

1957.

1951.1 10 mo. NE. of Colfax, Colfax Co., New Mexico. Elev. circa 6200 feet. July 21, 1957. (R.)

Open plains
Roadside water corner of ungrazed woods, thistle, wild ground, scattered Yucca filamentosa, and areas of bare ground.

Relatively few adult ltrh. Jms. of a few species very numerous.

Paropromala 1♂ & 1♀, swept at different times, all seen.

Agrostotellus, a few adults - not numerous.

Apia a few jms. only.

Blissotaria car. 1 seen but lost.

Trimerotropis pallid. " " "

Campylacantha 1 ad. not all jms. numeros.

Phyllotis numeros. - all jms.

Melanoptus luteus a few adults.

" viridatus 1 seen. Taken.

" mix. a few adult.

Conocylus 1 jms. Taken, all seen.

Orth. 36

Other ins. 36

1951. 2 In ~~Crater~~ Canyon, 6 ms.
N. of Cimarron, Colfax Co., N. M. Elev. 6800
ft (ann.). July 21, 1951. (R.)

Park-like opening in piñon, juniper &
thin oak at lower edge of heavy forest
belt. Areas of bare or short-grassed grounds
very few ♀.

Podiceps 1 swept from ground. 1 lost.

Trachyrhynchus hinnia 1 on ground. - all seen.

Cordilleris 1 taken on ground - 1 lost, all seen.

Mel. nua. Several seen, 1 taken.

Ampelis no. very few.

Uth 6 + 36 = 42.

Uth in. 6 + 36 = 42.

1951. 3 Along Clear Creek, 4 ms. N. of
Ute Park, Colfax Co., N. M. Elev.
(ann.) 7000 ft. July 21, 1951. (R.)

Open spots in pine and fir forest, with
much low oak scrub. Bare ground in
spots, surface largely stony.

No Uth. adult or taken except 1
Ampelis.

Uth. 1 + 42 = 43.

Uth in. 7 + 42 = 49.

1951. 4 8 ms. S. of Eagle Nest, Colfax Co.,
N.M. Elev (aner) 7650 feet. July 21, 1951.
(R.).

Near south end of mountain park containing
Eagle Nest Lake. On bare red soil and
wedy dry mountain meadow vegetation.
All C. seen taken except 1 Hemiteles lost.

Triclistus

Cicostethus rufus 1 on bare soil. Coloration

strongly protuberant. - all seen, altho' search
was made for more.

Amphitornus a single one taken, all seen

Mel. mex. a single one taken - all seen.

$$\text{C. th. } 3 + 43 = 46.$$

$$\text{Other ins. } 34 + 49 = 83.$$

1951 5 Albuquerque Santa Fe, Santa Fe Co.,
N.M. Elev (chub). VII. 22, 1951. (V. R.).

Stenopelmatid (Phrisocnemoides) found

nearly dead on stones in floor of car garage in
morning. Dragon-fly on ~~wall~~ wall of garage.

$$\text{C. th. } 1 + 46 = 47.$$

$$\text{Other ins. } 1 + 83 = 84.$$

1951. 6 10 ms. SW. of Santa Fe, Santa Fe
Co., N.M. Elev. (aner.) 6700 feet. VII. 22, 1951.
(R.)

High plains conditions, sun-cured short

curly grass, with scattered Ephedra-like
bushes and occasional low juniper.

Parabacillus most juv., few and local on
Ephedra-like plant (sample taken).

Psolocassa delic. 2 seen (all) and taken, widely
separated. Apparently Spring tail-sub.
the plant.

Cordillaris - locally numerous on ground.

Mestobryza plattii type. - in fair numbers, local,
on ground

$$\text{Covth. } 28 + 47 = 75.$$

$$\text{Covth. ins. } 8 + 84 = 92.$$

1951.7 2 mls E. of San Felipe Village,
Sandoval Co., New Mexico. Elev.
(ann.) 5100 feet. July 22, 1951 (R.).

On break-down of silt brush along eastern
side of Rio Grande. Surface covered with
heavy pavement of variously sized stones.

Cover scant - a few thistles and sparse
Ephedra-like shrub, ^{low} yucca + a few
juniper.

No C. except Cibolensis, which was
infrequent and active, as usual.

Five seen - three taken, two lost.

Difficult to mark down.

$$\text{Covth. } 3 + 75 = 78.$$

$$\text{Covth. ins. } 0 + 92 = 92.$$

1951.8 4 miles S. of Bernalillo, Sandoval
Co., New Mexico. Elev. (ann.). 4950 feet.

July 22, 1951. (R)

Flat grassy ~~bottom~~ river plain near the Rio
Grande, with bushes of tall compressed (not
in flower), and also some short curly grass,
and a few areas of bare ground.

Heterentria 1 swept, apparently from ground.

Mormonia 1 seen and lost.

✓ Cordillanus in small numbers, on ground.
Paropromata numerous in grass, occasional
on ground when disturbed, two
color types present.

✓ Cremiacris ditto
Mesobryana palli plattii type. 1 ad. + 1 juv. taken all
Ageneotettix - a few on ground.
Caritellix " " " " - all recognized
Cryptops " " " " taken.

Orth. 46 + 78 = 124.

Other ins. 4 + 92 = 96.

1951.9 7 miles S. of La Ventana, Sandoval
Co., N. M. Elev. (chart) 6700 feet. July 23, 1951.
(R).

Hilt surface in part with Topping Stone
parcament. Corn (sparse) short curly
sun-dried grass, Sarcobatus, some Atriplex
and scattered low juniper.

No Q. except 2 Trimerot. pallidipennis
Orth. 2 + 124 = 126.

Other ins. 1 + 96 = 97.

1951. 10. 5 miles S. of Cuba, Sandoval Co.,
N.M. Elev. (ann.) 7400 feet. VII. 23. 1951.
(R.)

Nearly pruned grass country with pinyon,
juniper + some bull pine.

No Q. - other insects swept.

Cloth. $0 + 126 = 126$.

Other ins. $5 + 97 = 102$.

1951. 11 4 miles W. of Cuba, Sandoval
Co., N.M. Elev. (chart) 7100 feet.
VII. 23. 1951. (R.)

Open bull pine woods, with sage, some
Atriplex, etc. Much nearly bare ground.

Circotettix rubula - a few only, two
taken, not shy or particularly active.

Not actively clattering, but day clear
& warm.

Herotus - 1 ad. seen - lost - 2 juvs. Taken
on ground.

Psolocna delic. seen & lost

Melanoplus sp. ——— 1 only seen &
taken - in tall grass shrub.

Cloth. $5 + 126 = 131$.

Other ins. $34 + 102 = 136$.

1951.12 5 miles NW of El Huerfano Mesa,
San Juan Co., N. Mex. Elev. (aner) 6325
feet. VII. 23. 1951. (R.).

Silty soil with sage and broom-corn
like plant (sample taken).

Arth. ignis. Eremopides in litter.

Arth. 1 + 131 = 132.

Arth. vis. 0 + 136 = 136.

1951.13 7 mls. E. of Shiprock, San Juan Co.,
N. M. Elev (chart) 5000 feet. VII. 24. 1951.
(R.).

Roadside along alfalfa fields.

No O. except Blissus carolina on
road pavement - shoulder slopes.

Arth. - 2 + 132 = 134.

Arth. vis. 13 + 136 = 149.

1951.14. 4 mls. S. of Table Mesa, San Juan
Co., N. M. Elev. (chart) 5422 feet. VII. 24. 1951.
(R.).

Silt with scattered low tufts of heavily
grazed grass, a few Atriplex, a small
other low plants.

✓ Eremopis just swept.

Melanoplus sp. just swept

} Vigninus swept
} yielded no more

Arth. 2 + 134 = 136.

Arth. ins. 0 + 149 = 149.

1951. 15 34 ml. N. of Gamsco,
McKinley Co., N.M. Elev. (aner.) 6500 feet
VII. 24, 1951. (R.)

Silt swells with scattered small &
large (some boulders) stones. Very little
vegetation except along a wash. latter
produced nothing.

Cordillaris scarce, 5 seen, 3 taken,
always on bare silt.

Arth. 3 + 136 = 139.

Arth. ins. 0 + 149 = 149.

1951. 16 9 miles W. of Gallup, McKinley
Co., N.M. Elev. (aner.) 6200 feet. VII. 25,
1951. (R.)

Roadside, with nearly bare ground, Fremont
weed & spiny bush (sample kept).

Trim. pallidip. One seen - lost.

Act. Acloplides infreq. in pickle (spiny) bush
(sample kept), adults & juvs. All taken
represent about 1/2 hour beating and
searching.

Arth. 9 + 139 = 148.

Arth. ins. 18 + 149 = 167.

1951.17 4 miles SW. of Lupton, Apache Co.,
Arizona. Elev. (aner.) 5920 feet. VII. 25, 1951.
(R.).

Low hills with juniper, clumps of low
composites (not in flower), some picklebush
(see 1951.16) and tumbleweed. Surface silt
and stone shingle.

Hesperotettix in composites, chiefly juv.,
not common.

Aeoloplides juv. only, swept.

Trim. pallidip. 1 seen but lost.

Uoth. 19 + 148 = 167.
Uoth. no. 6 + 167 = 173.

1951.18 Chambers, Apache Co., Arizona. Elev.
(road map) ~~5750~~ 5754 feet. VII. 25, 1951. (R.).

Gentle hill slope; surface sandy silt with
scattered Atriplex and the feathery soft sage
(sample kept), and scattered juniper.

Plagiostira 1 ad. ♂ in top of soft sage (sample
kept): no more found altho' diligent search
of many of these and other bushes was made.

Uranthus, a few. ^{juv.} only, on same plant.

Uoth. 6 + 167 = 173.
Uoth. no. 12 + 173 = 185.

1951. 19 8 miles W. of Navajo, Apache Co.,
Arizona. Elev. (ann.) 5600 feet. VII. 25, 1951.
(R.)

Roadside (ungrazed) - behind wire
heavily grazed. Atriplex, soft sage and
tufts of brush pass - much bare soil.

Cordillaria freq. on bare ground and in
low pass nests.

Acolopides swept from ~~low~~ low cone.

Neperostethis 1 sp. swept.

✓ Ceramiacis no juvs. in tall pass.

Orth. 9 + 173 = 182.

Other ins. 2 + 185 = 187.

1951. 20 22 miles N.E. of Holbrook,
Navajo Co., Arizona. Elev. (ann.) 5400
feet. VII. 25, 1951. (R.)

Silt slopes with fine stone pavement in
places. Atriplex (scattered), a few low
yucca and brush pass.

✓ Ceramiacis juvs. swept from tall pass.

Paratrillia juvs. swept.

Cordillaria few on silt.

Melanophus sp. 1 swept

Orth. 13 + 182 = 195.

Other ins. 0 + 187 = 187.

1951.21. Joseph City, Navajo Co., Arizona.

Elev. (chart) 5000 feet. VII. 15. 1951. (R.)

Roadside tall ~~wind~~ waxy growth near irrigation ditch.

No. O. except 1 juv. Melanoplus -

Urch. 1 + 195 = 196

Other ins. 4 + 187 = 191

1951.22 3 miles W of Winslow, Navajo Co., Arizona.

Elev. (ann.) 5140 feet. VII 26. 1951. (R.)

Surface red silt of Mesozoic derivation. Corn & scattered bunch grass - other very low growth.

Trin. latif. sp. 1 seen - lost.

1 juv. Acrolophides rupt. No other O. seen.

Urch. 1 + 196 = 197

Other ins. 2 + 191 = 193

1951.23 1 mile E. of Harrison, Coconino Co., Arizona. Elev. (ch. - ann.) 5000 feet. VII. 26. 1951. (R.)

Red silt wash with marginal clumps of Atriplex and low composites. Wash floor with bare silt & tufts of bunch grass.

Acrolophides seen in Atriplex, found only in two clumps of Sarcobatus. - 18' 24' tall

All ♀♀ of Aeoloplides very pale whitish green.
Neaprotellix taken from same Asterplex

as 2 ♀♀ of Aeoloplides.

No other Orthoptera.

Orth. 4 + 197 = 201

Other ins. 16 + 193 = 209

(the ♂
luffy as
pale
green.)

1957. 24 At N. base of Meteor Crater,
Coconino Co., Arizona. Elev. (ann.) 5600 ft.
VII. 26, 1951. (R)

Reddish Montanopic silt with exposures
of same shale and areas of shingle of same
on silt.

No O. except 1 Cibolacris on shingle.
Orth. 1 + 201 = 202
Other ins. 0 + 209 = 209

1957. 25 Three miles W. of Two Guns (Canyon
Blade), Coconino Co., Arizona. Elev.
(ann.) 5650 feet. VII. 26, 1951. (R.)

Common bunch grass, low composites (some in
yellow flower) on silt with open pavement
of whitish limestone fragments.

Candillacris very scarce on silt - all seen
taken except 1 lost.

Melanoplus juv. swept.

Neaprotellix " "

Orth. 5 + 202 = 207.

Other ins. 0 + 209 = 209.

1951.26 Eastern boundary of Coronado
Nat. Forest immediately S. of Angel,
Coronado Co., Arizona. Elev. (approx.) 5900 ft.
VII. 26. 1951. (R.)

Open juniper and piñon stand in
strong rolling country.

Only C. encountered was Desperdetia, in
fall but spidery limp composite (not in
flower).

Dist. 3 + 207 = 210.

Letter ins. 5 + 209 = 214.

1951.27 2 miles W. of Wintonia, Coronado
Co., Arizona. Elev. 6400 feet. VII. 26. 1951.
(R.) Open forest of relatively tall juniper
and piñon, with much "juniper" (of the
Utah mormons) shrubby, scattered low
composites, and areas of blackish silt,
partly bare or with irregular limestone
fragments.

Trimer. red leg. Two on bare areas -
1 lost, 2 taken. Mild.

Blisovetia card. 1 seen - lost.

Psolocera delic. 1 on ground - all seen.

Melanophus th. w. sp. - 255 swept from bare
low com. - all seen.

Cleistanthus sp. 1 ad. - 1 juv. unsp.

Urb. 8 + 210 = 218.

Urb. vis. 8 + 214 = 222.

1951. 28 3 miles due S. of Flagstaff.

Cocconino Co., Arizona. Elev. (ann.) 6925 feet.

VII. 27, 1951. (R.)

Opening in tall pine forest. Low composites and very low mats of other vegetation, some mullen.

Eriogonum 1 ♀, all seen, on ground

Mul. sp. w. 1 ♂ unsp., all seen.

Trim. red-ly. 1 of 2 seen on tree ground.

Urb. 3 + 218 = 221.

Urb. vis. 19 + 222 = 241.

1951. 29 N.E. end of Mormon Lake, Cocconino Co., Arizona. Elev. (ann.) 7200 feet. VII. 27, 1951. (R.)

Open brush bordered by tall pine forest.

Low grass, yellow-flowered composites of a number of species, this the end mullen,

the ground surface with many scattered low fragments of var. sizes.

Lithocarpus - 1 specimen on ground.

Agrostis ^{sp. w.} not numerous, chiefly juvs. on ground.

Andropogon but two seen - taken separately on ground.

1951.29 (cont.)

Trim. red-legged sp. 1 juv. on ground.

Neopentaria th. w. Not common, and in a variety of situations. Adults - juvs.

Melanoplus unus. a few.

" th. w. a single ♂ taken.

" other juvs. seen + taken.

leth. 21 + 221 = 242.

leth. ins. 50 + 241 = 291.

1951.30 7 miles S. of So. End of Mormon Lake,
Cocouino Co., Arizona. Elev. (approx.) 7500 feet.
VII.27, 1951. (R.)

In open hill pine forest with stretches of relatively treeless character. Low thornpines and many low shrubs and annuals. Much timber slash and dead wood about. Many scattered lava rocks.

