryzomys aquaticus Allen, Bull. Amer. Mus. Nat. Hist., 3:289, June 30, 1891. (Type from Brownsville, Cameron County, Texas.)

Oryzomys couesi aquaticus Goldman, N. Amer. Fauna, 43:39, September 23, 1918.

Specimens examined, 2 as follows: 36 km. N and 10 km. W Ciudad Victoria, 1 km. E El Barretal, on Río Purificacíon, 1; 70 km. [by highway] S Ciudad Victoria and 6 km. W of the [Pan-American] highway [at El Carrizo], 1.

Remarks.—The specimens, all immatures, are slightly darker than topotypes of O. c. aquaticus, seemingly tending toward the darker O. c. peragrus Merriam to the southward. These records of occurrence extend the known range of this subspecies approximately 210 miles to the southward and increase the possibility of continuous distribution between O. c. aquaticus and O. c. peragrus.

The male obtained south of Ciudad Victoria was taken on January 12, by William J. Shaldach, Jr., 200 yards within the tunnel of a mine at an elevation of approximately 2600 feet. This was in the Sierra Gorda, which is a part of the Sierra Madre Oriental.

Oryzomys rostratus rostratus Merriam

[Pg 216]

Rice Rat

Oryzomys rostratus Merriam, Proc. Washington Acad. Sci., 3:293, July 26, 1901. (Type from Metlaltoyuca, Pueblo, Mexico.)

Specimen examined, 1 from 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo.

Remarks.—This immature male is paler than specimens of O. r. rostratus from the state of Veracruz. This locality extends the known range of this species northward a distance of approximately 100 miles. Previously it had been recorded from only as far north as Alta Mira, Tamaulipas (Goldman, N. Amer. Fauna, 43:54, September 23, 1918). This specimen was trapped on February 16 in a rodent runway in dense grass in a fallow cane field.

Oryzomys fulvescens engraciae Osgood

Fulvous Rice Rat

Oryzomys fulvescens engraciae Osgood, Jour. Mamm., 26:300, November 14, 1945. (Type from Hacienda Santa Engracia, northwest of Ciudad Victoria, Tamaulipas, Mexico.)

Specimens examined, 5 from 70 km. [by highway] S Ciudad Victoria and 2 km. E El Carrizo.

Remarks.—These specimens are referred to O. f. engraciae on the basis of their pale color and narrow interorbital space. They were taken in runways in dense grass in fallow cane fields.

Sigmodon hispidus toltecus (Saussure)

Hispid Cotton Rat

[Hesperomys] toltecus Saussure, Revue et magasin de zoologie, ser. 2, 12:98, 1860. (Type from mountains of Veracruz, Mexico.)

Sigmodon hispidus toltecus Bailey, Proc. Biol. Soc. Washington, 15:110, June 2, 1902.

Specimens examined, 23 as follows: 36 km. N and 10 km. W Ciudad Victoria, 1 km. E El Barretal, on Río Purificacíon, 1; 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo, 22.

Remarks.—Among named kinds of Sigmodon this series most closely approaches S. h. toltecus to the southward. The specimens are slightly lighter in color of the upper parts than are examples of this same subspecies from 8 km. NW of Potrero, Veracruz, but in other ways are similar. The single specimen from 36 km. N and 10 km. W Ciudad Victoria is a skull only, but seems closest to S. h. toltecus. As is often the case with collections of Sigmodon, this series contains mostly immatures.

Cotton rats were found abundantly in cultivated areas. Local farmers stated that these rats were [Pg 217] destructive to sugar cane by girdling the stems one and one-half inches above the ground.

Baird Wood Rat

Neotoma micropus Baird, Proc. Acad. Nat. Sci. Philadelphia, p. 333, April, 1855. (Type from Charco Escondido, Tamaulipas, Mexico.)

Specimens examined, 2 from 7 km. S and 2 km. W San Fernando.

Neotoma angustapalata new species

Tamaulipan Wood Rat

Type.—Male, subadult, skin and skull; No. 36976, Univ. Kansas Mus. Nat. Hist.; 70 km. [by highway] S Ciudad Victoria and 6 km. W of the [Pan-American] highway [at El Carrizo], Tamaulipas, Mexico; 14 January 1950; obtained by William J. Schaldach, Jr., original no. 578.

Range.—Known only from the type locality; probably found in other localities along the humid, east face of the Sierra Madre Oriental in Tamaulipas.

