



Diols

Notes on Mammals and
Birds of Mex.

E. A. Goldman,

Alila,

Tulare Co.

California,

Estados Unidos.

Book 2nd

Apr 4th To Aug 10

1893.

(7)

Apizaco, Tlaxcala, Apr 4-6 1893
I spent two days here while
Mr Nelson went to see the gov.
in Puebla. The alt. must be over
8000 ft. I found no signs of jump-
ing rats here. There seems to be
an interval in which no jump-
ing rats are found between Golb
where I caught 5-toed jumpers
& Huamantla where I caught
4-toed ones. I saw no signs of
gophers. A stream flows by the
town which has a few bushes
& an occasional tree along
here mostly I saw & shot birds.
Mams. taken at Apizaco.
Sitomys: Got a rather large
specie of Sitomys same as
taken at Golb. & a white

(2)

Apizaco.

belled one same as taken at Amecameca. Both species lived among the rocks and along banks near the stream, & the smaller kind was common in grain fields everywhere.

Reithrodontomys. Caught a couple of them near the creek in a grassy patch.

List of Birds of Apizaco.

Scolecophagus cyanocephalus.

Pipilo fuscus.

Carpodacus mex. front.

Melospiza fasciata mex.

Ammodramus.

Otocoris.

Tit lark.

Melospiza lincolni.

Dendroica aestiva.

Chalchicomula.

(3)

Melospiza socialis.

Chalchicomula Puebla Apr. 8-19
+ 27 to May 2.

Mammals: *Sitomys*. 2 same species of *Sito.* as taken at Apizaco.

Dipodomys. A species of this genus is common. They are found more or less everywhere on the plain but especially along a bank & in land not cultivated lately. They usually have 2 holes though very often they have more all of which are used. Their range as far as I know it is in the shape of a triangle the extremes being Huamantla, Tlapaca, Esperanza

(41)

Chalchicomula.

Puebla, & Perote, Vera Cruz.

Reithrodontomys: Tolerably common along the hills in the grass at their bases.

Arvicola: We were somewhat surprised when I caught arvicolas in grassy places at the altitude of the town (8200 ft.) This makes the lowest altitude at which we have yet found them in Mex. They were rather dark colored.

Geomys: Tolerably common.

Lepus: Three species of the genus are found (1) the white sided jack. (2) a very large reddish woolly cottontail. & (3) a small gray one.

Mephitis: I picked up a skull.

Chalchicomula.

(5)

Neotoma.

~~Pico del Orizaba, Alt.~~

Birds of Chalchicomula.

Otocoris: Common in the fields on the plain near town.

Pipilo maculatus? A pipilo perhaps this one was common in the bushy places along road-sides & even in the midst of town wherever there was cover.

Carpod. mex. fron. Common.

Melospiza lincolni: Com.

Pipilo fuscus: Com.

Harpor. curv. Very common on the hills along the edge of the plain where plenty of wild magueyes, cactus, & brush grows.

(6) Chalchicomula.

Icterus wagleri, com.

Scotocophagus cyanocephalus,
Com. in the fields.

Rubia melanocephala, Com.

Coccothraustes vespertina: One was
shot near town by Mr. Nelson.

Guiraca caerulea: Com.

Amphispiza bilineata: Com.
along roadsides etc.

Talps: One species, com.

Spinus psaltria mex. com.

Scardafella inca, com.

Harpor. ocellatus. We saw this
bird here for the first time.

They were about as common as
Harpor. curv. & were found in
same locality.

Colaptes cafer, Com. I found

Chalchicomula. (7)

one nest in a tree, the aperture
only about 2 ft. from ground
& nest slightly above the level
of ground.

Aphelocoma sumichrasti, Com.
up to edge of firs on the mt.
(Coizaba)!

Ammodramas, com.

Spizella pallida, Rather com.

Lanius, com.

Spizella atrigularis, com.

Bubo virginianus subarcticus:
One was brought in by native
hunter.

Hemiprocne: I saw two of the
white-collared species flying.

Geothlypis speciosa. I shot
one bird on the top of a hill

(8) Mt. Orizaba. Tim. line,
near town.

Tachycineta thalassina.

Birds. Saw several birds.

Caracara Polyborus cheriway, a few were seen but are not very com. *

Mt. Orizaba near timber line.

Apr 19-21.

Mamm.

Arvicola: Common among succatone grass in cañons. not common elsewhere owing to unfavorable conditions.

Sitomys: White bellied species com.

Sorex: I caught one specimen in an *Arvicola* runway on a bank. * For birds omitted here see page 17

Mt. Oriz. Tim. line, (9)
Oryzomys: Rather com along with *Arvicolas*.

Neotoma: Not com, owing to lack of cliffs, one was trapped by Mr N. in the cave in which we camped.

Lepus: We saw signs of a small rabbit near & above timber line but not in such great quantities as near & above timber line on Mt. Itzaccihuatl.

There is plenty of cover for them here about the edges of lava beds but their signs were not numerous. Possibly a small specimen procured at a rancho lower down (alt about 9500ft) was the same as this one here.

(10) Mt. Orizaba, Rancho,
Canis latrans. Tracks probably
belonging to this animal were seen.
Birds.

Amphispiza bilineata! com.
Colaptes cafer! com.
Dendroica auduboni. ^{Found} com. far
up, above timber line.
Dryobates stricklandi. com
near timber line.
Merula mig. com.
Sitta pygmaea. com.
Sialia mex. com.
Snow bird. com.

Mt. Orizaba, Rancho, Alt. 9300
Apr. 21-27.

Mamm.

Arvicola! Very common where
ever there was cover of any

Mt. Orizaba, Rancho, (10)
kind.