Arphia 2 ♀♀ Taken separately on ground, all seen.

Trim. red-leg. 1 ad. + 2 juvs. On ground.

Cricotettix coronatus. A few seen and heard.
1 taken.

Heavy oedipodoid - pros. Phryganetia? - three in instar preceding maturity, on ground - very poor hoppers. All seen.

Melanoplus fuscus-nigrum. Numerous
and active. Unfound. ^{Relatively} ~~very~~ few males in
prop. to females.

Colth. $28 + 242 = 270$.

Other ins. $5 + 291 = 296$.

1951.31 Betw. Mormon Lake and Rang
Valley (18 miles S. of ^{So. end of} J. J. Franer), Coconino
Co., Arizona. Elev. (aney) 7300 feet. VII. 27, 1954.
(R.)

Open flat in bull pine woods rather
closely carpeted with grass and low
annuals, numerous small lava fragments
scattered on the surface, soil dark brown.

Argemone - 1, all seen, in ground.

Amphitornus - very low, a few in ground, two
taken.

Agrotis Th. w. - very local and very few.

Trimus. red leg. 1 ad. 1 juv. Taken. All seen.

Melan. n. n. 1 Taken, all seen.

" fuscus-nigrum. Locally numerous,
active. Moderate prices taken.

Colth. $21 + 270 = 291$

Other ins. $2 + 296 = 298$.

1951.32 15 miles S. of So. end of Mormon
Lake, Coconino Co., Arizona. Elev. (aner.) 7000 ft.
VII. 27, 1951. (R.)

Moderately open area in tall pine forest,
but with more lawn and less diversified
cover than at 1951.30 or 1951.31.

Agrostotellus th. w. 1 taken, no. thus seen.
Thim. red. leg. 1 taken - all seen.
Melanoplus th. w. A few.

Orth. 5 + 291 = 296.

Uther vis. 0 + 298 = 298

1951.33 13 miles S. of So. end of Mormon
Lake, Coconino Co., Arizona. Elev. (aner.)
7625 feet. VII. 27, 1951. (R.)

Open tall pine woods with tall grass and
various low annuals - some fallen timber.

Cricotellix coconino 1 taken from
pine needles on ground.

Mel. th. w. Numerous - active.

Orth. 9 + 296 = 305.

Uther vis. 4 + 298 = 302.

1951.34 10 miles S. of So. end of Mormon
Lake, Coconino Co., Arizona. Elev.

(Amn.) 7425 feet. VII.27.1957. (R.)

Mountain meadow in tall pine forest,
considerable areas quite damp - a
little standing water. Grass cover of
several different types, including a
Spartina-like one.

Hippiscus^(x) - a single female in ground,
but moderately active.

Camnula 1 ♀ - all seen, altho' special
search made for more.

Chrysostoma can. No. given. Taken - no
adults seen. No form not on
roadway material!

~~Trinotopis~~

Cristellus coronatus - a single one taken.

Mel. mexicanus common in latter spots.

N. W. Moderately numerous.

Orth. 32 + 305 = 337.

Other ins. 4 + 302 = 306.

1951.35 So. end of Clark's Valley, north of
Mormon Lake, Coconino Co., Arizona.

Elev. (aner.) 6925 feet. VII.27. 1951. (R.)

Open valley slopes in pine woods. Strong
silt with numerous old sized pieces of
lava. Plant cover chiefly low yellow-
flowered composites (sw. species - prob. *juv.*?)
mullin, and a low moss-like mat
plant.

Ceritettix - 1 ♀ - all seen.

Hesperotettix Th. W. - locally numerous,
but not confined to composites. Female
scarce.

Mel. labium - a few, 4 taken.

" Th. W. - not common.

Arthropoda - 2 ♂, 1 ♀, all taken separately
and all seen. The first male seen was
in flight.

Arth. 25 + 337 = 362.

Other ins. 9 + 306 = 315.

1951.36 East base of Elden Mtn., 6 miles
N.E. of Flagstaff, Coconino Co., Arizona.

Elev. (chart) 6900 feet. VII. 28, 1951. (R.)
^{flat}

Open pine woods, with short grass
and numerous shrubs and annuals, incl.
some composites and the bush (of which
sample was taken from 1951.27 to which
Pediocintilis seems to be partial).

Parabryllus - 1 swept.

Psolossa delic. - infrequent, on ground,
widely scattered.

Agrenotettix Th. w. locally abundant -
one juv. on ground.

Amphitornus ditto

Oritettix nr. ditto very local, but
numerous in its colonies, on ground.

Pediocintilis nr. 1 ad. ♀ - 1 juv. swept.

Trachybaeus rima - abundant,
ground.

Hadrotettix trif. a number, but usually
single, on ground, and much less
apt to take wing than usual. Size
small for species.

Hippineus (X.) a single ♂ (w/leg) on ground,
apparently a spring retreat.

1951.36 (cont.)

Cordillaris locally abundant, very active, on ground.

Phibotoma - a few juvs. only - nupt.

Melanophus franciscanus, local and very active.

Mel. forbesi? a few, resembles M. fran.

Mel. th. w. very scarce, but three taken - all seen.

Hesperotelles th. w. locally numerous, more in coniferous, others not. Active.

Plagiatoria 1 ♀ in terminal clump of plant of which sample was taken, 1 ♂ nupt. All seen.

Ceanothus - juvs. - nupt.

Pygmaea - 1 ♀ nupt. on ground.

Utth. $217 + 362 = 579$.

Utth. ins. $5 + 315 = 320$.

1957.37 10 miles NE. of Flagstaff (at junction of Schutz Pass road with U.S. 89), Coconino Co., Arizona. Elev. 6850 feet (ann.) VII.28, 1957. (R.)

[This is Dr. White's recorded locality for Pedioscirtus nevadensis - he piloted me there personally.]

Open pine woods on lava soil, with scattered fragments. Low mat plant cover in places, bunch grass and several taller shrubs and annuals, including "the Pedioscirtetes plant," of which I took a sample - which Mr. White has recorded in his paper.

Ritamarutia 1 on ground.

Mermiria reuteri. 1 ♂ in tall bunch grass (green phase).

Pedioscirtetes nov. local, some flying when disturbed, others more sluggish. Mr. White's two runs gave me several of the 1 ♂, 7 ♀, 1 juv. included here. Saw plant sample of the Fall, with plant, which at least some were taken, but most were seen after being disturbed and moving away.

Proclonus delic. a few, on ground.

Cordillaris locally numerous.

Agrostotethis ^{th. w.} "Common"

Amphitomus ^{a few} in fair numbers, on ground.

Critethis in fair numbers " "

Trachyr. hirsuta common, several.

Neoperotethis th. w. very local, in composite usually.

Melanophus francisci. Infrequent, three taken.

1951.37 (cont.)

Mel. laticornis. In fair numbers.

Arth. $69 + 579 = 648$.

Other ins. $9 + 320 = 329$.

1951.38 1 m. E. of Riordan, Coconino
Co., Arizona. Elev. (ann.) 7200 feet. VII. 29. 1951.
(R.)

Close stands of brush pines on lava soil,
with many lava boulders under second-
growth pines.

Paratrillax - 1 nupt.

Agonotettix - a few, local, adults - pins.

Heterosternus caudatus - several seen, 1 taken.

Mel. fuscus - marginatus - several seen and
taken.

Mel. th. w. diff. species - 1 male nupt. - all
taken.

Arth. $12 + 648 = 660$.

Other ins. $15 + 329 = 344$.

1951.39 2 ms. E. of Parks, Coconino
Co., Arizona. Elev. (ann.) 7000 feet.
VII. 29. 1951. (R.)

Lava soil with numerous fragments,
thickly clothed with low composites (few in

flour), some thistle and knuckle weed

Heterantria - 1 on ground.

Caritettix - very few, 1 taken.

Amphitonus - a few, adults - juvs.

Wespa sp. - locally numerous.

Mel. tuberosus - a few, local.

" sp. - a few, 10, 1/2 taken.

Aganostus - a few only.

Count. 21 + 660 = 681.

Other ins. 8 + 344 = 352.

1951. 40 1 m. E. of Williams, Coconino
Co., Arizona. Elev. 6500 feet (chart). VII. 4. 1952
(R.)

Scattered bunch grass under medium
bright pine with exposed lava soil and
many lava boulders. Some mulla.
by few O.

Aspilota 1 specimen seen - taken.

Mel. sp.? 1 ♂ jumping on ground
between bunch grass - very active.

Count. 2 + 651 = 653

Other ins. 0 + 352 = 352

1951.41 West rim of main Coconino plateau, 8 miles E. of Ash Fork, Yavapai Co., Arizona. Elev. (am.) 6350 feet. VII. 29, 1951. (R.)

Open juniper and piñon with very short, closely grazed, curly sun-dried grass. Lush felt bare in places, much bare scattered about.

Hesperotritax seen clearly a lot.

Trin. sub-leg. 1 taken, all seen.

Arphia - 1 taken, all seen.

Utch. 2 + 643 = 645.

Utter vis. 0 + 352 = 352.

1951.42 West side of south end of Aubrey Cliffs, 4 miles W. of Seligman, Yavapai Co., Arizona. Elev. (Ch.) 5200 feet. VII. 29, 1951. (R.)

Tall bunch grass, soft sedge, low composites, an Cyperus and a few Lygus, and a number of other plants on red sandstone talus from cliffs.

✓ Paraponotus - very few in bunch grass, 10 and 44 taken singly.

Amphitornus - a few on ground

Wespa long-w. - few on

in low compositae
Quercus a juv. inst

Col. 9 + 685 = 694.

Other ins. 5 + 352 = 357.

1951.43 1 mile N.E. of Yampai, Coconino
Co., Arizona. Elev. (Ch.) 5400 feet. VII. 29, 1951.
(R.)

Open country with short brush grass and
thistle. Almost no Q. at all except
1 ♀ Agrotis (4) + juv. Cordillaris - Uxia.

Col. 6 + 694 = 700.

Other ins. 0 + 357 = 357.

1951.44 Yampai Canyon, 9 miles E. of
Peck Springs, Coconino Co., Arizona.
Elev. (Ch.) 5500 feet. VII. 29, 1951 (R.)

Mats of short grass, clumps of brush grass,
tumble weed, Atriplex and low compositae.

Cordillaris 1 ad. on ground.

Uxia (?) 1 juv.

Amphitornus 1 juv.

1951.44 (cont.)

Psolocosa delic. 1 ♀ - all seen, on fr.

Mutobryonia plattii sp. - sev. taken - all

seen - on bromeliads.

Aedopidus - adults - juvs. in Atriplex.

Very difficult to get. 3 ad. + juvs. taken.

Harpaxotellus L.W. - few in composites.

1 ad. - 1 juv. taken.

Orth. 12 + 700 = 712.

Other ins 2 + 357 = 359.

1951.45 NW ^{trans} slopes of Huachuca Mts.,
6 miles from Kingman, Mohave Co., Arizona.
Elev. (aner.) 4850 feet. VII.31. 1951. (R.)

Eroded slopes of wash-out debris, with open
cover of agave, cacti, acacia, Koeberlinia
and other shrubs. No Corillea.

Pseudoceramele - 1 ♂ swept, all seen.

Paropromala - 1 juv., swept, " "

Psolocosa texana - 2 seen, 1 taken.

Chistomus venusta (apparently). 1 adult
seen on agave - host.

Pezomachus long. 1 swept, all seen.

Asperotetras - 6 juv. swept. 44, 1291

Uth. 5 + 712 = 717.

Uth. ins. 1 + 357 = 360.

1957. 46 SW. Slopes of Huachuca Mts.,
Nobles Co., Arizona. Elev. (aner.) 5200 ft.
VII. 31. 1957. (R.G.)

Pinus, juniper (few), a spiny holly leafed,
usually low and mat. like hick, cacti,
agave, some short bunch grass and numerous
other less conspicuous plants.

Pseudoceryle - 1 juv. swept.

Stagnomantis - 1 juv. swept.

Mercuria texana (det. absolute), 1 ~~juv.~~
in next but lost. Was sitting on a
boulder.

Trum. pallidip. - seen - lost

Scolecocera 6 ♀ swept from holly
leafed plant.

Cleocanthus - 1 juv. swept. Was pink
head.

Uth. 4 + 717 = 721.

Uth. ins. 0 + 360 = 360

1951.47 Canyon in NW. face of Huachuca
Mountains, Mohave Co., Arizona. Elev. (approx.)
5400 feet. VII. 31. 1957. (R.)

Reddish gravelly wash material
on canyon slopes above steep arroyo.
Common arborescent juniper (occasional), much
low holly-leafed oak-like shrubs (as noted
for 1957.46), some white-flowered low plant
(apparently a composite), cacti and agave. Area
of bare wash.

Psoloma, ^{Tex.} - not common, very active and
in ground as usual.

Cibicides - locally in small lots on wash.

Trin. red-leg - a very few on wash mat.

Neoprotella - a very few in white-flowered
shrub, 1 ad. & 1 juv. Taken.

$$\text{Urch.} \cdot 12 + 721 = 733.$$

$$\text{Urch. ins.} \cdot 0 + 360 = 360.$$

1951.48 NW. Slopes of Huachuca Mts.,
7 miles SE. of Kingman, Mohave Co.,
Arizona. Elev. (approx.) 4500 ft. VII. 31. 1957.
(R.)

Long outcrops of silt and string
gravel. Common chiefly agave, a low

composite (not in flower), Cochlosiphia,
Soma acacia, cacti, and a very little
brush grass.

Pseudoceryle - 1 ♂ swept

Mesochorus p. rubripennis - a few,
taken with both red and yellow disked
wings.

Thrin. pallidip. 1 taken.

Aganostictis - 1 juv. swept.

Asperitictis 1 juv. swept.

Others 8 + 733 = 741.

Other vis. 2 + 360 = 362.

1957. 49 ^{N.H.} Lower outwash slopes of Huachuca
Mts., 4.5 miles S.W. of Kingman, Mohave
Co., Arizona. Elev. (approx.), 4050 feet. VII. 31. 1957.
(R.)

Arroyo slopes of lower outwash of mts.,
mostly fine silt. Vegetation consists chiefly
palo verde, cacti - various low bushes with
a few Covillea ^{not} along the shallow
washes.

Pseudoceryle 1 ad. ♂ + 1 juv. juv. swept

1951.49 (cont.)

Paratrillus - 1 ♀ swept.

Pitaneutria 1 juv., remaining on the ground.

✓ Paropomala - 1 juv. swept.

Agerostellus - 1 juv. swept.

Trim. pallidip. - 1 ad. + 1 juv. Taken - no others seen.

Cibolarius - a few, 3 taken.

Macra corillae - 2 juvs. swept from

Corilla, no others seen.

Orth. 15 + 741 = 756.

Other ins. 5 + 362 = 367.

1951.50 9 miles W. of Kingman, on
Harris Plains Road, Mohave Co., Arizona.

Elev. (aner.) 2850 feet. VIII, 1, 1951. (R.).

Wash bottom with Tall bunch grass,
creosote brush and some composites.

✓ Pseudasmyle 1 adult male swept.

✓ Paropomala 1 ♀ flushed from bunch
grass. No other O.

Orth. 2 + 756 = 758.

Other ins. 3 + 367 = 370.

1951. 51 E. side of Union Pass, Black
Range, Mohave Co., Arizona. Elev. (ann.)
3350 feet. VIII, 1, 1951. (R.)

Covillea and yucca covered slope, with
a few junipers and a ghost-like bunch
grass.

No. O. except juv. Bortettia swept from
Covillea and 1 Cibolarius on ground.

Orth. 4 + 758 = 762.

Ather ins. 2 + 370 = 372.

1951. 52 W. side of Union Pass, Black
Range, Mohave Co., Arizona. Elev. (ann.)
? feet. VIII, 1, 1951. (R.)