Diagnosis.—Size large (see measurements); upper parts dusky brown, paler on sides, individual hairs on middle of back tipped with black or with Light Pinkish Cinnamon (capitalized color term after Ridgway, Color Standards and Color Nomenclature, Washington, D. C., 1912); head grayer especially on cheeks; underparts dusky (dark bases of white-tipped hairs exposed), hairs on throat and inguinal region of adult specimen white to base; outside of legs dusky gray; tail scaly in appearance and sparsely covered with short, blackish hairs above and short, whitish hairs below; skull with auditory bulla large; external auditory meatus large; palatine region narrow; sides of interpterygoid fossa concave and broadly excavated near posterior end of molariform tooth-rows.

Comparison.—Neotoma angustapalata has been compared with N. torquata (specimens from Veracruz and Puebla), N. navus (Coahuila), N. mexicana (New Mexico), N. micropus (Tamaulipas), N. albigula (Coahuila), N. ferruginea (Jalisco), and N. distincta (from published description in Goldman, N. Amer. Fauna, 31:64, October 19, 1910). Neotoma angustapalata differs from N. micropus and N. albigula in having a deep, instead of a shallow, anterointernal reentrant angle on the first upper molar and seems to belong to the N. mexicana group of wood rats. Neotoma angustapalata differs from N. navus, N. mexicana, N. torquata, and N. ferruginea in larger size, darker underparts, tail with sparse, short hairs and scaly appearance, more broadly concave sides of interpterygoid fossa at posterior end of molariform tooth-rows, larger external auditory meatus, and narrower palatine breadth. Neotoma angustapalata differs from the description of N. distincta in having a faintly bicolored tail, no ochraceous pectoral band, broadly concave sides to interpterygoid fossa, and narrower palatine breadth.

Remarks.—Neotoma angustapalata is represented by two specimens; the type and another specimen, an adult male, no. 37062, with skin and broken skull. The description takes into account both of these specimens. The most significant characteristics of *N. angustapalata* are its scaly-appearing tail with short, sparse hairs, dusky underparts, broadly concave sides of the interpterygoid fossa at the posterior end of molariform tooth-rows, and the narrow palatine breadth. Among named kinds of *Neotoma*, the newly named species most closely resembles *N. torquata* and *N. distincta*; however, it is geographically widely separated from these two species. *Neotoma navus* of southeastern Coahuila is the only other member of the *N. mexicana* group in northeastern Mexico.

[Pg 218]

These wood rats were taken in rocks and crevices at the base of a small hill in thick vegetation growing in deep humus. Schaldach termed the trapping site as "arid tropical tending toward humid tropical".

Measurements.—The subadult, male holotype measures as follows: Total length, 325; length of tail, 154; length of hind foot, 36; length of ear from notch, 29; basilar length (of skull), 33.9; zygomatic breadth, 22.1; interorbital breadth, 5.7; length of nasals, 15.2; length of incisive foramina, 8.7; length of palatal bridge, 8.5; least breadth of palate between first upper molars, 2.7; greatest breadth of interpterygoid space, 4.1; alveolar length of upper molariform tooth-row, 9.6. The adult, male, no. 37062, measures as follows: Total length, 380; tail vertebrae, 195; hind foot, 42; ear from notch, 31; interorbital breadth (of skull), 6.4.

Specimens examined, 2, from the type locality.

Rattus rattus subsp.

Black Rat

Specimens taken, 2 from 70 km. [by highway] S Ciudad Victoria and 6 km. W of

the [Pan-American] highway [at El Carrizo].

Mus musculus subsp.

House Mouse

Specimen examined, 1 from 12 km. N and 4 km. W Ciudad Victoria.

Nasua narica tamaulipensis Goldman

Coati

Nasua narica tamaulipensis Goldman, Proc. Biol. Soc. Washington, 55:80, June 25, 1942. (Type from Cerro de la Silla, near Monterrey, Nuevo Leon, Mexico.)

Specimen examined, 1 from 70 km. [by highway] S Ciudad Victoria and 2 km. W El Carrizo.

Remarks.—Several bands of coatis were observed in the vicinity of the village of El Carrizo. One skull of a male was obtained.

Transmitted June 8, 1951.

23-8338

Transcriber's Notes

Page 210: Säugthiere may be a typo for Säugethiere.

*** END OF THE PROJECT GUTENBERG EBOOK MAMMALS FROM TAMAULIPAS, MEXICO ***

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