Lepus! Two kinds are found (1)
a large one of which we pro-
cured no specimens here but I
saw one. It was perhaps the
same as the large one found
at the foot of the Mt. at
Chalchicomula & (2) a small
gray one of which we got one
specimen.

Oryzomys! Not common
I caught 2 in a cañon on
the south side of a hill south
of the Rancho.

Reithrodontomys! A few were
caught mostly in Arvicola run-
ways.

Sitomys! White-bellied spe-
cies same as taken at Chal-

(12) Mt. Orizaba, Rancho.

Chionomys was com.

Sorex:—Two kinds were taken
(1) a large shrew & a small
brown one with pretty long tail.

Sciurus: One was brought in
by native hunter, they are not
very com.

Thomomys:—A small smoky
colored species was common es-
pecially in some potato fields.
The soil here is of a blue volcanic
ash color & gophers were exactly
the same in color excepting

3 I caught out of some 15 or 18
specimens which were reddish
like those taken at Salazar, Mex.
& on the "Sierra de Pachucá" in
Hidalgo.

Mt. Orizaba, Rancho, (13)
Birds.

Anthrostromus macromystax
I shot two specimens & saw one
other on the north side of a
cliff south of the Rancho.
One of them had a nest but
I failed to find it.

Aphelocoma couchi?—A species
resembling this one was common
from lower edge of firs up to
about 11,000 ft. or more.

Aimophila superciliaris, Com.
Butes. A species of this genus
was seen on several occasions
but no specimens procured. They
were nesting somewhere in the
neighborhood.

Columba fasciata? Birds prob-
ably this species came in 2^d or 3^d

(14) Mt. Orizaba Rancho.
to a hedge of gooseberries on several occasions. I failed to get a specimen. They seemed to feed on the green berries.

Cyanocitta. Birds of this genus were seen but none procured.

Colaptes cafer. com

Dendroica auduboni. com.

Dryobates stricklandi. Very com.

Empidonax. I killed 2 species of this genus near Rancho.

Ceryle ruber. com.

Talco. A species of this genus was com.

Geococcyx alpinus. I saw none on the Mt. but people describe them.

Habia melanocephala. Com

Mt. Orizaba Rancho. (15)
Harporhynchus ocellatus. Rather com. as high up as Rancho.

Parus meridionalis. Com.

Pipilo. Two species we found here (1) something like the one at Chalchicomula very common & unusually bold, & (2) a species having a Rufous crown not previously seen, was not so com.

Lophia mex. I bird was killed by Mr N.

Junco cinereus. com.

Troglodytes brunnicollis. Rather com.

Turdus huttoni. com

Certhia familiaris mex. I shot by Mr Nelson.

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Sitta Mt. Orizaba Rancho.

Sitta pygmaea: Com.*Sialia mex*: Very com.

Snow bird: Com.

Merula mig: Com.*Spizella soc*: Very common on a hill which had been cleared near Rancho. They had very little black on forehead.*Setophaga picta*: Com.*Spinus pinus*: Rather com. at Rancho.*Sayornis pertinax*: Not very common I shot one bird.*Tachycineta thalassina*: Very com. on a hill near rancho where they would fly about in great numbers & occasionally alight on the trees.

Chalchicomula

(47)

Sitta Carolinensis: Rather com from fir belt upward.

Chalchicomula Birds omitted in their proper place.

Tachycineta thalassina: Com.*Thryothorus bewickii fairdi*: ^{very} Com.*Passerina ciris*: Not common I shot one bird on a brushy hill near town.*Empidonax griseus*: Rather com.*Daltriparus melanotis*: Com.*Salpinctes obsoletus*: Not very com. Those I saw were along a cañon in the hills near town.*Zenaidura macrura*: Not very com.*Basilinna leucotis*: Com.*Eugenes fulgens*: Com.

Tehuacan.

Trochilus platycercus: com.

Sylvania pusilla: com.

Butes: A species was rather com but none were obtained.

Falco: A species was com.

Tehuacan, Puebla, Alt. 5300ft.

May 2-9 Mammals.

Lepus: Two species especially the larger one were common. The larger one was not exactly like that found at Chalchicomula but did not differ much apparently.

The small gray one we got no specimens of but I saw a hunter with one he would not sell it looked very much like the small one found at Chalchicomula.

Tehuacan.

Myctinomys: Mr N. bought some of boys who said they got them from houses.

Perpallio: He also got a couple of large bats of this species from same place.

Mus. musculus. I caught two of them in a brush fence far from any buildings.

Petromys: Caught one near a large rock along some brush.

Neotoma: A large red-backed rat was very common in the cliffs east of town & under rocks. They usually had holes under rocks or other ~~other~~ cover & made trails from them in all directions & had their reg-

Tehuacan

near dumping places sometimes
10 yds. from hole. Not a single
dung could be found about
their nests or anywhere except
at this pile where there would
be 2 qt. or more of it. Their habits
were very much like *Neotoma*
nelsoni we got near Manzanilla
in Colima.

Mephitis: I caught a specimen
having a white stripe in middle
of face & long tail it was in
such a poor state of fur however
it was hard to tell what color
he was.

Birds:

Amphispiza mysticalis: Very

Tehuacan

common along roadsides &
trash fences.

Hemiprocne: I saw some 20 or 25
of them on 2 occasions circling
& flying about very high in the
air east of town near a very
large spring in a limestone
cliff.

Pipilo fuscus: com.

Pipilo: Another bird was com.
something like *fuscus* but with
more white on chest & two brown
patches on sides of throat.

Melospiza lincolni: I shot
one specimen the only one
seen.