Steep slopes interland with
washes. Com Covillea, yucca, acacia,
cacti, ephedra and many other
typical lower Sonoran desert plants.

Only O. Bortettia juv. in Covillea
and 1 Eremopedes gracilis in
hand but not.

Orth. 2 + 762 = 764.

Ather ins. 0 + 372 = 372.

1951.53 E. slope of Newberry Mountains,
Clark Co., Nevada. Elev. (approx.) 1000 feet.
(R.) VIII. 1. 1951.

Long, silty ~~ste~~ slopes with many washes.
White gravelly material. Plants chiefly
Covillea, scattered brush, pass, etc.

No C. except juv. Acrolophus beatus

Length: 2 + 764 = 766.

Other ins. 0 + 372 = 372.

1951.54 Slopes at west foot of Newberry
Mountains, Clark Co., Nevada. Elev. (approx.)
2350 feet. VIII. 1. 1951. (R.)

Plant cover chiefly Covillea, yucca and
cactus (in large part joint cactus).

Only C. juv. Bostellia beatus from
Covillea.

Length: 2 + 766 = 768.

Other ins. 3 + 372 = 375.

1951.55 - Fifteen miles S. of Searchlight,
Clark Co., Nevada. Elev. (aner.) 2400 feet.
VIII, 1, 1951. (R.)

Covillea flat with whitish sun-cured
brush grass and Cercaria (?) bushes,
a little cacti.

Parabacillus - 1 juv. swept.

Boottia - juv. + 1 ad., infrequent
in Covillea.

Cibolarius, one on silt.

Cremopides grac. 1 juv. swept
from Covillea.

Urb. 5 + 768 = 773.

Urb. ins. 2 + 375 = 377.

1951.56 North slope of Searchlight
Hills, Clark Co., Nevada. Elev. (aner.),
3900 feet. VIII, 1, 1951. (R.)

long wash slopes with Joshua trees, large
yucca (baccata type), Cercaria (?) and
numerous other gray white bushes.

No C. except Trim. pallidip. on
ground surface and Boottia swept
from Covillea.

Urb. 4 + 773 = 777.

Urb. ins. 1 + 377 = 378.

1951.57 Lower outwash slopes of
Charleston Mts., below mouth of Kyle
Canyon, Clark Co., Nevada. Elev. (an.
ch.) 3325 feet. VIII.2.1951. (R.) [Lowest
day]
Long gentle slope largely with Covillea,
and a scattering of ~~grove~~ Joshua trees.
No C. except 1 Botulix swept from Covillea.
Arth. 1 + 777 = 778.
Other ins. 0 + 378 = 378.

1951.58 Kyle Canyon, Charleston Mts.,
Clark Co., Nevada. Elev. (ch.) 5500 feet.
VIII.2.1951 [Lowest day]

Joshua Tree belt with yucca, Atriplex,
acacia and numerous other shrubs -
a rich assortment of cover.
No C. except 1 Trin. pallidipennis taken
on ground.
Arth. 1 + 778 = 779.
Other ins. 0 + 378 = 378.

1951.59 Kyle Canyon, Charleston Mts.,
Clark Co., Nevada. Elev. 6500 feet. VIII.2.1951.
(R.) [Lowest day]

Canyon wash and shoulders between
channels of same. Plant cover largely

Mormon "juniper," a spreading relatively soft bushy shrub, some size, low composites, etc.

Psychomastax, entirely in "juniper," much sweeping produced the limited number collected. While males seemed adults, all females apparently were immature.

Tricentropis blue-leg. - very few on thingly surface.

Perpustellus - a th. w. species, very local in the soft spreading bush. Male taken (2) brownish, female (2) greenish.

Atiloplus, ad. ♂ of a gray species swept, but from what bush cannot be stated.

Encarsia fenestrata (?) or a new species.

1 ♂ swept from Mormon "juniper."

No more found, although careful search was made.

Acanthus sp. 1 ♂ of a greenish white color swept.

Utah. 17 + 779 = 796.

Utah vis. 35 + 378 = 413.

1951.60 Northwest Slopes of Charleston Mts.,
below Kyle Canyon, Clark Co., Nevada.
Elev. (ch.) 3000 feet. VIII.2.1957. (R.)
[Below (i.e. lower) than 1951.57 of the same
day.]

Clearly staked desert pavement with Covillea,
etc.

No. C. caught 1 ad. + 1 juv. Boottittia swept
from Covillea.

$$\text{Orth. } 2 + 796 = 798.$$

$$\text{Aster ins. } 0 + 413 = 413$$

1951.61. Las Vegas Valley, 18 miles NW. of
Las Vegas, Clark Co., Nevada. Elev. (an.)
3000 ft. VIII.3.1957. (R.)

[Low clouds drizzly. No ground species
to be seen in consequence.]

Long gentle slopes of W. side of valley with
Covillea, yucca and some ~~juniper~~ Joshua trees.

Only C. taken
" Boottittia beaten from Covillea.

$$\text{Orth. } 13 + 798 = 811$$

$$\text{Aster ins. } 0 + 413 = 413$$

1951.62 Las Vegas Valley, 27 miles NW. of
Las Vegas, Clark Co., Nevada. Elev. (ann.)
3250 feet. VIII. 3, 1951. (R.)

[Overcast and drizzly.]

Common Covillea, yucca and Joshua trees.
No ground forms seen. Only 10. Portetella
nupt from Covillea.

Ueth. 10 + P61 = 821.

Other in 0 + 413 = 413.

1951.63 Lee Canyon, Charleston Mts.,
Clark Co., Nevada. Elev. (ann. 5800 feet).
VIII. 3, 1951. (R.)

[Light rain all the time spent here.]

Joshua tree belt with maximum number
in a given area. ~~Portetella~~ ^{Portetella} No. 10. except in the
Joshua trees, and all taken were secured
by hand-work in these. Probably over 100
individual Joshua were checked for the
results were listed.

Aglaothorax 2 ♀ 1 ♂, all tracked down at
the base of the leaves of the Joshua, relatively
inactive, prob. due to the dull and drizzly
day. One most female found singly, the
♂ and other ♀ were in a single head of

1951.63 (cont.)

gishua

~~gishua~~

Atelopus - a beautiful dove-gray species with a black dorsal line. A male and a female found in different gishua, flushed deeply in between the leaf bases. More active and elusive than Aglathorax.

Capnobates viridis - a single female flushed cross-wise in between a number of gishua leaves. It finally launched off in a fluttering flight, but was easily netted.

No dictyids seen were lost.

leth. 6 + 821 = 827.

leth. ins. 0 + 413 = 413.

1951.64 Two miles N.E. of Crystal, Clark Co., Nevada. Elev. (ann.), 1950 feet. VIII. 4. 1951.

(R.)

Silly and gravel surface. Croton, some Atriplex and other similar shrubs. See

O. 1 juv. Acrotoides rupt. + 1 ad.

T. sin. pallidip. on ground.

leth. 2 + 827 = 829.

leth. ins. 0 + 413 = 413.

1951.65 5 miles NW. of Moapa, Clark Co.,
Nevada. Elev. (an.) 1650 feet. VIII.4.1951.
(R.)

Silty wash of dry mud and fine gravel.
Common mesquite, tremble wood and other
species usual in washes.

1 ♀ O. *Artemia* *integra* on bare mud
a flying insect. very brave and active.

Arth. 3 + 829 = 832.

Other ins. 0 + 413 = 413.

1951.66 17 miles NW. of Moapa, Clark Co.,
Nevada. Elev. (an.) 2525 feet. VIII.4.1951. (R.)

Long sloping banks of stony silt with
open cover of creosote bush and other shrubs,
plus a few yucca.

No O. except juv. *Bortolus* *rupt.*

Arth. 3 + 832 = 835.

Other ins. 4 + 413 = 417.

1951.67 Kane Springs Wash, 31 miles
NW. of Mospan, Lincoln Co., Nevada.

Elev. (ann.) 2700 feet. VIII. 4, 1951. (R.)

Silt flat along broad wash at base of
relatively high bank. Chief com.
Covillea and various types of brittle
mush.

No C. at all except 17 Ampelodesma
rept from Covillea.

Orth. 1 + 835 = 836.

Other ins. 0 + 417 = 417.

1951.68 Near Maynard May Lake, 46 miles
NW. of Mospan, Lincoln Co., Nevada.

Elev. (ann.) 3300 feet. VIII. 4, 1951. (R.)

Broad wash between low slopes on
branches. Surface silty. Com chiefly
Covillea

Only C. Bostetteri ab. - juv. rept from
Covillea and juv. Inasara ditto.

Orth. 10 + 836 = 846.

Other ins. 6 + 417 = 423.

1951.69 Lower Pahranagat Lake,
Pahranagat Valley, Lincoln Co., Nevada.
Elev. ? (check on airt. chart) VIII. 4. 1951.
(R.) \uparrow 3000 ft. Peak Valley up.

In salt grass along east border of Lake.
Urophylax adults - juvs. not numerous.
Cross. 1 juv. alb. sp.

Uth. 18 + 846 = 864.

Uth. ins. 11 + 423 = 434.

1951.70 5 miles SE. of Nyko,
eastern rim of Pahranagat Valley,
Lincoln Co., Nevada. Elev. (an.), 4300 feet.
VIII. 4. 1951. (R.)

Bench with Covillea - little bush.
No Bostettia - only 1 juv. Insula
on Covillea - 1 juv. Hagnomantis
in same.

Uth. 2 + 864 = 866.

Uth. ins. 3 + 434 = 437.

1951.71 14 miles E. of Wyko, Lincoln
Co., Nevada. Elev. (ann.) 5750 feet. VIII. 4. 1951.
(R.)

[Check name of mts. range!]

Bank of draw of 1st low range east of
Wyko Range.

Stony silt with numerous lava
fragments. Corry, ^{shaly} short sedge and a low
curly bunch grass, and some Ephedra-like
bushes.

✓ Peromyscus in latter, last.

Atelopus taken from same. All seen.

With. 6 + 866 = 872.

Other ins. 0 + 437 = 437.

1951.72 Lower W. Slope of Meadow
Mountains, W. of Caliente, Lincoln Co.,
Nevada. Elev. (ann.) 5750 feet. VIII. 4. 1951.
(R.)

In Joshua tree belt. Examined a
number of trees but only 1 seen was
one black lined Atelopus last.

Wounds taken among ^{and capsules of} Joshua.

With. 10 + 872 = 882.

Other ins. 2 + 437 = 439

1951.73 Meadows Valley, 4 miles N. of
Caliente, Lincoln Co., Nevada. Elev.
(am.) 4500 feet. VIII. 5, 1951. (R.)

Lower slopes of low hills and flat, former
with relatively short rabbit weed + sage,
latter (much moister ground) with
tall and relatively rank rabbit weed.

Cibolarius 1, all seen, ^{dry} unfringed.

Trim. gracilis 1, all seen, ditto.

" pallidip. 1. " " "

Neperotettix th. w. numerous in both
types of rabbit weed.

Acanthos, 1 swept from tall rabbit weed.

Orth. 13 + 872 = 885.

Atherins. 2 + 439 = 441.

1951.74 4 miles N. of Panaca, Lincoln
Co., Nevada. Elev. (am.) 5250 feet. VIII. 5, 1951.
(R.)

Gradually sloping bank of stony gravel,
with several species of rabbit weed, some
sage and a little tumble-weed. Higher
bank dotted with juniper.

Neperotettix local in rabbit weed.

Melan. sp. juv. swept.

Acanthos swept from rabbit weed.

Orth. 8 + 885 = 893.

Atherins. 6 + 441 = 447.

1951.75 3 miles N. of Pioche, Lincoln Co., Nevada. Elev. 5900ft. VIII.5.1951. (R.)

Sage and rabbit weed (large and small species) flat, dotted with juniper. Some sage very low and almost mat-like.

Cordillanus, 1, all seen, taken on ground.

Agelaius, a very few, 1 ad. - 1 juv. taken, jumping into rabbit weed when disturbed.

Desperillus th. w. locally numerous in both types of rabbit weed.

Melan. - sage br. species. 1 on ground, all seen.

" mus.? 1 ♀ in cage.

lth. $14 + 893 = 907$.

lth. ins. $5 + 447 = 452$.

1951.76 1 mile SE. of Jackrabbit, 13 miles N. of Pioche, Lincoln Co., Nevada. Elev. (ann.) 6050ft. VIII.5.1951. (R.)

Open stand of Mormon "juniper"; true juniper, sage and rabbit weed.

Agelaius 1 (trapped).
Desperillus 1 in Mormon "juniper" - 2 taken.

Scolecophagus 1 ♂, 1 ♀ separately flushed from holly-leaved shrub with hollow berry-like fruit.

lth. $5 + 907 = 912$.

lth. ins. $1 + 447 = 448$

1951.77 Spring Valley 25 miles N. of
Pioche, Lincoln Co., Nevada. Elev.
(ann.) 6150 feet. VIII.5, 1951. (R.)

Juniper forest with sage in the more
open places. Only a little Mormon
"juniper" and this heavily grazed.

No *Q.* except Psychomastax swept from
latter.

$$\text{Orth. } 3 + 912 = 915$$

$$\text{Other ins. } 0 + 448 = 448.$$

1951.78 Spring Valley 2 miles N. of
Geyser Ranch, White Pine Co., Nevada.
Elev. (ann.) 5975 feet. VIII.5, 1951. (R.)

Sage and rabbit used almost exclusively
in broad (one mile across) valley.

Hesperotettix juv. - ad. Melanopl. in
rabbit used.

$$\text{Orth. } 6 + 915 = 921.$$

$$\text{Other ins. } 15 + 448 = 463.$$

1951.79 East base of Connor's Pass,
Schell Creek Range, White Pine Co.,
Nevada. Elev. (me.) 6625 feet. VIII.5.1951.
(R.).

Alpine canyon with fall rabbit weed along
wash, sage on slopes.

Hesperotettix th. w. local in rabbit weed.

mel. sage sp. A few.

" appar. mex. local.

Atelapha 18 swept from rabbit weed.

Wash. 16 + 921 = 937

Wash. inv. 0 + 463 = 463

1951.80 Summit of Connor's Pass, Schell
Creek Range, White Pine Co., Nevada.

Elev. (brush mark) 7732 feet. VIII.5.1951. (R.)

Slopes with juniper and piñon, sage and
rabbit weed, and in the innered. Small flat
of the pass an area of very short grass like
salt grass.

Amphitomus th. w. spec. 18-19. swept in
the short grass area. Branch developed no more.

Cordilauris 1 swept from ground.

Troxia pallid. 1 on ground - all seen.

" reddish bands 1 on ground - all seen.

Cristotelia undulata - total of these seen, then
lost, on more open ground among piñon.

Wash. 6 + 937 = 943

Wash. inv. 20 + 463 = 483.

1951.81 3 miles ^{SW.} of Ely, White Pine Co.,
Nevada. Elev. (aner.) 6900 feet. VIII.6.1951.
(R.)

Hill slopes with open sage and short
rabbit weed.

Cordillanis 1 juv. on ground.

Amphitomus local & scarce, on ground,
long-winged.

Aganostethus few, 1 taken, on ground.

Wesprethodes th. w. locally numerous,
usually in rabbit weed.

Melan. type sp. 1 ♀ swept.

" aur. type, few, in & about sage.

Counts. 20 + 943 = 963.

Counts in. 5 + 483 = 488.

1951. F2 11 miles SW. of Ely, White
Pine Co., Nevada. Elev. (aner.), 6700 feet.
VIII.6.1951. (R.)

Juniper and piñon with open areas
of short sage and rather low rabbit weed.
Very little ♀.

Aganostethus 1 on ground.

Aeroplides 1 swept.

Aeroboreus 1 on road, all seen.

Counts. 3 + 963 = 966.

Counts in. 0 + 488 = 488

1951. 83 Smith's Creek bottom, John's Valley
White Pine Co., Nevada. Elev. (approx.) 5700 feet.
VIII. 6, 1951. (R.)

Bare dry mud areas, with other vegetation
bearing Atriplex.

Aerobonates - a few on dry mud, 1 taken.

Trinotus lilobata 1 only, on dry mud.

" canaliculatus a few on ditto, 3
taken.

Blasattaria ca. 1 taken on mud but close
to roadway.

Cedophides numerous in Atriplex,
but as usual - difficult to secure.

Arth. 12 + 966 = 978.

Arth. ins. 0 + 488 = 488.

1951. 84 West side of Currant Creek
Summit, Horse Range, Nye Co.,
Nevada. Elev. (approx.) 6850 feet. VIII. 6, 1951.
(R.)

Will Hopes with juniper + piñon and
undergrowth of rabbit brush, some sage,
an Ephedra-like plant and a little
"Common" juniper.

Only C. seen! Neospartettus rust.

Arth. 1 + 978 = 979.

Arth. ins. 2 + 488 = 490.

1951.85 Flat at E. base of Horse Mts.,
White Pine Co., Nevada. Elev. approx. 6300
feet. VIII. 6. 1951. (R.)

low sage with scattered rabbit wood
and (roadside only) Fremontia wood, the
whole dotted, park-like, with juniper.

Pteronotus 1 running on ground.

Cordillarius local and scarce, on
ground, 2 taken.

Trin. pallidip. ?? On ground - 1.

Acrochoreutes 2 seen, 1 taken, on
ground, very many.

Hesperotettix - local in rabbit wood.

Utch. 10 + 979 = 989.

Utch. ins. 0 + 490 = 490.

1951.86 Low hills in middle of John's
Valley, 26 miles S.E. of Ely, Nevada.
Elev. (est.) approx. 6500 feet. VIII. 6. 1951.
(R.)

low hills, covered with sage, some
rabbit wood, and Sarcobatus, and a
little Atriplex.

Acrochoreutes, 2 very diff. looking ♀♀,
in Atriplex.

Trachya hirsuta type - one on p., all seen.

Utch. 3 + 989 = 992.

Utch. ins. 2 + 490 = 492

1951.87 Murray Summit, 5 miles SW. of
Ely, Egan Range, White Pine Co., Nevada.
Elev. (trunk mark), 7316 feet. VIII.6.1951. (R.)

Sage and a few rabbit weed under
juniper.

Almost no O.

Trinob. parvulus 1 seen - taken, on ground.

Protosia delaisi. 18 on ground, all seen.

Uths. 2 + 892 = 894.

Uth. ins. 4 + 492 = 496.

1951.88 Robinson Summit, 17.5 miles
NW. of Ely, White Pine Co., Nevada. Elev.
(b. m.), 7607 feet. VIII.7.1951. (R.)

Open sage slopes.

No O. except 1 Xanth. ^{castaneus} ~~montanus~~
on ground.

Uth. 1 + 994 = 995.

Uth. ins. 0 + 496 = 496

1951.89 Near W. base of Robinson Summit,
White Pine Co., Nevada. Elev. (an.) 6900 ft.
VIII.7.1951. (R.)

Sage with several species of rabbit weed
and a very little bunch grass.

Trin. cyanipes - 1 on base ground, all seen.

Neopentates th. w. in rabbit weed.

Urdaleonotus a very few, rather common.

Uth. 11 + 995 = 1006

Uth. ins. 1 + 496 = 497

1951.90 Little Antelope Summit, Pogonip
Ridge, 42 ms. W. of Ely, White Pine Co.,
Nevada. Elev. (bar.) 7432 feet. VIII.7.1951. (R.)

Sage and sparse rabbit weed.

All U. seen:

Cordillaria a few on bare spots.

Trin. fragilis - on ground, few.

Urb. 4 + 1006 = 1010.

Other no. 3 + 497 = 500.

1951.91 Bottoms of flat between Pogonip
Ridge and Panache Range, White Pine
Co., Nevada. Elev. (bar.) 6025 feet.
VIII.7.1951. (R.)

Partly bare mud flat, with areas of low
veg, some fernlike mud, and a little
Atriplex.

Cordillaria, a few on bare ground.

Herotomma h. cupid. a few, very local,
on bare ground.

Trin. pallid. a few.

" fragilis - a number, all on bare
ground.

Urb. 10 + 1010 = 1020.

Other no. 0 + 500 = 500

1951.92 Pinto Summit, Fish Creek Range,
E. of Eureka, Eureka Co., Nevada. Elev.
(~~alt.~~) (6. m.), 7376 feet. VIII.7.1951. (R.)

Sage, some rabbit weed and quaked
and Mormon "juniper." Some bare
ground silty and stony.

No C. except 1 Parvulus, all seen, on ground,
and 1 Cordillaris on ground, as well as one
Cristatus undulatus, chased and lost.

Arth. 2 + 1020 = 1022.

Other ins. 0 + 500 = 500

1951.93 Devil's Gate, Fish Creek Range,
8 miles NW. of Eureka, Eureka Co., Nevada.
Elev. (ch.) 6000 feet. VIII.7.1951. (R.)

Narrow canyon bottom (drainage way) with
sage, very large and robust rabbit weed,
pickle weed and some litiglex.

Trin. bitata 1 on bare ground - active.

Hesperotettix - swept from rabbit weed.

Circulatus 1 juv. swept from rabbit weed.

Arth. 9 + 1022 = 1031.

Other ins. 2 + 500 = 502

1957.94 Near Twin Springs, at N.
end of ~~the~~ Monitor Range, Antelope
Valley, Eschscholtz Co., Nevada. Elev. (ch.
an.), 6150 feet. VIII.7.1957. (R.)

Very broad flat of sage and rabbit weed,
with many considerable areas of bare
dry mud, some smooth, others rough.

Hesperotettix^{th. w.} occas. in rabbit weed.

Trin. luteata 1 on ground, all seen.

Orth. 5 + 1031 = 1036.

Other ins. 7 + 502 = 509.

1957.95 East side of Toiyabe Range,
below Austin Summit and S. of
Austin, Lander Co., Nev. Elev. approx.
7000 feet. VIII.8.1957. (R.)

Sage, some rabbit weed, etc. in open
pinyon forest.

Only 0. ad. juv. Trin. cyaneipes
- juv. Melan.

Orth. 5 + 1036 = 1041.

Other ins. 11 + 509 = 520.

1951.96 Austin Summit, Toiyabe Nts,
Lander Co., Nevada. Elev. (b.m.). 7554-
7675 feet. VIII. P. 1951. (R.)

Sage brush slopes with many boulders,
some rabbit used.

Cordillaria, a very few local, on ground.

Xanthippus montanus, one, all seen, on
ground.

Trin. cyaneipes, juv. only, on pr.

Melan sp.; juv. only, locally present.

Orth. 8 + 1041 = 1049.

Other ins. 0 + 520 = 520.

1951.97 Middle of Reese River Valley,
7 ms. SW. Austin, Lander Co., Nevada.
Elev. (an.), 5700 feet. VIII. P. 1951. (R.)

Alkali impregnated dry mud with short
salt grass, Salicornia, and some
rabbit used.

Trin. caeruleipes } Both locally on bare
" pallidip. } mud generally.

Orth. 5 + 1049 = 1054.

Other ins. 7 + 520 = 527.

1951.98 Railroad Pass, Shoshone Range,
Rauden Co., Nevada. Elev. (ch.) 6431 feet.
Aug. 8, 1951. (R.)

Typical sage with a low sage, many bare
areas of silt & granully silt, often
heavily washed.

Cordillaris, a few local on bare pr.

Hesperis capitulum. local on

bare pr.

Trim. tristata, a few, on pr.

" fragilis, very few, on pr.

Arenarctus, local, on granully

exposure near road only.

Mul. cap. speciosus - 1 nest.
Chick. $16 + 1057 = 1070$.

Other vis. $0 + 527 = 527$.

1957.99 Flat between Hlesatoya and
Shoshone Mts., 3 miles E. of Campbell
Creek Ranch, Rauden Co., Nevada.

Elev. (un.) 6025 feet. VIII. F. 1957. (R.)

Sage flat with much bare silt and
gravel, and a very little rabbit
weed.

1951 99 (cont.)

July 11. Trin. gracilis and T. lobata,
on ground, all over Fibris, - juv. Melan

Urb. 3 + 1070 = 1073.

Other ins. 6 + 527 = 533.

1951. 100 Carroll Summit, Mesatoya Mts.,
Churchill Co., Nevada. Elev. (6. mi.) 7452-
7500 feet. VIII. 8. 1951. (R.)

Steep slopes with sage, dotted with piñon.
Small slides of broken rock.

July 11. a very few Trin. cyaneipes,
on ground, and Cinetix thalassina,
chiefly on slide areas, active and many
times very high, hence capture difficult.

Urb. 5 + 1073 = 1078.

Other ins. 1 + 533 = 534.

1951. 101 Middle of 3 Valley between
East Gate and West Gate Churchill Co.,
Nevada. Elev. (alt.) 4525 feet. VIII. 8. 1951
(R.)

Sage and Atriplex almost exclusively.

July 11, a few Trin. lobata and
Aedopides infreq. in Atriplex.

Urb. 3 + 1078 = 1081.

Other ins. 3 + 534 = 537.

1951.102 Pass at N. end of Sand
Springs Mts., 5 miles W. of Frenchman,
Churchill Co., Nevada. Elev. (ch.) 4400 ft.
VIII. 8. 1951. (R.)

Very sparse cover of very dry Atriplex and
other shrubs. No tall sage and small
quantities of thorn, sun-cured covering
early grass.

No O. except Paropomala

most, presumably from grass.

Orth. 1 + 1081 = 1082.

Other ins 0 + 537 = 537.

1951.103 Salt Wells Junction, near
Eight Mile Flat, Churchill Co., Nevada.
Elev. (ch.) 3937 feet. VIII. 8. 1951. (R.)

Low silt dunes with little or no cover
except spring prickly-leaf (?) Atriplex,
often in thick clumps. Some ground
between often crusted and alkali
impregnated.

Trim. tibialis - 2 spec., 1 taken, on ground

Aedroplides in above bushes only, very common,
diving into the interior of the clumps.

Orth. 4 + 1082 = 1086.

Other ins. 0 + 537 = 537.

1951.104 Four miles W. of Fallon, Churchill
Co., Nevada. Elev. 3940 feet. VIII. 9. 1951. (R.)

Old field (formerly irrigated) of tall
weeds, sunflower, etc. alongside of
alfalfa field. Some bare silt.

Melan. musc. dev., abundant.

" foedus, a very few.

Schist. vaga - several seen but with and
none taken.

Trim. sp. 1 on silt
Coryza wollula, numerous on bare silt

Orth. 21 + 1086 = 1107.

Uth. ins. 2 + 537 = 539.

1951.105 Betw. Luteville and Hazen,
Churchill Co., Nevada. Elev. (an.) 3950 feet.
VIII. 9. 1951 (R.)

Two conditions: dry pebbly silt with
Atriplex and Sarcobatus; tall ridges in
water or ~~dry~~ wet ground.

Amphitomus, 1 on dry ground, all seen.

Hex. dor. numerous locally.

Coryza wollula, numerous on silt.

Cyphus pseudonistana 1 on ditto, all seen.

Oedopoda, water from both Atriplex

+ Sarcobatus.

Correphatus, from ridges only.

Orth. 14 + 1107 = 1121

Uth. ins. 3 + 539 = 543.

1951.106 3 miles NW. of Fernley, Washoe
Co., Nevada. Elev. (Am.) 3900 feet. VIII. 9,
1951. (R.).

Blackish sandy silt near the course of
the Truckee River. Corn Sarcobatus,
Atriplex and sun-dried out grass.

Trin. villosata 1, all seen, on ground.

" pallidip. Numerous.

" red-legged. A few, local.

Tripidulus, a very few, flying into bush
when frightened.

Acroplidae numerous but hard to get in
with Sarcobatus & Atriplex, flying freely.

Melan. ~~sp.~~ Hunder species. Few, in
Atriplex chiefly.

Orth. 17 + 1121 = 1138.

Orth. ins. 0 + 543 = 543.

1951.107 4 miles W. of Wads worth,
Washoe Co., Nevada. On bench above
Truckee River. Elev. (Am.) 4300 feet. VIII. 9,
1951. (R.).

Rolling slopes of silt, pebbles and small
stones, with open corn of Atriplex.

1951.107 (cont.)

Sarcobatus + semi-cured grass.

Parabambusa, 1 swept.

Stagnomantis, 1 juv., swept.

✓ Paropomala, very local in grass, but flying into other vegetation when disturbed.

Trim. red leg. - very few, on ground.

" pallidipis - numerous.

Tripidubus - very few.

Celidaris - 1 ♂ on strong section - search for more produced no result.

Utter. " + 1138 = 1149.

Utter. no. 0 + 543 = 543.

1951.108 1 m. SW. of Verde, Washoe Co., Nevada. Elev. (am.) 5150 feet. VIII.9.1951. (R.)

Roadside strip of sage, a plant resembling chamise and also Mormon "juniper" and then low dry shrubs.

Mel. deserti abundant.

" cinereus, less frequent, more in sage.

Trim. cyanipes 1 in net, all seen.

Utter. 19 + 1149 = 1168.

Utter. no. 4 + 543 = 547.

1951.109 2 miles N. of Floriston, Nevada
Co., California. Elev. (Am.) 5375 feet.
VIII.9.1951. (R.)

In opening in tall pine forest, area of
soft sage and various types of
tall one-curd grasses.

Coryza - minimum as found.

Mel. desert. abundant in all situations.

Orth. 11 + 1168 = 1179.

Other ins. 0 + 547 = 547.

1951.110 Along Truckee River, 2 miles SW.
of Truckee, Placer Co., California. Elev.
(Am.) 5800 feet. VIII.10.1951. (R.)

Broken rock and silt under sugar pines.
Very few rabbit manure, chinchilla and patches
of dry cow cabbage.

Only O. Xanthippus montanus, juv.
distributed but not common and Trim.
cyaneipes, very few.

Orth. 3 + 1179 = 1182.

Other ins. 4 + 547 = 551.

1951.111 Along Truckee River, 5 miles SW
of Truckee, Placer Co., California. Elev.
(an.), 6075 feet. VIII. 10. 1951. (R.)

Open flat in pine and fir forest. Surface in
large part broken lava rock, covered largely
with sun-dried grass.

Trin. cyanipis - very few in rock areas.

Camula locally common in pine
grass.

leth. 10 + 1182 = 1192.

leth. ins. 3 + 551 = 554.

1951.112 Near Tephyr Point, Lake Tahoe,
Douglas Co., Nevada. Elev. (an.) 6500 feet.
VIII. 10. 1951. (R.)

Tall rank growth in open in pines, along
a ditch of running water.

No C. except 1 ad. Mel. devastator in
and sev. juv. Trin. fibrigida, except.

leth. 4 + 1192 = 1196.

leth. ins. 28 + 554 = 582.

1951.113 Middle Fork of Martie's Creek, S.E. of
Truckee, Placer Co., California. Elev. (an.)
6500 feet. VIII. 10. 1951. (R.)

Among lava and granite boulders along
dry stream course and banks. Very dry
cow cabbage, sage, chingupin, etc.

Soil C. - Trifolium. falcum, clatrum, local and
not common; Alighting ^{just Trifolium} in either
bare dusty ground or low vegetation.

Orth. 5 + 1196 = 1201.

Other ins. 0 + 582 = 582.

1951.114 1 mile N. of Meyers, El Dorado Co.,
California. Elev. (approx.) 6350 feet. VIII, 11, 1951.
(R.)

Roadside lush grass, weeds, wild Straw-
berries, etc., with spots of bare sandy silt.

Tetrix, a very few, local on drier spots.

Comptosia common.

Chorthippus " but more localized
in fuller grass.