Phainopepla nitens: Very com.
Aphelocoma sumichrasti:

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Tehuacan.

not very common. I shot one
bird & saw several others.

Harporhynchus curv. Very com.
Tamias; Com.

Mimus polyglottos. Com.

Scolecophaga inae Com.

Geothlypis speciosa. Not com.

Zenaidura macrura. Com.

Melospiza leucoptera. Com.

Quiscalus major. Very common
in the midst of the town
& in newly plowed & other
fields near it.

Pyrrocephalus rubinus mex. Com.

Catherpes mex. Not very common.
I saw several along cañons which
come out of the hills east of
town.

Tehuacan.

(23)

Campylorhynchus; A species of
this genus was very common
on the brushy hills east of
town.

Sylvania pusilla. Com.

Empidonax; At least one spe-
cies was com.

Micrathene whitneyi; I shot
one specimen from a tree to
which it flew when started
from a cliff by my approaching.

Spinus psaltria mex. Com.

Ampelis cedrorum. Com.

Passerina ciris. Not com.

D. scalaris. Tolerably com.

Melanerpes hypopolius. Com.
about the candelabra cacti
east of town especially.

(24)

Huamantla.

Guiraca caerulea, com.

Molothrus: A species of this genus was com.

Peterus wagleri, com.

Trochilus lucifer, com.

Myiarchus: Not very com.

Huamantla, Tlaxcala, Mexico.

May 9th to 17th 1893.

Note - Huamantla is very much the same country as Chalchicomula, Puebla, and I neglected to make any lists of the Birds and mammals but they are much the same. From Huamantla I made a trip up on the Sierra Malinche found very little there stopped 2 nights and trapped high up near timber line.

Perote, Huamantla.

25-

Got only two shrews / arvicola and 4 Neotomas. No signs of Geomys were seen on the Mt. or in the neighborhood of Huamantla. We worked the immediate neighborhood of Huamantla getting white-bellied Sitomys, Reithrodontomys and Arvicolas, also Spermophilus mus.

Perote, Puebla, Mexico, 1893.

May 17th to about June 10th

Alt. about 8200 ft.

Note. I made a trip from this place over into a lava bed about N.W. from town & in company with Mr. Nelson made a trip to the top of the Cofre which rises

to a height of about 13000 ft. a few miles south of town. Work was done near Perote for several miles in all directions. Two camps were made on the Mt. one at the Casa del Nevos and another at a small hut where there was water just below fir belt.

General Notes.

Perote is situated near the ^{base of the} Cofre de Perote and very near the eastern edge of the Mexican highlands. To the north east and west extend a sandy plain for 8 or 10 miles.

About 3 or 6 miles east the highland suddenly breaks down and from the crest one can look down on the low country of Vera Cruz. At the time when we

were staying at Perote it was quite cold although about the warmest time of the year. Clouds float up from the warm country of Vera Cruz on strong winds in the afternoon. It is much colder all along this part of the edge of the Mexican highland than farther inland for instance at San Marcos.

Vegetation.

As on all the other high mts. we have visited in Mexico the distinct timber belts occur here on the Cofre de Perote.

- (1) A belt of Pine extending up to about 8500 ft. alt. ~~then~~
- (2) A belt of firs extending to the
- another belt. (3) of pines is

Huamantla, Perote.

reached the latter extending to timber line. The two pine belts are never of the same species.

In the "Malpais" or lava bed the following were characteristic. Yucca, Pinon (3-leaved), a kind of juniper, one oak, 1 pine, a wild agave. The native grass called affillerilla grew sparingly, and at least three species of *Opuntia*. The latter were all low bushy growing species which rendered whole acres of ground a hopeless mass of thorns, also a wild cherry.

The principal crops are corn, wheat, barley, garbanos, albejon, & potatoes.

Perote, ~~Huamantla~~

Mammals

Arvicola. Probably two species of this genus were common (1) one was common along grassy banks and around maguey plants near Perote and (2) one was very common in little meadows that occur near timber on the "Cofre" at an altitude of probably 11000 ft. The second species was always found in open ground and usually where the grass was very short, due to the cattle and goats which range over them. In such places their holes were very common and runways leading from one hole to another very distinct.

Huamantla, Perote.

Canis latrans. A few are found on the Mt. plain about Perote and in the lava bed they are more common and said to be very destructive to the sheep and goats which are pastured there.

Dipodomys philipsi Common
From the lower edge of pines on the "Cofre" down all over the plain and east to the edge of the plateau.

Deer. Rather uncommon on the "Cofre" and in the lava bed north of town.

Geomys. Very common on parts of the plain and in the lava bed.

Perote, Huamantla.

Lepus. (1) A few jack rabbits are found on the plain it is the large white sided species. I believe no specimen was secured.

(2) A large cotton tail rabbit was quite common in parts of the lava bed where they lived among the thick *Opuntias* mentioned in section on vegetation and fed on the fresh young grass which grew thereabouts. (3) A small species was not also common along with second species.

Lynx. Said by the natives to occur in the lava bed and among the cliffs high up on the "Cofre".

~~Huamantla~~. Perote.

Reithrodontomys. Common in the
saccaton grass between along the
base of the Mt.

Sitomys. Two species of this genus
occurred (1) the common white-
bellied species found all over this
part of the plateau & (2) a large-
eared rather long-tailed species
was scarce in the lava bed.

Oryzomys. Not very common
a few were taken under bunches
of saccaton grass along the
base of the mt.

Spermophilus. A small species
of this genus something like
mex. was common on the

Perote. ~~Huamantla~~.
plain.

Mephitis. Two specimens were
trapped near town.

Neotoma. Quite common among
the thick cacti in the lava bed
where they make runways and
have holes which usually enter the
ground at the base of a large cactus.