Orth. 25 + 1201 = 1226.

Other ins. 9 + 582 = 591.

1951.115 3 miles S. of Meyers (just W.
of Echo Summit), El Dorado Co., California.
Elev. (approx.) 6550 feet. VIII, 11, 1951. (R.)

Dry mountain meadows, bare in
places, in others tall grass and dry
cow-cabbage & other plants. Little C.

Mel. desert. local.

Cratypedes mont. one, all seen.

Orth. 6 + 1226 = 1232

Other ins. 10 + 591 = 601.

1951. 116 West side of Luther Pass, Sierra Nevada. El Dorado Co., California. Elev. (an.) 7700 feet. VIII. 11. 1951. (R.).

Mountain meadow surrounded by tall pines, just below actual pass. Rubus pass in places, dry in others, sage in spots.

All *O. cum.* *Trin. falsus* clatters, a few, *Stachys*
Camnula, local in pass.

Orth. 6 + 1232 = 1238

Orth. vis. 23 + 601 = 654

1951. 117 Near Woodford, Canyon of West Fork of Carson River, ^{virtually at} east foot of Luther Pass, Alpine Co., California. Elev. (an.) 5640 feet. VIII. 11. 1951. (R.).

Opening in pine forest. ground chiefly decomposed granite gravel with a little silt. Low plant cover largely sage, much bare surface. Wind very strong, down the canyon.

Antennaria, 1 spec. running on ground.

Trin. cyaneus. Numerous.

Conyza wallula local.

Achillea - a small colony, several at least flushed from sage.

Myk. long sp. - 1 ♀ must.
Idemostes sp. - 1 ♀ flushed to ground
from sage - very active.

Orth. 121 + 1238 = 1259.
Other ins. 0 + 654 = 654.

1951.118 3 miles S. of Centerville,
Carrum Valley, Douglas Co., Nevada
Elev. (an.) 4900 feet. VIII.11.1951. (R.)
Roadside thongh, in part dry and partly
with water. Tall grass, sedges and
cattails.

Chorthippus local and not very common.
Mel. dew. Not common.

Cnemidophorus abundant in ^{richer} ~~rather~~ grass

Orth. 35 + 1259 = 1294
Other ins. 14 + 654 = 668.

1951.119 Eagle Valley, 1 mile N. of Empire
(3 miles E. of Carrum City), Churchill Co.,
Nevada. Elev. (an.) 4750 feet. VIII.12.1951.
(R.)

Sage with a little rabbit weed on
silt and sandy silt, some places heavily
mashed.

Cordillarius local, on sand.

Agrostis, a few, 1 taken.
Trisetum, local, more frequent
on silt.

1951.119 (cont.)

Empidonax vallula, a very few.

Trin. albicollis? in sev. flocks, 2 taken.

Mel. n. n. - not common, in flocks, flying into sage.

Utter. 15 + 1294 = 1309.

Utter vis. 2 + 668 = 670.

1951.120 7 miles S.E. of Gardnerville,
Douglas Co., Nevada. Elev. (an.) 5000-5100 feet.
VIII. 12. 1951. (R.)

Hill slopes covered with broken rock of all
sizes, with some silt between. Scattered
juniper and piñon with the low cover
almost entirely rather low sage.

Trin. cyaneus, 1, all seen.

Circotettix thalassina, 3 seen, 1 taken.

very many.

hepus 1 taken, in flocks, all seen.

Utter. 3 + 1309 = 1312.

Utter vis. 1 + 670 = 671.

1951.121 Hills 13 miles S.E. of
Gardnerville, Douglas Co., Nevada.
Elev. (an.) 6400 ft. VIII. 12. 1951. (R.)
On one side stony tilt under open sage.
On the other juniper and piñon on

Very rocky slope. Nothing in litter. In
former Trim. cyaneipes relatively common
on ground, and a single Agonistethis.

leth. 6 + 1312 = 1318.

Uther ins 1 + 671 = 672.

1951.122 4.5 miles S of south end of
Topsy Lake, Mono Co., California.

Elev. (an.) 5400 feet. VIII.12.1951. (R.)

Grutte slope with sage and frosted between
with sun-cured out pass.

Pambolus, swept from out pass.

Mesoch. plattii type, few on ground.

Cozyra multula few.

Trim. abreus, local, not common

" pallidip. 1 taken.

" cyaneipes, a single one taken.

" californicus 1 taken, all recognized.
Mel. divinator, a few only, could
not get a male.

leth. 14 + 1318 = 1332.

Uther ins. 0 + 672 = 672.

1951.123 Devil's Gate, 11 miles NW. of
Bridgeport, Mono Co., California.

Elev. (ch.) 7519 feet. VIII.12, 1951. (R.)

Grassy meadow in rocky defile. Tall
dry sun cured grass and scattered
sage. Winds very high.

Camnula locally common.

Mel. mex. a few only.

Orth. 5 + 1332 = 1337.

Other ins. 0 + 672 = 672.

1951.124 Conway Summit, Mono
Co., California. Elev. (b. m.) 8136 feet.
VIII.12, 1951.

Slopes of tangled and heavily grazed
(sheep) sage with some rabbit weed, and
cow cabbage and tall grass.

Only C. - Trim. gracilis - 1 seen + taken.

Orth. 1 + 1337 = 1338.

Other ins. 3 + 672 = 675.

1951.125 West side of Mono Lake,
Mono Co., California. Elev. (am.) 8450
feet. VIII.13, 1951. (R.)

Rough stony ground. Cow chiefly sage.

Capt. Cratygeus, a few.

Mel. juv. a few.

Orth. 4 + 1338 = 1342.

Other ins 0 + 675 = 675.

1951. 126 1 mile S. of Leving, Mono Co., California. Elev. (ann.) 6750 feet. VIII. 13, 1951. (R.)

Sage, sand has and a few other shrubs in sandy silt or intrinsically pure sand.

Cordillanis, a few, very local, in intrinsically pure sand.

Coryza, roadside silt.

Trin. ~~albescens~~ albescens, a very few, one taken.

" bilobata, locally numerous, flying into bushes.

" grisea, but 1 seen - taken.

Orth. 13 + 1342 = 1355.

Other ins. 0 + 675 = 675.

1951. 127 7 miles S. of Leving, Mono Co., California. Elev. (ann.) 7100 feet. VIII. 13, 1951. (R.)

Almost entirely sage on sandy silt.

Trin. albescens, few and local.

Musib. plattis type, but 1 seen - taken.

Cordill. local - few.

Orth. 4 + 1355 = 1359.

Other ins. 0 + 675 = 675.

1951. 128 Headman's Summit,
Mono County, California. Elev. (approx.)
8041 feet. VIII. 13, 1951. (R.)

Surface grayish black gravelly sand,
approx. volcanic in origin, under open
stand of very tall pines. Wind very high.

Trimer. falsus clatterus, 1 all seen, taken.

" albescens locally numerous, not
very active.

Cratypedes monticola 1 taken, all seen.

Ueth. 12 + 1359 = 1371.

Ueth. ins. + 3 + 675 = 678.

1951. 129 West side of Long Valley Reservoir,
Mono Co., California. Elev. (approx.) 7200 feet.
VIII. 13, 1951. (R.)

Sage brush with some rabbit weed and
other shrubs.

Curdill. local on bare ground, not numerous.

Trimer. gravis, very few.

" cynipes, seen very active,
flying into cage.

" albescens? only.

Cratypedes mont. 1 seen - lost.

Ueth. 11 + 1371 = 1382.

Ueth. ins. 0 + 678 = 678.

1951.130 One mile N. of Raus, Inyo
Co., California. Elev. (an.) 4280 feet.

VIII.14, 1951. (R.)

Alkali incrustated rough ground, with
salt grass, salsphire, Sarcobatus, a
few rabbit weed and other shrubs.

Almost no ground O.

Amphitornus - a few, in one small colony,
2 taken.

Apia - 1 taken, no others actually recognized

Neopenthetix long-winged - local in rabbit
weed.

Orth. 14 + 1382 = 1396.

Other ins. 1 + 678 = 679.

1951.131 4 miles N of Chalfant, Mono Co.,
California. Elev (an.) 4800 feet. VIII.14, 1951.
(R.)

Very dry stone and silt (latter in washes)
desert. Cover largely low spiny bushes,
a few softer, no Sarcobatus or rabbit
weed.

Ligurotettix - 1 swept from ? No more
taken.

Trin. albescens, on stony surface, a few seen,
2 taken.

" pallidip. (?) 1 taken on stony area.

Orth. 4 + 1396 = 1400.

Other ins. 0 + 679 = 679.

1951. 132 2 miles N. of Benton Station,
Mono Co., California. Elev. (am.) 5850
feet. VIII. 14, 1951. (R.)

Sage and an *sphedra*-like plant on
sandy silt with small stones.

No C. except 1 *Trim. albicans*.

Catch. 1 + 1400 = 1401.

Other ins. 0 + 679 = 679.

1951. 133 Near old Queen's Station, Mono
Co., California. Elev. (am.) 6500 feet. VIII. 14, 1951.
(R.)

Hops at north end of White Mountains,
on way up to Montgomery Pass from west.

Sage with few rabbit weed.

No C. 1 *Thant. unipra Neopentellus*
in rabbit weed.

Catch. 1 + 1401 = 1402.

Other ins. 7 + 679 = 686.

1951. 134 Montgomery Pass, at N. end of
White Mountains, Mineral Co., Nevada.
Elev. (b.m.) 7123 feet. VIII. 14, 1951.
(R.)

Sage and rabbit weed under open
juniper and piñon.

Sole C. 1 ♂ 1 ♀ th. w. *Neopentellus* in
rabbit weed. No more could be located in
exam. of several hundred bushes.

Catch. 2 + 1402 = 1404.

Other ins. 11 + 686 = 697.

1951. 135 California - Nevada state line,
north on Mono Co., Cal. side, 2 miles
N.E. of Benton Sta., California. Elev. (am.)
6000 feet. VIII. 14, 1951. (R1)

Soft silt with frosting of small stones.
Vegetation almost exclusively. All O. seen:

Trin. caudatus, 1 seen + taken

" strimma, 1 seen + taken

Orth. 2 + 1404 = 1406

Orth. ins. 0 + 697 = 697

1951. 136 1 mile S. of Benton Station,
Mono Co., California. Elev. (am.) 5175
feet. VIII. 14, 1951. (R.)

Saline flat with Atriplex, Sarcobatus
+ rabbit weed.

Neopent. th. w., local in rabbit weed.

Melanopl. large species, taken in same.

Agaveotettix - 1 swept.

Orth. 7 + 1406 = 1413

Orth. ins. 3 + 697 = 700

1951. 137 Near Shady, Mono Co.,
California. Elev. (an.) 4200 feet. VIII. 14, 1951.
(R.)

Sage, Atriplex and rabbit weed, some
sun-dried grass in tufts.
^{Juv. Staphylinid, pupa from coll. 10}
✓ Paropromela, locally numerous in sun-
dried grass - very active and elusive.

Mesoprotella long-winged. - in rabbit
weed, locally numerous.

Aedopides - a few in Atriplex, many
were secured no males.

Melanopl. type species - a few taken from
rabbit weed. None noticed in sage. Very
active and elusive.

Utah. 20 + 1413 = 1433.

Utter vis. 1 + 700 = 701.

1951. 138 Near Rough Mt Springs,
Inyo Co., California. Elev. (an.) 4300 feet.
VIII. 15, 1951. (R.)

Sage with a very little Atriplex and rabbit
weed. Area of fine grass.

Trin. caerulea. - a few, one taken on
sting.

Trin. strimma - 1 seen - taken on same.

Mesoprot. long-w. - 1 pupa from rabbit weed.

Utah. 3 + 1433 = 1436.

Utter vis. 0 + 701 = 701.

1951. 139 7 miles S. of Big Pine,
Owens Valley, Inyo Co., California.
Elev. (~~approx.~~ ^{approx.} 4000 feet. VIII. 15. 1951.
(R.)

Surface of two characters, one with
many large loose boulders, and small
flats of volcanic silt; the latter with
sun-cured *Fer* used. Other vegt., sage
with some Atriplex.

Herotomus, ^{latif.} in silt only, flying into
Fer used.

Trin. struma - local on silt and
lava, very active.

Trin. pallidip. 1 on lava.

Melanoplus pus. 1 swept.

Cont. 8 + 1436 = 1444

Other ins. 0 + 701 = 701

1951. 150 1 mile W. of Aberdeen, Owens
Valley, Inyo Co., California. Elev.
(am.) 13900 feet. VIII. 15. 1951. (R.)

Sage and rabbit-wind flat.

Neopust. th. w., swarming in rabbit
wind.

Melanopl. sage sp. - in fair numbers
in rabbit wind. No other U. seen.

Cont. 72 + 1444 = 1516

Other ins. 1 + 701 = ~~1444~~ 702

1951.141 6 miles N. of Lone Pine, Owens Valley, Inyo Co., California. Elev. (est) approx. 3900 feet. VIII. 15, 1951. (R.)

Flat with dry crusted alkaline mud, bearing short salt grass, largely ^{along a depression} ~~along a depression~~ Artemisia integrifolia ^{but not} ~~but not~~ ⁱⁿ ~~in~~ ^{the} ~~the ^{mud} ~~mud~~, one taken, exceedingly active.~~

Paropromala, locally numerous in both brush grass and salt grass.

Cloth. 10 + 1516 = 1526.

Uterus ins. 0 + 702 = 702.

1951.142 Alabama Hills, 3 miles N. of Lone Pine, Owens Valley, Inyo Co., California. Elev. approx. 4800 feet. VIII. 15, 1951. (R.)

Wield rounded and fissured granite knobs and points. Plant cover very thick thin - sage, some rabbit weed, a little dried poppy and other shrubs & ~~annuals~~ annuals. No A. except 1 Mel. type sp. taken from rabbit weed.

Cloth. 1 + 1526 = 1527.

Uterus ins. 0 + 702 = 702.

1951.143 Betw. Inyo Mts. and Cozo Range, 8 miles NW. of Darwin, Inyo Co., California. Elev. (chart) 5000 feet. VIII. 16, 1951. (R.) Scattered cover of Atriplex, Koeberlinia and many other dry and leafless bushes.

Only Q:

Stagmomantis, 1 juv. mpt.

Aedopidea 1 ♂, mpt.

Atelopus, 2 ♂♂ mpt from two different plants, one with leaves (cut in full) resembling a small geranium, and the other a very different type.

Orth. 4 + 1527 = 1531.

Other ins. 0 + 702 = 702.

1951. 144 Shoulder of Argus Range, directly above Panamint Valley (on Cal. 190), Inyo Co., California. Elev. (am. chart) 5000 feet. VIII. 16, 1951. (R.).

Large (and small and reddish vesicular type) scattered on surface on top of a thick basalt topping. The deep canyon (1000+ feet) plunged side revealed a number of ^{superimposed} lava flows cut by erosion. Vegetation:

Covillea, Atriplex (not hymenoclyta), and little else.

Tamocerus, 1 juv. mpt from Covillea.

Bostettia, num. in Covillea.

1 Insana covilleae in net, mpt, but lost!

Orth. 18 + 1531 = 1549.

Other ins. 3 + 702 = 705.

1951.145 - 4 miles ^{NE.} N. of Marwin, at NW.
border of Argus Range, Inyo Co., California.
Elev. (ch.) 3700 feet. VIII. 16. 1951. (R.)

Slopes chiefly clothed with Covillea and
several species of little bush, little
evident Atriplex. Ground surface largely
covered with basalt and reddish vesicular
lava fragments.

Only C. seen - Protella swept from
Covillea.

Arth. 5 + 1049 = 1054
Uther ins. 0 + 705 = 705.

1951.146 Hill slope N. of Mt. Ophir, 4 miles
N. of Marwin, Inyo Co., California.
Elev. (ch. + an.) 5100 feet. VIII. 16, 1951. (R.)

Atriplex, Coebulimia and many other
spiny very low bushes. Many scattered
yuccas. No Atriplex hymenelytra seen.

No C. except 1 Atelopus taken from between
leaf bases on a head of yucca.

Arth. 1 + 1054 = 1055.
Uther ins. + 705 =

1951. 147 Flat 4 miles NW. of Harwin,
Inyo Co., California. Elev. 5400 feet (ch.)
VIII. 16. 1951. (R.)

Washes and clayey silt areas. Corn
largely Atriplex. All O - two Trimerotropis
taken on clayey silt.

Orth. 2 + 1555 = 1557.

Orth. inc 0 + 705 = 705.

1951. 148. Near S. end of Inyo Range,
Inyo Co., California. Elev. (ch.) 5000 feet.
VIII. 16. 1951. (R.)

Barren sand with Atriplex and several
other bushes.

No O. except 1 Amorimia integra, taken
on sand and followed after flying into
bushes.

Orth. 1 + 1557 = 1558.

Orth. inc. 0 + 705 = 705.

1951. 149 Along nearly dry course of
Crown's River, 4 miles S.E. of Lone
Pine, Inyo Co., California. Elev.
(ch.) 3700 feet. VIII. 16. 1951. (R.)

Tall grass, low salt grass and
a little rabbit weed, and clumps

1951.149 (cont.)

of what seemed to be arrow wood. Much
open area.

✓ Paropomata, local in both types of grass.

Amphitornis, 1, all seen, on ground.

Coccyx urophasianus, a few, roadside.

Melanophus sp., 1 ♀, in tall grass, all seen.

Neopentelides l. w., tw. in rabbit wood.

Arth. 13 + 1558 = 1571.

Arth. ins. 2 + 705 = 707

1951.150 3 miles S. of Olancha, Inyo Co.,
California. Elev. (aner. - ch.) 3825 feet.
VIII, 17, 1951. (R.)

Atriplex and similar dry brush, with
the first Covillea seen in this direction
(due S.), and scattered Joshua trees.

No O. in Covillea. All seen ^{14 taken} 2

Trin. albescens on sand silt in
wash.

Arth. 2 + 1571 = 1573.

Arth. ins. 0 + 707 = 707.

1951. 151 Rose Spring, N. end of Rose
Valley, north of Inyokern, Inyo Co.,
California. Elev. (ch.) 3500 feet. VIII. 17.
1951. (R.)

Covillea flat with dry brittle brush.
Only 1 Boottia after beating a
considerable series of Covillea plants.
Orth. 1 + 1573 = 1574.
Other ins. 0 + 707 = 707.

1951. 152 Freeman, at east foot of
Walker Pass, Kern Co., California.
Elev. (ch.) 3400 feet. VIII. 17, 1951. (R.)

Covillea ^{almost entirely} ~~only~~. Boottia, beaten from
same, ~~only~~ one Paropoma rupt.
Orth. + + 1574 = 1578
Other ins. 0 + 707 = 707.

1951. 153 Summit of Walker Pass,
Sierra Nevada, Kern Co., California.
Elev. (b. m.) 5250 feet. VIII. 17, 1951.
(R.)

East side almost solidly Joshua,
west side, except ss. juniper, sage,
pinyons. Joshua follow through

1951. 153 (cont.) the pass, for some miles ^{to the W.} on south facing slopes and warm flats, prairie on the reserve.

Work done on the immediate west side of summit. Low cover sage, some rabbit weed and other shrubs. Wind strong

Trin. albicoma local in fair numbers.

Windy and wind made capture difficult.
Trin. modesta sp. 1 on bank.
Aracodites 1 juv. ♀, on relatively bare ground.

Urch. 5 + 1578 = 1583.

Urch. ins. 0 + 707 = 707.

1951. 154 Upper Kern River, 9 miles W. of Walker Pass, Kern Co., California. Elev. (an.) 3000 feet. VIII. 17. 1951. (R.)

Rabbit weed along irrigation ditch.

No Q. except 1 Hesperotettix C.W., beaten from rabbit weed.

Urch. 1 + 1583 = 1584.

Urch. ins. 0 + 707 = 707.

1951. 155 Isabella, Kern Co., California.

Elev. (an.), 2450 feet. VIII. 17. 1951. (R.)

Very dry slope with typical California hills that sun-cured dry grass and scattered rabbit weed.

Only O. desperatella in latter. Note
brownish coloration of whole mass.

Coll. 7 + 1584 = 1591.

Other ins. 0 + 707 = 707.

1951. 156 5 miles W. of Old River,
 Kern Co., California. Elev. (am.) 340
 feet. VIII. 18, 1951. (R.)

Roadside - rabbit and sun-cured
 oak grass, tumble-weed and a few other
 shrubs. Exceedingly dry and dusty.

✓ Panopoma, scarce in grass.

Agrostella dicrana, local in grass.

Lepta, a few adults + juvs.

Geolophus, 1 swept.

Melanoplus sp. juv. 1 swept.

Neoperotella, l.v. local in rabbit weed.

Coll. 15 + 1591 = 1606.

Other ins. 0 + 707 = 707.

1951. 157 2 miles SE of Tupman, Kern
Co., California. Elev. (ann.), 315 feet.
VIII. 18, 1951. (R.)

Tall bunch grass, rabbit weed and a
few other things. very dry.

Alpina muricata, but very scarce,
in grass.

✓ Paropomala communis, but elusive,
in the same.

Tripidulus, one, all seen, taken on bare
ground.

Utah. 12 + 1606 = 1618.

Utah ins. 4 + 707 = 711.

1951. 158 Hills 6 miles S. of Maricopa,
Kern Co., California. Elev. (ann.) 2425 feet.
VIII. 18, 1951. (R.)

Hops with dry out grass and a few weeds -
much bare ground.

Sub Q. - 1 Agrostis sierrana, in grass.

Utah. 1 + 1618 = 1619.

Utah ins. 3 + 711 = 714.

1951. 159 Cuyama Valley, 17 miles E. of Santa
Marina, San Luis Obispo Co., California.
Elev (an.) 1610 feet. VIII. 14. 1951. (R.)

Roadside - Trunkle - road, ground
runways, etc.

No C. except several Conozoa tuberosa,
1 taken, 1 lost.

Orth. 1 + 1619 = 1620.

Other ins. 0 + 714 = 714.

1951. 160 Cuyama Valley, 10 miles E. of
Santa Marina, San Luis Obispo Co., Cali-
fornia. Elev. (an.) 700 feet. VIII. 18. 1951.
(R.)

Roadside - silt (heavily trampled by
gophers and pocket mice) and straggly
grass weeds, as well as completely
dry types. Wind very high.

Only C. - Psolocera thomozana,
several seen, but 1 taken. Exceedingly
active, and sailing long distances
with the wind.

Orth. 1 + 1620 = 1621.

Other ins. 1 + 714 = 715.

1951.161 6 miles S S E. of Santa Maria,
Santa Barbara Co., California. Elev. (an.)
600 feet. VIII. 19, 1951. (R.)

Roadside and field. Nothing roadside.
In field of dry wheat patches and straggly
weedy *compositis* (small yellow flowers).
Acanthaceae fairly numerous. A few
Conyza *texensis* on bare spots, 1 taken.
Melan. sp. 1 juv. impt.

Crit. 13 + 1621 = 1634.

Crit. vis. 4 + 715 = 719.

1951.162. Los Alamos, Los Alamos Valley,
Santa Barbara Co., California. Elev. (an.)
700 feet. VIII. 19, 1951. (R.)

Roadside of tall weeds, alongside of
cultivated fields. Sole C. a *cauculately*
brachypterous podicoid? - *junus*? from in
color, unfortunately terminal. Search for
more without results.

Crit. 1 + 1634 = 1635.

Crit. vis. 29 + 719 = 748.

1951.163 1 mile E. of Gaviota Pass,
Santa Barbara Co., California. Elev. (an.)
200 feet. VIII. 19. 1957. (R.)

Roadside weedy area with scattered
shrubby and tangled mass of fleshy
beach plant. Footing difficult to
maintain on account of holes and ^{numerous} dead
plant stems.

Sole C. 1 ad. - 1 juv. Melanoplus trupt.
and a number of Ulexanthus trupt.

Ulex. 8 + 1635 = 1643.

Ulex no. 0 + 748 = 748.

1951.164 Near El Capitan, Santa
Barbara Co., California. Elev. (an.)
100 feet. VIII. 19. 1957. (R.)

Roadside, sun-cured out pass with the
same fleshy beach plant as at 1951.163.

Sole C. ^{1 juv.} 1 juv. specimen of Mel. desertator,
1 taken.

Ulex. 1 + 1643 = 1644.

Ulex no. 0 + 748 = 748.

1951. 165 1 mile E. of Carpinteria, Santa
Barbara Co., California. Elev. (an.) 50 feet.
VIII. 19, 1951. (R.)

Old field with out-paces and scattered
weeds. No D. except Acanthaceae nupt.

Arth. 2 + 1644 = 1646.

Other ins. 0 + 748 = 748.

1951. 166 Two miles E. of Camulos, Ventura
Co., California. Elev. (an. + ch.) 875 feet. VIII. 20, 1951.
(R.)

Roadside - bare ground and areas of tar
weed, etc.

No D. except Couzon behrensi on bare ground.

Arth. 2 + 1646 = 1648.

Other ins. 0 + 748 = 748.

1951. 167 Near Honby, Solidad Canyon, Los
Angeles Co., California. Elev (an.) 1500 feet. VIII. 20, 1951. Santa Clara River.
(R.)

In broad sandy washes of Santa Clara River
bed. Pure sand in spots.

Trim. californicus, local and very rare.

Couzon behrensi, local, near roadside.

Arth. 5 + 1648 = 1653.

Other ins. 0 + 748 = 748.

1951. 168 Mint Canyon, Los Angeles Co,
California. Elev. (an. - ch.) 2000 feet.
VIII. 20, 1951. (R.)

Canyon bottom land with bare ground,
very dry low growth of various species,
including a Nolina with dead flower stalks
as much as 8 feet tall. No rabbit used. No
true desert elements in the vegetation.

Sole C, small Herotomus taucaneum,
1 taken, on ground.

Orth. 1 + 1653 = 1654.

Other ins. 0 + 748 = 748.

1951. 169 Near head of Mint Canyon,
Sierra Pelona, Los Angeles Co., California.
Elev. (an. - ch.) 3500 feet. VIII. 20, 1951. (R.)

Canyon floor and lower hill slopes, with
corn largely very low chamise, in large
part dead and dry.

Parabacillus in dead chamise, ♂♂
taken, ♀ seen and collected by hand.

Morsea locally numerous in both dead and
live chamise.

Agerotettix sierranus, few - active, in
chamise - on the ground.

Weperotettix few in chamise, very active.

Orth. 28 + 1654 = 1682

Other ins. 0 + 748 = 748.

1951. 170 2 miles N.E. of Vincent, Los Angeles
Co., California. Elev. (an. - ch) 3000 feet.

VIII. 20, 1957. (R.)

Flora found Moham. Very low and largely
dead chamise with other mountain type shrubs
few with leaves - between low, rather
flattened junipers. Much bare ground.

very soft
- wood.

Parabacillus swept from chamise.

Morua few - very local, \checkmark equally in dead chamise.

Trimeris. caeruleigemma, 1; all seen, on
bare ground.

Desfontainia, swept from chamise and
another green bush, few and local.

Utth. 8 + 1682 = 1690.

Utth. no. 0 + 748 = 748.

1951. 171 Between Lancaster and Palmdale,
Los Angeles Co., California. Elev. (an.) 2600
feet. VIII. 21, 1957. (R.)

Rather heavy stand of Joshua trees with
low cover between largely of leafless shrubs,
in part very spiny. Bare brown sand in
many places.

Parabacillus swept from spiny bush.

Tris. californicus 1, all seen, no found.

Utth. 2 + 1690 = 1692.

Utth. no. 0 + 748 = 748.

1951.172 3 miles NW. of Little Rock,
Los Angeles Co., California. Elev. (an-
c. ch.), 2650 feet. VIII. 21. 1957. (R.)

Tall roadside weeds and luxuriant
rabbit weed, along dry ditch. Nothing on
bare ground.

Chist. univata, juv. and local in tall
weeds.

Melanoplus sp., sev. in rabbit weed.

Neopentetes l. w., 1 in ditto

Ceanothus, juv. in ditto.

Orth. 8 + 1692 = 1700.

Other ins. 1 + 748 = 749.

1951.173 1 mile E. of Little Rock,
Los Angeles Co., California. El. (an.?)
2950 feet. VIII. 21. 1957. (R.)

Rock Mohave country with scattered
~~Joshua~~ Joshua and Covillea plus
numerous dry spring bushes and a
little brush pass.

In Covillea 1 ad. Portetia seen - lost!
1 juv. taken.

✓ Paropromela 1 in spring bush

Orth. 2 + 1700 = 1702.

Other ins. 0 + 749 = 749.

1951.174 3 miles E. of Desert Springs.

S. border of Moham Desert, San Bernardino Co., California. Elev. (ch.) 4650 feet.

VIII. 21. 1951. (R.)

Joshua trees and junipers, with some rabbit weed and numerous other low bushes.

No C. except 1 Parastreptus swept.

Catch 1 + 1702 = 1703.

Ceteris vis. 0 + 749 = 749.

1951.175 Near Hoover, Cajon Canyon, San Bernardino Co., California. Elev. (an.) 2000 feet. VIII. 21. 1951. (R.)

Canyon brush, with subsidiary washes, many boulders, bare sandy areas, and tangles of chamise, yucca, other shrubs and a few trees. ~~Some bushes~~ Mud high

Trin. californicus, numerous on bare sand, but very many and flying, aided by wind, long distances.

Melanopl. sp. a few in bushes.

Idionotus, 1 single ♂ swept. No more could be located.

Catch 5 + 1703 = 1708.

Ceteris vis. 0 + 749 = 749.

1954. 176 Rim Summit, So. Rim of San

Bernardino Mountains (on highway Cal. 18),
[2 miles S. of Argus Lake]
San Bernardino Co., Cal. Elev. (S.M.)

5756 feet. VIII. 22, 1954. (R.)

Open spot in pine forest on outlook to S.
Covered bracken mostly, clumps of yellow
flowered rabbit weed, some sun-cured
rather than pressed, and var. other herbs.
Areas of bare granite gravel.

Amphitornus, 1, all seen, on gravel.

Trimer. cynaeus, numerous on bare
areas, flying freely, marked color range.

Cratichneumon, a number, very active,
on bare areas.

Chalcid, 1 ♀, 1 ♂, picked it up from
bracken and rabbit weed (I saw the spot).
all seen.

Platylabus 1 ♀ swept from?

Chalcid th. co., locally abundant in
rabbit weed, almost never taken out of it.

Cedronotus, apparently two species,
a larger and a smaller one. Both in
two ground, and sometimes in ground.

Chalcid, a few juvs., swept.

Chalc. 58 + 1708 = 1766

Other ins. 3 + 749 = 752.

1951.174 3 miles E. of Desert Springs.

S. border of Mohave Desert, San Bernardino Co., California. Elev. (ch.) 4150 feet.

VIII. 21. 1951. (R.)

Joshua trees and junipers, with some rabbit wood and numerous other low bushes.

No C. except 1 Paratrillax swept.

Catch. 1 + 1702 = 1703.

Catch. ins. 0 + 749 = 749.

1951.175 Near Hoover, Cajon Canyon, San Bernardino Co., California. Elev. (an.) 2000 feet. VIII. 21. 1951. (R.)

Canyon brush, with subsidiary washes, many boulders, bare sandy areas, and tangles of chamise, yucca, other shrubs and a few trees. ~~Some bushes~~ Mud light

Tram. californicus, Numerous on bare sand, but very wary and flying, aided by wind, long distances.