Sciurus. A species of this genus
is found rather sparingly on
the "Cofre"

Birds.

Zenaidura macroura. A few
were seen.

~~Huamantla~~ Perote.

Polyborus cheriway. Only 2 or 3 birds were seen on the plain.

Colaptes cafer.

Rather common down among the pines near Perote and up to timber line.

Swift.

Several black ones were seen just above fir belt.

Trochilus platycercus. Rather common in the lava bed where they were working about flowers. I did not find out whether for honey or insects.

Otocoris. Common on the plain.

Empidonax. Found the nest of a very dark colored species on a

Perote. ~~Huamantla~~.

shelf in a cave about a mile above town. The shelf was about 10 ft. from the ground. The nest was constructed of moss and fine grass and contained three white eggs with some blotches of brown about the size of pin heads on larger end.

Corvus. A species of this genus was rather common.

Aphelocoma sumichrasti. Common along base of Mt. at Perote and among the pines & piñons in the lava bed.

Agelaius phoeniceus. Only one or two specimens were seen on the plain.

Perote.

Icterus. A lemon colored species was seen in lava bed.

Sturnella m. mex. Common on the plain near Perote. Found the nest of one under a small bunch of grass the nest ^{was} of grass and contained 3 young birds June 5th

Loxia. A few were seen on the "Cofre" and one specimen secured

Spizella soc. Common about the fields at Perote.

Carpodacus from mex. com.

Pipilo fuscus. com.

Perote.

Ammodramus superciliosus. Com. from the base of the Mt. at Perote to timber line.

Spinus p. mex. Com. at Perote.

Junco cinereus. Com. from Perote to timber line.

Guiraca caerulea eurhyncha. com at Perote

Tachycineta thalassina. Com. from Perote upward on the Mt.

Chelidon erythrogaster. Com. at Perote.

Lanius. Com. at Perote.

Sylvania pusilla. I saw one or two the first day during our stay at Perote this was the

Perote.

Last I saw of them for the spring.

Harpodynchus curv. Com. at Perote.

Salpinctes obsoletus. I saw one or two in dry washes near the base of the Mt.

Thryothorus b. bairdii. Com. among the maqueys & cactus on the plain.

Certhia fam. mex. Rather com. on the lower slopes of the Mt.

Parus meridionalis. Com. along with preceding.

Setophaga. A species of this genus was com. on the Mt.

Phainopepla nitens. I saw two or three near in the lava bed.

Sitta pygmaea. Common from base of Mt. up to timber line.

Las Vigas.

Sialia mexicana. Rather com. near timber line on the "Cofre"

Las Vigas, Vera Cruz, Mex.

From about June 10th to 24th, 1893.

Itinerary.

Most of my trapping at this place was done within 3 miles of the town. A trip was made to the Cerro de Volcanillo about 3 miles above Las Vigas on the slope of the "Cofre". From the Cerro de Volcanillo probably all the lava came which forms the bed lying from the slope down to Oaxaca. When we visited the peak ~~there~~ we saw no signs of a crater there but the peak itself is a mass of

Lava. The alt. at Las Vegas is probably 8500 ft.

General Notes.

Las Vegas lies on the East slope of the Cofre de Perote among the pine woods. Just north of town is a deep barranca at the bottom of which is a small stream. This barranca heads only a short distance above Las Vegas at which ^{it breaks down from} ~~joins~~ the plain of the plateau and is probably a 1000 ft. in depth. From Las Vegas one can look down on the warm country of Vera Cruz. The descent from the town is very steep. A short distance from Las Vegas is a hill known in the neighborhood as El Cerro de los Pajeros where at a distance

of probably 75 miles in a straight line ^{from the sea} thousands of seabirds become confused in the fog while flying along the front of the range and attracted by large fires which are built on the hill are killed by thousands by the natives with clubs. The birds are said to be of many species.

Diurnal Notes.

On this slope of Perote are found three species of *Sciurus*. I afterward found ^{at first} that the plain grey species is confined to the pine woods above the oak belt which occurs on the E. slope of the Cofre. Two species the small one and the one with red rump & neck are

found lower down in the oaks.
Las Vegas is situated in the zone
occupied by the upper or grey
squirrel. The two lower ones are
found in the cañon lying just
north of Las Vegas. Owing to its
depth and the ^{consequent} difference in
climate met with between the
cañon and plain just above.
The two lower squirrels are thus
brought within a very short dis-
tance of the town.

Vegetation.

At least two species of pines were
found at this place one was
very conspicuous on account of
its long silky leaves. At least
two species of oak, an Alder,
elder and the grass Alfillerilla.

Mammals.

Arvicola. Rather common along
wet banks and under saccate
grass.

Thomomys. Not so common
under the bunches of saccate
Sturnus. white-bellied species
was common.

Lepus. Three species of this genus
at least were found. (1) A large
cottontail was very abundant (2)
a smaller one was common (3)
a few white-sided jack-
rabbits were living on the plain
near the station but they were
very shy and although I hunted
for them on several occasions
& Mr Nelsons offered 75cts. a
head for them the Indians

could not get any.

Sciurus. Three species were rather common. (1) the plain gray one of the pine woods & (2) & (3) the two of the oak belt were rather common in the barranca.

Mephitis. I caught a single specimen at its hole under a large rock.

Geomys. Rather common on the plain near town.

Birds.

Otocoris. Common on the plain north of town.

Sialia mex. com.

Aimophila superciliosa ^{not} abund.

Dryobates scalaris. com.

Ergaticus ruber. Not uncommon in the pine woods just above town.

Setophaga miniata. Common along with preceding.

Tachycineta thalassina. com.

Parus meridionalis. common in the pine woods above town.

Junco cinereus. Abundant

Corvus. com.

Sylvania pusilla 2 or 3 were seen the last time for the spring.

Cyanocitta coronata. com.

Vitta pygmaea. com.

Geothlypis. A species of this genus was common.

Troglodytes brunneicollis. A few were seen in the pine woods.

Guiraca caerulea. Common.

Merula migratoria. Com.

Agelaius phoeniceus. Saw two or three about ponds of water on the plain near town.

Jico, Vera Cruz, Mex.

June 21st to about July 18th 1873.

Itinerary.

Work was extended for 4 or 5 miles in all directions & a side trip made to the oak forest up on the slope of the Cofre about 8 miles from Jico.

The alt. is about 3000 ft.

Jico lies on the sloping base of the "Cofre de Perote".

General Notes.

Jico lies as just noticed on the

extreme lower slope of the Cofre although a gentle slope extends from here to the coast. There are two ways by which Jico may be reached from the plateau. (1) by the Ferro Carril Interoceanico from Perote a few leagues to Jalapa and from there it is necessary to go on horseback by way of Coatepec. (2) From Perote the shortest route is to pass to the south of the peak by way of Rancho Obispo de Agua.

The slope of the country toward the sea causes small streams flowing from the "Cofre" to cut down deep in the volcanic soil and form small barrancos which run parallel to each

other all along the base of the Mt. Jico lies on the divide between two of them.

The inhabitants are mostly of the mixed races.

The principal occupations are coffee planting and fruit growing. Jico lies in one of the best coffee districts of Cera Cruz. The coffee grows from a short distance of Jico down. Near J. is an old volcanic cone with steep sides which is entirely covered by coffee. Very little stock is raised.

The climate is very damp & it rained heavily almost every day during our stay. Some times a shower would come

up suddenly and it would rain so hard that the streets of the town would be running streams from one sidewalk to the other. These streets are made passable at some of the corners by setting large rectangular blocks of stone on end and stepping on the ends. Leather and anything that will absorb water becomes covered with mold in a very short time unless dried by a fire while it is hard work to prevent goods etc. from rusting.

Vegetation.

The vegetation of J. is very luxuriant and of endless species

Just above Jico a heavy oak forest occurs. The lower part of this has now been cleared off.

Several species of oaks and many native trees are included in it.

One species of oak grows to be especially large and straight many of the trees measure 8 ft. in diameter and are very tall near the large abutments run out in all directions firmly bracing the great trunks and furnishing shelter between them for many wild animals.

All about the country grow hundreds of flowering plants.

The principal crop raised is coffee. many tropical fruits are raised such as the orange

avocado, mango, banana. a little Ann. chile pepper and a few peaches are also raised.

Mammals.

Pecary. Very common in parts of the oak forest.

Canis. Not uncommon in the oak woods and up to timber line.

Temesate. This little deer so-called by the people is quite common in the oak forest.

Inaktusa. This animal also is said to be common among the oaks.

Lepus. Two species may be given at least as occurring here one the large cottontail taken at

Las Vegas is not uncommon along the lower edge of the oak forest. (2) a smaller species is common about Jico but generally hard to get on account of the vegetation.

Thomomys. One species is rather common about Jico & up to lower edge of the oak forest through the cleared belt.

Sciurus. Three species are found same as those taken at Las Vegas. (1) The gray species of the pine woods above the oak forest is I believe never found lower down. (2) & (3) The small squirrel called by the people "noto" & the large squirrel with rusty rump neck and belly are

both common and even may be said to be abundant in the oak forest. The small one (noto) was especially common and fearless. One day while out trapping I started one from a thick clump of bushes only a few feet away where it was probably searching for acorns. It sprang up to a dead limb only about 10 ft. away and stopped scolded away at me for several minutes with its tail curved over its back. It made a loud chattering noise and as it did jerked its head and body up and down. Finally it left the tree and springing to the ground ran off 20 yds. and

passing on a fallen log scolded me again for a minute.

Reithrodontomys. Rather common from J. up to lower edge of oak woods.

Sitomys. Two species were taken (1) white-bellied *Sitomys* in the upper part of oak woods and upland to timber line. (2) A species was common in the oak forest.

Cryzomys. Not common. two or three species I trapped near lower edge of oak forest.

Arvicola. Common along banks of ditches and cañons near Jico.

Martucha. This porcupine called *martucha* by the natives is not very common in the oak woods

Procyon. Tracks were seen in the cañons and coffee plantations near Jico.

Arvud. Probably not uncommon. two or three specimens from the oak woods were bought of the natives.

Lynx. A few are said to live high up on the "Cofre".

Urocyon. Probably a few are found below the oak forest.

Caris labrans. Found at least high up on the cofre.

Putorius. I trapped two one near Jico in a coffee field and one just at the lower edge of the oak woods.

Mephitis. Black & white black skunks of this genus were

brought of the Indians.
 Sores. Two species are found.
 (1) a small species is rather rare at Jico those taken were living in damp situations along the canons. (2) A black-tailed large species is rather common in the oak woods where they make well beaten roads sometimes three inches broad usually under fallen logs. One or two were also taken at Jico but always in damp well shaded situations. A shrew looking exactly like these was taken on Mt. Brizaba at an altitude of about 9000 ft.

Blarina. This species was common along ditch banks

and under logs and rocks in fields at Jico and up to the lower edge of fir woods. This species lived always in more open situations than the second Sores just given and I believe are never found in the present oak forest although they are very common up to its extreme edge through the cleared belt.

Vesperugo. A single specimen of this ~~sp~~ genus was brought me by an Indian who had caught it near his house near lower edge of the oak woods.