Melanopl. sp. a few in bushes.

Thionotus, 1 single ♂ swept. No more could be located.

Catch. 5 + 1703 = 1708.

Catch. ins. 0 + 749 = 749.

1957. 176 Rim Summit, So. Rim of San
Bernardino Mountains (on highway Cal. 15),
[2 miles S. of Angeleno Lake]
San Bernardino Co., Cal. Elev. (D.M.)

5756 feet. VIII. 22, 1957. (R.)

Open spot in pine forest on outlook to S.
Covered bracken mostly, clumps of yellow
flowered rabbit weed, some sun-cured
rather than pressed, and var. other shrubs.
Areas of bare granite gravel.

Amphitornus, 1, all seen, on gravel.

Trimer. cyaneipes, numerous on bare
areas, flying freely, marked color range.

Cratypides mont., a number, very active,
on bare areas.

Chacotettix, 1 ♀, D. picked it up from
bracken and rabbit weed (I saw the spot).
all seen.

Platylira 1 ♀ swept from ?

Chacotettix th. w., locally abundant in
rabbit weed, almost never taken out of it.

Cedalonotus, apparently two species,
a larger and a smaller one. Both in
low ground, and sometimes in pond.

Quaestus, a few juvs., swept.

Utter ins. 58 + 1708 = 1766.

Utter ins. 3 + 749 = 752.

1951.177 San Bernardino Mts., 4 miles
(on Cal. 18 highway) E. of Running
Springs, San Bernardino Co., Cal.

Elev. approx. 6700 feet. VIII. 22. 1951. (R.)

Pine and fir forest with many granite
boulders, and low dense thickets, often
mats, of chinquipin, manzanita and a
spring bush.

No O., 2 Morona swept from man-
zanita.

Colth. 2 + 1766 = 1768.

Other ins. 0 + 752 = 752.

1951.178 3 miles E. of Fawnskin,
near E. end of Big Bear Lake,
San Bernardino Mts., San Bernardino
Co., Cal. Elev. (am.) 6825 feet, VIII. 22, 1951.
(R.)

Pine and fir forest, with undergrowth
and var. other shrubs.

No O. seen except 2 Melan. sp. w.
species, 1 taken, 1 lost.

Colth. 1 + 1768 = 1769.

Other ins. 0 + 752 = 752.

1951. 179 Cactus Flat (N. slope of
San Bernardino Mts.), San Bernardino
Co., Cal. Elev. (an. - ch.) 5850 feet. VIII. 22, 1951
(R.)

Pinon, juniper - Joshua trees (area
now largely burned when compared
with 1919). Under cover sage, rabbit
weed, some chamise and an ephedra-
like plant.

Fl. O. rept: 1 Moxysa, 1 Uedalontus
Arth. 2 + 1769 = 1771.
Arth. ins. 3 + 752 = 755.

1951. 180 3 miles E of Banning,
Riverside Co., Cal. Elev. (ch.) 2200 feet. VIII. 23,
1951. (R.)

Much disturbed roadside. Some chamise,
much low, mat-like (prohibition to nets)
acacia, and a little cactus - almost nothing else.

Stagnomantis, 3 juvs. in chamise (beaten
out)

Melan. sp., 1 in ditto.

Uedalontus unguis, 1 in ditto.

Arth. 5 + 1771 = 1776.

Arth. ins. 0 + 755 = 755.

1951. 181 7 miles E. of Indio, Riverside
Co., Cal. Elev. (an.), 220 feet. VIII. 24. 1951.
(R.)

Gravelly and sandy wash slopes with
scattered Covillea, pale verde and yellow
leafless sun-cured bushes. Most of
surface bare.

No C. except 1 Bostettia swept from
Covillea.

Wash. 1 + 1776 = 1777.

Other vis. 0 + 755 = 755.

1951. 182 13 miles E. of Indio, Riverside
Co., Cal. Elev. (an.), 1450 feet. VIII. 24. 1951.
(R.)

Stony shingle on silt, with many inter-
locking shallow or deep washes. Some
ocotillo, Covillea, pale verde, and other
shrubs.

No C. seen except Bostettia swept from
Covillea.

Wash. 4 + 1777 = 1781.

Other vis. 3 + 755 = 758.

1951. 183 Thaver's Summit, between
the Eagle and Oroopia Mts., Riverside
Co., Cal. Elev. (b. m.), 1700 feet. VIII. 24. 1951.
(R.)

Deeply cut-up silt and gravel bench,

with many wash channels. Cover
chiefly Covillea, a few palo verde,
some sun-dried, leafless shrubs.

John G. Postell's swept from Covillea.

Utah. 5 + 1781 = 1786.

Other no. 3 + 758 = 761.

1951. 184 5 miles E. of Pleasant Center,
Riverside Co., California. Elev. (an.), 625
feet. VIII. 24, 1951. (R.)

Multiple washes in silt, with stone
prominent surfacing the flat areas. Acacia,
juniper, some rabbit wood and a
few palo verde and other low shrubs.

Nothing seen on ground.

Postellia + bigelowii beaten from
Covillea.

Utah. 5 + 1786 = 1791.

Other no. 1 + 761 = 762.

1951. 185 Road pass through Stone Rock
Mts., Yuma Co., Arizona. Elev. (an.) 1000
feet. (16 miles E. of ~~Chumley~~ Chumley)
VIII. 25, 1951. (R.)

Brand strong washes with Covillea,
palo verde, acacia, etc. No G. except Postellia
swept. (Acroplides seen - lost!)

Utah. 2 + 1791 = 1793.

Other no. 0 + 762 = 762.

1951.186 4 miles ^{8.} W. of Quartzsite, Yuma
Co., Arizona. Elev. (an.) 1000 feet. VIII. 25, 1951.
(R.).

Broad areas of relatively smooth stony
pavement on silt. Vegetation: Yucca
Covillea, pala verde, acacia, etc.
Sole C., Bortettia, relatively numerous,
and Ligustrum, much fewer, with swept
from Covillea. No trace of ground forms.

Urb. 20 + 1795 = 1815.
Other vis. 4 + 762 = 766.

1951.187 Western border of Ramezias Plain,
2 miles E. of Plomosa Mts., Yuma Co.,
Arizona. Elev. (an.), 1300 feet. VIII. 25, 1951.
(R.).

Areas of stony pavement and broad stony
washes. Com: Covillea, acacia, cotillo, pala
verde and much low desert vegetation - relatively
few, cotillo in leaf and drains with low
green mats. Sarcobatus, 1 swept.
Bortettia, swept from Covillea.

Mel. aridus, 18 swept from sun-cured low
wash.

Crotalaria, 1 ♀ (1 leg), on stony pavement, all
seen.

1 Schistocerca gregaria seen & recognized, but lost!

Urb. 4 + 1815 = 1819.
Other vis. 3 + 766 = 769.

1951. 188 4 miles E. of Wenden, Yuma
Co., Arizona. Elev. (b. m.), 1795 feet.
VIII. 25, 1951. (R.)

Roadside Covillea and Fall clumps of
grass in roadside drain. Vegetation
relatively poor.

Acloptodes juv. swept - few in dist. no
adults could be located.

✓ Paropomala adults - juvs., chiefly latter,
in fall grass only.

Portetia, in Covillea.

Certs. 22 + 1819 = 1841.

Certs. vis. 4 + 769 = 773.

1951. 189 4 miles W. of Aquila,
Maricopa Co., Arizona. Elev. approx.
2300 feet. VIII, 25, 1951. (R.)

Roadside, relatively moist, vegetation
relatively rich. A thick carpet of short
grass, tall bunch grass, tall weeds, low
marginals, ~~etc.~~ other grasses and flowering
annuals.

✓ Paropomala numerous in bunch grass.
few males.

Melan. sp. All juvs. in short grass.

Ceratomyza: 1 ♀ swept in tall weeds

1951. 189 (cont.)

Aquidettes, a few on ground.

Apria, a few in short grass, one taken.

Uths. 13 + 1841 = 1854.

Uther ins. 8 + 773 = 781.

1951. 190 4 miles E. of Aquila, Maricopa
Co., Arizona. Elev. approx. 2300 feet. VIII. 25. 1951.
(R.)

Luxuriant and rank grass and weeds
along surface water.

✓ Paropromala, 1 juv. all seen.

Aquidettes 1 on ground, one other seen.

Apria, in short ^{but lush} grass.

Uths. 7 + 1854 = 1861.

Uther ins. 22 + 781 = 803.

1951. 191. 5.5 miles N. of Wickenburg,
Yavapai
Maricopa Co., Arizona. Elev. (an.), 2500 feet.
VIII. 26. 1951. (R.)

Relatively rich and varied flora - Covillea
(not many), palo verde, Kochulinia, brush
grass, low mats of annuals in flower and
numerous other shrubs and bushes. Some sun-
cured grass. No ground Q. except 1 Trin.
pallidip. seen and lost. No Botettis
in Covillea.

Parabacillus, 1 swept from grass. 1791

Pocilotettix sang., 1 in unidentified bush.

Hesperotettix fus in a tall soft ephedra-like shrub.

Mel. andrus, a few in a variety of bushes.

Tucana cor., 1 juv. swept from Couler ^{adults & juv.}

Ernopyga albol., 1 swept from the same bush in which Hesperotettix was found.

Utah. 12 + 1861 = 1873.

Utter in. 3 + 803 = 806.

1957. 192 2 miles S. of Congress Junction, Yavapai Co., Arizona. Elev. (an.) 2950 feet. VIII. 26, 1957. (R.)

Many yellow-flowered low composites, bunch grass, acacia, tall soft ephedra-like shrubs, Fremont weed and low surface mats of annuals in bloom.

Syrbilla fusco-irritata, a few. 1 taken, very active, when pursued flying into impenetrable acacia.

Polioptila t. pumila, local on bare ground.

Citroreus, 1 juv. ~~not found~~.

1951.192 (cont.) Merot. l. latimictus, local on
Train. red. legged. 1 on roadway, 1 other
lost. Parasynalca, local, in grass.
Mel. audens? numer. juvs., few adults,
in various bushes.

Cycloptilum, 1 swept.

Uths. 22 + 1673 = 1895.

Uthens. 11 + 806 = 817.

1951.193 3 miles N. of Yarnall, Weaver
Mts., Yavapai Co., Arizona. Elev. (ch.) 4600 ft.
VIII. 26. 1951. (R.)

Mountain valley conditions. Much bare
gravelly soil. Core largely holly oak
scrub about 6-10 feet high, some manzanita,
and much brush grass, both tall and low.
Some woods along roadside + in drains.

Parasynalca, app. numerous, small sizes swept from
Andellanus, a large female, on ground, all sizes.

Amphitomus, 1 ♀ on p. between grass tufts.

Merivisa texana, 1 taken, all seen, flying
into heavy brush.

Aganostetha, 1 taken on bare ground.

Onozor carinata, local, few taken, on
relatively bare ground.

Melan. dup. 1 taken in heavy weeds.

" pridens locally numerous, but in

varied habitats,
Mel. diff. 1 taken in heavy wood, all
sun

Orth. 32 + 1195 = 1927.

Other ins. 4 + 817 = 821.

1951. 194 Peeples Valley, Weaver Mts.,
9 miles N. of Yarnell, Yavapai Co.,
Arizona. Elev. (ch. + an.) 4400 feet.
VIII. 26. 1951. (R.)

Tall grass, sun flowers and other weeds,
some Mormon "juniper", tall + low bunch
grass, etc.

Parabacillus, 1 swept.

Syphula fusco-vittata 1 ♂, all sun, in
low cover.

Amphitornus locally numerous, usually
in fr.

Agenotellus, local, on ground.

Hadrastellus 1 ♂, all sun, on ground.

Mesopentellus, few, in composites, but
not in variety.

Melan. arilus? not common.

Orth. 19 + 1927 = 1946.

Other ins. 23 + 821 = 844.

1951. 195 2 miles S.E. of Morrifton, Maricopa
Co., Arizona. Elev. (am.), 1825 feet. VIII. 27, 1951.

(R.) [Downcast-spitting rain.]

Covillea, tall ephedra-like plant, pale verde,
short grass and low shrubs.

Boottia, 1 swept from Covillea, all seen.

Rhinotettix, 1 swept from Covillea, 1 lost.

Stagnomantis ad. ♀ swept from Covillea.

Melanoplus sp. 1 in very low shrub. Only
adult of genus seen.

Utch. 5 + 1946 = 1951.

Utter no. 2 + 844 = 846.

1951. 196 1 mile E. of Pleasant Well, Maricopa
Co., Arizona. Elev. approx. 1475 feet. VIII. 30,
1951. (R.)

Rain washed gravelly silt with scattered
Covillea (no Q. in them), a few pale verde, rabbit
weed and other low plants, almost entirely along
the shallow washes.

July Q: Paraburillus swept along the washes,
and a few Alpina in that pass.

Utch. 4 + 1951 = 1955

Utter no. 1 + 846 = 847

1951.197 1 mile S.E. of Apache Junction,
Pinal Co., Arizona. Elev. approx. 1500
feet. VIII.30, 1951. (R.)

Nearly flat silt plain. Some Covillea
(not in it), a little rabbit weed and a
low open shrub stand. All badly washed.

Soil C.: Parabacillus ^{juv.} tript.

Melan. sp. ? juv. in low thurbergy.

Neurotettix, 1 tript from rabbit weed.

Orth. 8 + 1955 = 1963.

Ather ins. 3 + 847 = 850.

1951.198 2 miles W. of Comet Peak,
E. of Florence Junction, Pinal Co.,
Arizona. Elev. (an. - ch.), 2000 feet. VIII.30, 1951.
(R.)

gentle gravel slope with shallow washes.
Comm: Covillea, pale verde, salicaria, cholla
and various shrubs and grass patches.

Podotettix tript from Covillea, few.

Podocera tript from ground surface.

Tripidulus, 1 from thurbergy, all seen.

Melanopt. appar. decoloratus, juv. imm.,
adults few, in low thurbergy.

Eremopedes allof., 1 tript from low thurbergy.

Orth. 9 + 1963 = 1972.

Ather ins. 4 + 850 = 854.

1951.199 Oak Flat, Pinal Mts., between Superior and Miami (4 miles [road] N.E. of former), Pinal Co., Arizona. Elev. (ch. - an.), 4500 feet. VIII. 30, 1951. (R.)

Flat on east side of main ridge of Pinal Mt. Cover: scrub oak (chiefly), sotol, acacia, an ephedra-like tall grass shrub, bunch grass, short grass - weeds, on a silt and silt shringle base.

Croton leucocarpus.

Paropomala local in tall bunch grass.

Pedocetes ^{f. pygmaea}, 1 swept from ground.

Cordillanus, 1 on ground.

Melan. sp. juvs. - few.

Catch. 9 + 1972 = 1981.

Other ins. 0 + 854 = 854.

1951.200 Road divide 1 mile N.E. of Pinal Ranch, Pinal Co., Arizona. (Just E. of Pinal-Pinal Co. line.) Elev. (ch.) 4600 feet. VIII. 30, 1951. (R.)

Jumbled decomposed granite boulders, in knobs and flats, with plant cover sotol, dactyloctenium, scrub oak, the latter the chief element.

Q. little evident.

Lophula fuscus, 1 taken.

Melan. Texana 1 seen clearly - lost!!!

Catch. 1 + 1971 = 1982

Other ins. 1 + 854 = 855

1951.201 Flat N. of Copper Hill, 3.5 miles
N.E. of Globe, Gila Co., Arizona. Elev.
(approx) 6800 feet. VIII.30, 1951. (R.).

An acacia dotted landscape, with tall
and low brush pass, some oak pass, ~~and~~
low solid masses of *sericea* and various
other low shrubs. Ground as a whole
damp. Some areas of thistle.

Paratrillax swept from pass.