Bat. Long-eared. Taken precisely as preceding.

Tatusia novemcincta, said to be common. I saw tracks of the animal at Jico.

Mt. Lion. said to be common in oak forest.

Birds.

Dendrotyx macrourus. Abundant in the oak forest. While hunting one day with Mateo Ramirez the owner of the Rancho ojo de agua in the oak forest we ran across a female with several young. The young birds scampered off in the undergrowth but the ^{old} young birds instead of following began to circle around Ramirez and I at the same time uttering a clucking noise. I was anxious

to make a specimen of her and as she kept too close to shoot with an ordinary charge I opened my gun & after putting in my auxiliary shot her with that. Then the young ones finding their mother did not follow began to come back at the same time uttering a queer little peeping noise. Although we kept very quiet they would not come in sight so that I could use my auxiliary and Ramirez I finally chased them and after about 1/2 hour chasing Ramirez finally fished one out from under a log. They were only a few days old. Dark buff in

color and looked very much like young chickens.

Colinus pectoralis. Not common
I shot a female in a hedge near Jico

Ortalis vetula macalli.

Penelope

Penelopina

Columba fasciata. Not uncommon
in the oak woods.

Columbigallina passerina.

Scardafella inca. Not very com.
a few were seen at Jico in the coffee fields.

Cathartes aura. com.

Catharista atrata. com.

Pipornis griseicauda.

Crotophaga sulcirostris.

Piaya cayana mehleri. Common
in the cañons at Jico.

Trogon mexicanus. Not very
common I shot one bird near
lower edge of oak woods.

Ceryle cabanisi. Rather common
along the cañons at Jico

Colaptes cafer. Common along
the lower edge of the oak
woods.

Melanerpes formicivorus.

Abundant along lower edge
of oaks.

Dryobates scalaris. Rather
common at Jico.

Cypseloides niger.

Chaetura brunneitorques.

I shot a single specimen
and saw many others flying

at the Rancho Ojo de Agua & up as high as timber line.

Tamprolaema rhani.

Amazilia beryllina. Common in the fields about Jico.

Cyanornis cyanocephala.

Myiodynastes luteiventris.

Abundant along ledges and cañons or wherever trees were growing near Jico.

Myiozetetes texensis. Common along with preceding.

Pachyrhamphus major.

Platypsaris aglaie.

Myiarchus laurencei.

Sayornis nigricans. Common along streams.

Empidonax albigularis. Com in the fields.

Empidonax fulvifretus. Common along with preceding.

Pipoccephalus r. mexicanus

Common along streams and damp meadows.

Ptilorhinus cyanogenys.

Cyanocitta s. diademata.

Common in the oak woods.

Yphelocoma unicolor. Common along with preceding.

Callipepla robustus. Common in the coffee fields.

Icterus auduboni. Common along cañons and wherever trees are to be found.

Carpodacus front. mex. Com. in the town and among the coffee fields.

Spinus p. mexicana
Common in the fields at
Jico.

Spinus notata

Spizella socialis arizonae
Common in the fields.

Junco cinereus. I was surprised
to find this species ranging
down almost as low as fields
and up to timber line but
not in the gloomy parts
of the oak forest.

Aimophila rufescens. Quite
common on bushy hills
near town.

Habia melanocephala. Common
along with preceding

Gubaea caerulea eurhyncha
Common along ledges. These ^{male}

birds are found of singing
from the top of a tree. Their
song is rather fine.

Tanagra abbas.

Sporophila moreletti. Abundant
in the fields where there are bushes.

Sporophila corvina. Common
along with preceding species.

They have a habit of sitting
on a branch and leaving it
is tough to catch insects. Usually
they fly upward about two feet
then again alighting repeat
this every few seconds meanwhile
uttering a harsh little note
while in the air. They are very
restless little birds and fly
frequently from place to
place often going 100 yds. at

a time.

Euethia olivacea pusilla

Tolatinia splendens.

Euphonia hirundinacea.

Piranga hepatica. Common
along cañons and hedges
whenever there were trees.

Progne chalybea.

Stelgidopteryx serripennis

Merulianus meliophrys. Not
common I shot a single bird
near lower edge of oak
woods.

Diglossa baritula. Not very
common. I shot one near
lower edge of oaks and saw
two or three others.

Geothlypis cucullatus. Common
below the oak forest in fields

and on brushy hills.

Setophaga miniata. Common
in upper part of oak woods
and up into the pine woods

Basileuterus rufifrons.

Basileuterus belli.

Harporhynchus longirostris.
Probably not common one
was brought in by a boy.

Sclerurus mexicanus.

Hileodytes pallescens.

Hileodytes gonatus.

Catherpes mexicanus. Not
uncommon along the cañons
at Jico.

Cistothorus polyglottos.

Thryothorus maculipsectus.

Hemicorhina prothelena.

Atlapetes pileatus.

Dendroornis erythropygia.

Myadestes obscurus.

Merula grayi.

Merula migratoria propinqua.

Common in the oak. Along

lower edge of the oak forest.

Melanotis caerulescens.

Catherus melpomere. Very

Common in the coffee fields

and wherever there was plenty

of cover. They are shy skulking

kinds and seldom seen in

the open. They may often be

heard or seen scratching on

the ground among the

leaves ^{in thickets} after the fashion of

some of the Pipilos. I found

a nest near Jico in a

fork of a coffee bush about

four feet from the ground

the nest was of coarse grass

lined with finer grass. The

nest contained two rather small

light blue eggs covered

uniformly with small brown

specks.

Sialia azurea. I was surprised

to find this species down nearly

to Jico along with *Juncos cinereus*

Buarremon funneus

Buarremon albiventer.

Cyclorhis flaviventris.

Oporornis ophthalmicus.

Anthus macronyx.

I heard them at night while

staying at Rancho Gij de la Cruz.

Atlixco. Puebla. Mex.

July 20th to Aug 10th 1893.

Atlixco lies on the southern base of Popocatepetl a few hours ride from Puebla on a branch of the Inter-oceanic R.R.

The altitude is about ~~5000~~⁶⁰⁰⁰ ft.

Work was done for 5 or 6 miles in all directions.

General Notes.

Atlixco lies on a sandy plain a few miles from the southern base of Popocatepetl. It is surrounded except toward the south by low hills some of which are covered by a growth of brush. The drainage is toward the south.

The climate is rather dry during our stay although in the middle of the rainy season not much rain fell. There is enough water to grow such crops as wheat, corn etc. but such crops as sugarcane require irrigation.

The population of Atlixco is about 14000.

The principal occupations are sugar planting agriculture in general and stock raising.

Vegetation.

Schinus molle is one of the most characteristic trees with casahuate the tree which bears large white flowers of the warm country. Immense quantities of alfalfa are raised and stock

is brought long distances to be fed on it while considerable quantities are shipped to the City of Mexico.

Coffee is raised near town but in very small quantities.

Prin. crops. Corn, wheat, chile, sugar, Prin. fruits, Chirimoya, orange, Sweet limes, pears, apples, plachis, cherries, guineas, and two species of aguakate. also a fruit call the Jimiquile by the people.

Large quantities of sugar cane are raised just below town.

Mammals.

Heteromys. Rather common along the edges of the grain fields wherever there is shelter and sometimes along small gulches where they

live along the walls.

Procyon. Tracks were seen.

Bassaris. Very common along woyos and around fields.

Canis latrans. Said to be tolerably common a young one was brought in by hunter.

Mus musculus. Common along woyos and around fields.

Sitomys. A species looking very much like one taken at Pachuca was not uncommon in hedges along roadsides etc, where they were eating the ripe seeds of *Schinus molle*.

Mus ratus. Caught one in a trap set for *Spermophilus* along the wall of a barranca. Saw no signs made by them.

Atlixco.

Lepus. This genus was represented by two species (1) A Jack rabbit is common on the hills and in alfalfa fields. and (2) A cottontail is common also in alfalfa fields and in the sugar cane where it is almost impossible to get at them.

Geomys. A large species is common in the sandy country across the stream coming from the base of the Volcans and passing to the south of Atlixco and about two or three miles away. This sandy country all seems to lie on the farther side of the stream and

Atlixco.

extends up to the base of the Mt.

Description. Size large general color rather dark buff. Belly slightly lighter. Hair of back slightly tipped with blackish. Tail covered by a very scattered growth of fine short hairs.

I saw no signs of them on the Atlixco side of the stream. A ♀ had the following formula $P \frac{1}{1}. A \frac{2}{2}.$

Spermophilus. Two species of this genus are found (1) The large common squirrel *Spermophilus macrourus* and (2) The small spotted one very bright in color and tail very long. Neither species

Arctives.

were very common. The large one was confined to the rocky walls of small barrancas and the smaller one to generally has holes running at an angle into the banks of ditches etc. One of the species was taken of the small one and I believe none at all of the larger one.

Dilelphys. Common judging from number of tracks seen. I caught two specimens in traps. They are of the gray species. A young one was struggling in the trap when I came up but as soon as it saw me it hopped its

Arctives.

head and became motionless keeping the same attitude it chanced to be in when it first saw me. Its body was stiff as though dead. When I took hold of it it tucked its ears back as a horse does when angry but showed no other signs of life and made no effort to bite when I placed my finger in its mouth.

Birds.

Colinus pectoralis. Very common but hard to flush on account of the abundance of cover furnished by alfalfa, corn, and cane fields. Their calls could be heard at almost

any time of day by going out a short distance South or east of town.

Cathartes aura. Common.

Catharista atrata. Common.

Polyborus cheriway. Rather common.

Circus hudsonius. Several were seen foraging over the damp marshes and fields below town.

Chaetura brunneitorques? Mr Nelson and I saw a number of swifts flying several miles from Atlixco toward the Mt. that he identified as this species.

Tayornis nigricans. Common along small streams.

Troglodytes r. mexicanus.
Rather common along

streams and the wet fields below town.

Ploceus. Common in the grain fields about Atlixco.

Corvus. Common.

Molothrus robustus. Common.

Agelaius phoeniceus. Very common.

A short distance below town where some of the land is swampy and drainage ditches are common. They are generally found in scattering flocks although solitary birds and 2's and 3's are sometimes met with.

Sturnella m. mexicana. Quite common in same country as preceding species.

Zonotrichia macroura. Common
They forage about in fields.
like *S. major* and blackbirds
in general. I saw them several
times fly in from foraging
trips in the fields and alight
on the trees and castor plants
near a large pond. They would
gather very closely together and
hop about although searching
for food on the plants.

Spinus p. mexicana. Common
about the fields.

Carpodacus fron. mex. Common.

Habia melanocephala. Common
among bushes around the
fields where they may often
be seen hopping along
the branches and from one

to another probably searching
for insects.

Guiraca c. eurhyncha. Common
Ammodramus. Quite common
among the damp fields
below town. This species
is white below.

Pipilo fuscus. Common.

Amphispiza mysticalis.
Common mostly on the
hills.

Spizella soc. Common

Pukea. Very common nest
on ground or low bush
according to two observations
made here. Both nests were
of the same material ~~etc.~~
grass roots with stems on
the outside. Eggs pure white

one end slightly smaller than the other and were three in number in each case.

Sporophila corvina. Very common. I observed the same habit as at Jico of flying from its seat straight up into the air and while rising giving vent to its dry little note then turning and diving down to its seat.

Sporophila moreletti. Dull common.

Petrochelidon melanogaster.

Common they were nesting under the eaves and on window panes of a church.

Chehlon erythrogastra, common. This species generally flies nearer the ground I believe

than *Petrochelidon melanogaster*. I often saw them foraging over alfalfa fields close to the ground and *P. melanogaster* flying above them.

Lanius excubitorides. Common. *Harporhynchus curvirostris*. Not very common specimens seen were among the brush on hills.

Catherpes mexicanus?

A white-throated wren was common along the barrancas perhaps this species.

Thryothorus b. bairdi. Not uncommon on hills.

The following birds were omitted in their proper places.

Melopelia leucopetra. Common among the brush on hills and around fields.

Zenaidura macroura. Common along with preceding species.

Scaphella inca. Common in the fields.

Crotophaga sulcirostris. Not uncommon around the fields below town.

Uranornitha. A species of this genus was common even in the plaza in the middle of the town.

Tochilus pulcher. Common
Tochilus platycercus. Common.

Tochimiles. Puebla, Mex. Several days were spent at this. Between July 20 & Aug 10th the dates given for Atlixes.

Itinerary.

Tochimiles is a small town on the lower slope of Popocatepetl.

Its altitude is about ⁶⁵⁰⁰~~5200~~ ft. Work was done for 4 or 5 miles in every direction.

General Notes.

The town lies among the low hills bordering the plain on the extreme southern base of Popocatepetl. It is situated in a break in the hills formed by two deep barrancas which come out onto the plain here. Tochimiles

Tochimilco.

lies between them. The climate here is somewhat cooler than at Atlixco owing to its greater altitude.

Vegetation.

Pines are found on the hills all around the town but several hundred feet higher. This is a small-coned 3-leaved species. Two oaks grow on the hills in scattered bunches and a few madroños. The casahuate comes up from the plain as high as Tochimilco. The chirimoya & species of aguacates, ~~and~~ The mango and a little coffee is raised. Corn & wheat are the principal crops that are grown on the flat-topped hills near

Tochimilco.

town. Apples and peaches are also raised in considerable quantities but as usual of very inferior quality. A few magnolias are raised for pulque and a wild agave grows also an acacia.

Mammals.

Procyon. Common.

Sciurus. The same species as that taken at Atlixco is found here among the oaks but was very difficult to get as they refused bait.

Sciurus. Rather common above here on the Mt.

Lepus. Two species are found (1) The Jack - same as found at Atlixco is not uncommon

along the base of the hills, (2)
A large cotton-tail is found
among the hills and gets
up some distance among
the pines.

Birds.

Columbigallina passerina?

I have having rufous under
wing coverts perhaps this species
was found ^{on} along thick brushy
hillsides but not very common.

Scardafella inca common
in the orchards and immediate
neighborhood of the town.

Chondestes aura common.

Catharista atrata common.

Tylos sparverius common.

Fluvilium gnoma. I heard
them in the evening on several

occasions.

Colaptes cafer. Tolerably among
the oaks on the hills.

Chaetura brunnicorques. I
saw swifs presumably this
species flying over the hills.

Thryothorus. Tolerably on hill
sides wherever flowers were
blooming.

Amazilia beryllina. Quite
common I often saw them
searching probably for insects
on the mistletoe.

Basilinna leucotis, common.
This species is in the habit of
sitting quietly on a dead branch usually
on the extreme top of a tree
for five minutes or more at a
time and uttering a kind of

Tochimilco.

Chirping noise, and all the time moving the tail up and down slightly and turning the head constantly from one side to the other and peering in all directions.

Empidonax. Saw several of a species of this genus but could not identify it.

Aphelocoma sumichrasti. Common among the oaks and lower pines.

Corvus corax sinuatus. Common.
cardinalis. Saw a single specimen of a species of this genus.

Spinus pinus. Not uncommon in the lower part of the pines.

Tochimilco.

Spinus psaltria mexicana. Common about town and on the plain below.

Leucopodacus front. mex. Common in the town and out onto the plain.

Habia melanocephala. Com.

Guiraca caerulea eurhyncha. Com.

Pipilo fuscus. Common.

Pipilo. (Mt. species) Common.

Junco cinereus. Common on the hills and upward.

Peucaea. A species identified as being different from the *Atreus* species by T. S. Palmer in the Provisional list of E. W. Nelson was common.

Sporophila moreletti. Common along the streams near Tochimilco.

Petrochelidon melanogaster, com.
Chelidon erythrogaster, common

Phlogothraupis cirrhensis, Durk. common

They usually go in flocks of 15 to 40. They go from tree to tree usually keeping well up towards the tops. I sometimes saw them hunting among the oaks & mahonios so much in the manner of flycatchers. A flock seems to frequent the same grounds often day after day.

Lanius ludovicianus excubitorides
 Common from the plain up to lower edge of pines.

Basileuterus. A species of this genus was common on open hillsides usually

Catherpes mex. conspicuus,
 Not uncommon on the houses in the town and along the barrancas.

Thryothorus b. bairdi, common from the plain up to pines.

Parus meridionalis, common down to lower edge of pines.

Daltryparus melanotos, common down into the oaks.

Catherpes. A species of this genus was seen on several occasions among the oaks.

Sialia mexicana, common down to lower edge of pines, in openings.

The following were omitted in their proper places. (over)

Tochimilco;
Setophaga miniata.
 Common down to lower edge
 of pines.

Ceryle rubra. Not uncommon
 along with preceding species.

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* Part of this time was spent at
Tochimilco.