Pseudoceryle ditto, apparently both
in same environment.

Yerminia 1 swept from ground on low cone.

Syrhula fusco-vittata, local, very active,
flying considerable distances.

✓ Paropromala, a few in pass.

Amphitornis, in pass - on ground.

Chrysomitris locally numerous, in
var. plants other than rabbit weed -
even flying into acacia when pursued.

Agelaius numer. juvs. as well as adults.
on ground.

Cordillaria a few on lower spots.

Melan. sp. all juvs. in var. of *ocypet.*
leth.

$$51 + 1982 = 2033.$$

$$\text{Other ins. } 8 + 855 = 863.$$

1951. 202 9 miles NE. of Globe, Gila Co.,
Arizona. Elev. (am.) 4700 feet. VIII. 31, 1951.
(R.)

Shoulder of finely broken red shale with sur-
face mats of vegetation, some scrub oak and
acacia, a little rabbit weed. Numerous bare areas.
Syntherisma *fusca* *reticulata*, 1 ♂, all seen.
Psolocera *f. pusilla*, numerous, chiefly on bare areas.
Coryza *carinata*, a few juvs. - 1 adult, on
bare areas.
Trinotopis red-legged. Slightly on bare red areas,
color very similar to habitat.
Arctophila 1 juv. swept.

Host. 17 + 2033 = 2050.
Other no. 2 + 863 = 865.

1951. 203 South slope of Seven Mile bluffs,
15.5 miles NE. of Globe, Gila Co., Arizona.
Elev. approx. 5000 ft. VIII. 31, 1951. (R.)

Very sparse of short grass with scattered
acacia and rabbit weed, on silt and
stony silt. Nothing in rabbit weed.

Host 1 *Trin.* red-leg + 1 *blackflycatcher*.

Cordell. a few in one spot on ground.

Psolocera *f. pusilla*. Freq. on ground.

Coryza *carinata* 1 ad. + two juvs.

Trachyphachis *brunnea* type. Locally common.

Mesothrypa capita type. White on
ground, but near short grass.

Leptanura h. latirivatum - numerous
in particular areas on bare ground.

Orth. 26 + 2050 = 2076.

Orth. vis. 1 + 865 = 866.

1951. 204 Bench to N. of Seven Mile Mts.,
29 miles N.E. of Globe, Gila Co., Arizona.
Elev. approx. 6000 feet. VIII. 31, 1951. (R.)

Plains low rabbit weed and numerous
other weeds & some shrubs in area of open
juniper and piñon. Roadside ditch
of rank weeds.

Pseudomyz, 1 ♀, 1 ♂.

Phryganella 1 ♀, seen in cortex, on
ground. Detailed search revealed no more.

Melan. appar. decoloratus, abundant
and general.

Mel. diff., 1 in roadside weeds.

Protophila, abundant.

Oecanthus, 1 ♂, numerous.

Orth. 56 + 2076 = 2132

Orth. vis. 25 + 866 = 891.

1951.205 16 miles NE. of Salt River
Crossing, Globe - Show-Low Road, Gila
Co., Arizona Elev. (an.), 1900 feet. VIII.31.1951.
(R.)

Surface reddish silt and stony silt.
Cove: open forest of scrub holly oak, with
some juniper; ground cover very short grass
and low weed, much fine silt and stones.

Yucca, 1 running on ground.

Litanthea ditto

Parabrylles, 1 juv. swept.

Syphula fusco- vittata, sev. of taken, active.

Podisma t. pusilla, few on ground.

Mesothyreus plattii Dyar. - numerous &
several.

Trichost. red-leg, 1. sev. last, up.

Metanophus sp., very few, on low weed.

Neoprotelis, 1 juv. swept.

Cuth. 16 + 2132 = 2148.
Other ins. 4 + 891 = 895.

1951.206 5 miles NE. of Carrizo, Navajo
Co., Arizona. Elev. (an.) 5800 feet. VIII.31,
1951. (R.)

Very damp reddish ~~clay~~ silt with numerous
stones. Low shrubs and meadow cover with
a close ground cover.

Yuccinia numerous, running up ground,
frequently jumping.

Retantria, 1 seen + lost.

Syrphula, fusco-vittata, a few.

Cordill., a few on ground, 1 taken.

Utch. 9 + 2148 = 2157.

Utter vis. 2 + 895 = 897.

1951 207 1 mile N. of Forestdale,
Yavapai Co., Arizona. Elev. (an.) 6900 feet.
IX. 1. 1951. (R.)

Tall grass - woods in tall pine woods.
Early in day and very wet.

Nothing except several Oecanthus rust.

Utch. 3 + 2157 = 2160

Utter vis. 2 + 897 = 899

1951. 208 9 miles NW. of Forestdale,
Yavapai Co., Arizona. Elev. (an.) 6075
feet. IX. 1. 1951. (R.)

Open flat with juniper - tall pine on bordering
slope to east. Surface - silt stream with
small to medium-sized lava fragments.

Cover: short grass & low herbs.

Yuccinia Paraspidia 1 juv. rust.

Yuccinia not uncommon on ground.

Caritellus, several seen, 1 taken, unpinned.

Cordillaris, 1 seen & taken, all noticed.

Utch. 9 + 2160 = 2169.

Utter vis. 1 + 899 = 900.

1951. 209 Bench at rim of Cedar Canyon,
10 miles SW. of Fredsdale, Yavapai Co., Arizona.
Elev. (an.), 6000 feet. IX. 1, 1951. (R.)

Shut pass between scattered juniper on
reddish silt with many scattered stones.

Parabryllus 1 juv. swept.

Acanthaceae, swept from roadside tall yellow-
flowered composites.

Urost. 6 + 2169 = 2175

Uther us. 21 + 900 = 921

1951. 210 5 miles SW. of Carrizo, Gila Co.,
Arizona. Elev. (an.), 5625 feet. IX. 1, 1951.
(R.)

Reddish silt with shut pass between
scattered juniper and piñon.

1 juv. Condillarius - 1 juv. redipidid.

Urost. 2 + 2175 = 2177

Uther us. 0 + 921 = 921

1951. 211 11 miles SW. of Carrizo, Gila Co.,
Arizona. Elev. (an.), 5925 feet. IX. 1, 1951.
(R.)

Shut pass and woody glade-like opening
in scrub oak with a few scattered tall
pine. Also bunches of manzanita.

Parabryllus, 6 juv. swept.

Yuccinia, 1 compound.

Trimerotropis red-leg, a few.

Mesobrycon plattii-type, locally
numerous, not at all shy.

Helicostes brujamini, one very small
colony in a limited section of a sandy
old roadbed.

Melanoplus ^{leg. 5} leg. 5, 1 male, all which
could be located. 1 or 2 pairs leg. 5 on
ground.

Melanoplus blue legged sp (decoloratus?)
frequent, but not common.

Uca rupt.

Uth. 21 + 2177 = 2198.

Act. ins. 0 + 921 = 921.

1951. 212 Rim of Natanes Plateau,
9 miles (road) S. of ^{full} Gila River crossing,
Gila Co., Arizona. Elev. (an.) 6025 feet
ix. 1. 1951. (R.)

Blanca stand of relatively low rabbit
weed with little grass and small bare
areas of silt and stones.

Yuccinia 1 taken on ground

Stagnomantis lineata 1 ♀ rupt.

Pseudoceryle, 2 ♂ rupt.

Mammia vespa. 1 ♀, all seen,
flying vigorously, finally captured.

Chrysothrips 1 on ground, all seen.

1951. 212 (cont.)

Ageneotettix, a few on ground.

Aulocara illiotti, a few, one on roadway.

Psolossa delicatula, numerous, on the ground.

~~Step~~ Xanthippus corallipes - type, 1 tattered female flushed from ground - captured.

Phygadeuon, local, a few, 3♂, 1♀ taken, on ground among stones.

Melanoplus lachrymans locally numerous.

" parkardi, a single one seen - taken.

" other sp. 1♀ taken.

" blue legged (desultorius), a very few.

Desmettettix abundant and everywhere.

Crab. 81 + 2198 = 2279

Other ins. 3 + 921 = 924

1951. 213 West side of Seven Mile Mountains,

21 miles N.E. of Globe, Gila Co., Arizona.

Elev. (an.) 4350 feet. IX. 1, 1951. (R.)

gritty slope of short grass on silt, with many stones.

Yuccinia, 1 on ground.

Two aphidids, two on ground.

Mesothripsa plattii - type, 1 taken.

Herotomus h. latirostris, local,
two taken, very active.

Helicula rufa, about five seen, two
taken, in bare areas, very local.

Brachyotola 1 juv. taken, all seen.

Utth. 9 + 2279 = 2288.

Other ins. 0 + 924 = 924.

1907. 214 Cutter, 6 miles S.E. of Globe,
Gila Co., Arizona. Elev. (am.), 4100 feet.
IX. 2, 1907. (R.).

On silt with very low scattered mesquite
cover, some rabbit weed, with scattered
mesquite. Some bare silt.

Pseudoscorpion rapt.

Herotomus h. latirostris, one on bare silt.

Asperotettix, local, not freq., in rabbit weed.

Melanophus sp., few in tall roadside weed.

Utth. 10 + 2288 = 2298.

Other ins. 10 + 924 = 934.

1951. 215 N. slopes of Hayes Mts., 11 miles
S.E. of Globe, Gila Co., Arizona. Elev.
(am.), 4625 feet. IX. 2, 1951. (R.)

Slopes of silt and gravel with short grass,
acacia, yucca, rosin. Numerous small
areas of bare gravel and rather fine
scrub, reddish in color.

Pseudoceryle, ~~several~~ ^{one} swept.

Podiceps t. pusilla, very few, local.

Melospiza capita - type, few in passay area.

Heliantha rufa, very few, and extremely

local on bare areas. Frequently did not
jump and ^{sometimes} could be taken with hand,
at others jumped and could not be located.

Trachyrhynchus sp., a number of juvs. no
adults seen.

Catch. 13 + 2298 = 2311.

Utheries. 0 + 934 = 934.

1951. 216 8 miles E. of Coolidge Dam,
Graham Co., Arizona. Elev. (am.) 3300
feet. IX. 2, 1951. (R.)

Top of bench above reservoir. Silt filled
with gravel - stones.

Site C. seen Merturnus h. latirostris

Catch. 8 + 2311 = 2319.

Utheries. 6 + 934 = 940.

1951.217 1 mile W. of Caloa, ^{Upper} Gila
Valley, Graham Co., Arizona. Elev. (an.)
2900 feet. IX. 2. 1951. (R.)

Mesquite, acacia and Covillea on adobe
silt.

No C. taken were except from Covillea.

Rhabdometatus, 1 juv.

Musara covilleae, 1 juv.

No Portetia!

Utah. 2 + 2319 = 2321.

Utah inv. 1 + 940 = 941.

1951.218 9 miles S. of Safford, Graham
Co., Arizona. Elev. (an.) 3800 feet. IX, 2, 1951.
(R.)

Mesquite, acacia and Covillea, with
some rabbit weed and low dense ground
mats of greenish-white flowered shrubs.

No C. taken except that beaten
from Covillea.

Retantria, 2 juvs.

Rhabdometatus, 1 ad. ♀ and 3 juvs.

in 2 diff. instars.

Aclopiidae 1 ad. + 1 juv.

Musara covilleae 10. ♂ + 2 juvs. in

diff. instars. Utah. 11 + 2321 = 2332

Utah inv. 5 + 941 = 946

1951. 219 16 miles S. of Safford,
Graham Co., Arizona. Elev. (an.), 4625
feet. IX, 2, 1951. (R.)

Area of tall whitish fine curly bunch
grass with thin short grass and some
rabbit weed, in an area dotted with
cholla and a few mesquite.

Pseudoscorpion a number of ♂♂ - 1 ♀
swept from the grass above described.

✓ Paropromela relatively numerous in the area.

Trimerops. red-leg. on lower legs.

Hemiptera but 1 seen & taken.

Cerambycidae altif. 1 ♀ swept from tall
grass.

Cycloptilina 1 ♂ swept.

Utah. 24 + 2332 = 2356.

Other inv. 2 + 946 = 948.

1951. 220 West side of San Simon Valley,
4 miles W. of Bowie, Cochise Co., Arizona.
Elev. (an.), 3940 feet. IX, 3, 1951. (R.)

Roadside, much disturbed for
road material. Weedy.

Sole Utah. juv. Melanoplus.

Utah. 0 + 2356 = 2356.

Other inv. 11 + 948 = 959.

1951. 221 West side of San Simon Valley,
10 miles W. of Bowie, Cochise Co., Arizona
Elev. (an.), 4225 feet. 1x. 2. 1951. (R.)

Tall brush grass, rabbit weed, tumble
weed and various other weeds. A few
mesquite dotted over surface, also
yucca and a few dactyloctenium.

Parabrachyus, numerous in grass, females
less frequent than males.

Boopidion, females all immature, in
various stages, males largely adult.

In that grass and low weeds, dodging
with agility and ♂ crawling as well as
jumping.

Asphid 1 juv.

Trachybrachyus 1 juv., all new.

✓ Paroplistus, numer. in tall grass.

Brachyptera 1 in. instar preceding maturity,
endeavouring to hide in a bunch of
low mesquite.

Mequetatus, locally numerous in rabbit weed.

Melanophus decastratus, several, some
immature.

Phortalicus, a few, juvs. only.

Alexanthus, locally numerous, rupt.

Arts. $88 + 2356 = 2444$.

Other ins. $7 + 959 = 966$.

1951 222 1 mile N.E. of Willcox,
Cochise Co., Arizona. Elev. (an.) 4200 ft.
IX. 3. 1951. (R.)

Roadside, very tall brush pass, tumble
weed, etc.

Many juv. *O.*, few adults.

Pseudoceryle, 1 ♂ swept from brush pass.

✓ Paropromela, sw. from ditto.

Botrydium, 1 very small juv., all noticed.

Melanophus sp. 1 th. w. adult ♀ in low corner.

With. 5 + 2444 = 2449.

With. ins. 13 + 966 = 979.

1951. 223 Willcox Playa, 5 miles SW. of
Willcox, Cochise Co., Arizona. Elev.
(ch.) ~~4000~~³⁸⁰⁰ feet. IX. 3. 1951. (R.)

Corn largely salt grass and tall brush
pass. No *O.* except:

✓ Paropromela, numerous.

Lepia 1 ad. ♂ + other juv.

Phortulistes 1 juv.

With. 21 + 2449 = 2470.

With. ins. 3 + 979 = 982.

1951. 224 Sulphur Springs Valley, 6 miles
S. of Cochise, Cochise Co., Arizona. Elev.
(am.) 4225 feet. IX, 3, 1951. (R.)

Short grass on ^{whitish} gravelly silt among
groves of mesquite.

Most *D. immitis*, latter to adults
as about 20 to 1.

Pitaneutria 2 adults remaining on ground.

Parasitellus, 1 pupa.

Cordillanus, local, on ground.

Agonotetrax, a few.

Amblyura numerous, largely immatures,
few males, females wild and
shy.

Propeutor, juv. only.

Lophis, 1 juv.

Heterotoma h. latiminctum, a few on ground.

Trinacrus red. leg. a few, on bare ground.

Helicula, on a single bare mound.

Brachyotus, 1 juv. all seen.

Melanophus "regalis" 1 ♂, all seen.

" "dentatus" 1 ♀. " " adult.

Phostolus, juv. only, a few.

Count. 41 + 2470 = 2511.

Others vis. 5 + 882 = 887.

1951.225 Bowie, Cochise Co., Arizona.
Elev. (b.m.) 3750 feet. IX. 2, 1951. (R.)
All at light at night - all, however, on
ground.

Catch. 0 + 2511 = 2511
Other vis. 24 + 887 = 911.

1957.226 2 miles E. of Ullga, San Simon
Valley, Cochise Co., Arizona. Elev. (av.) 3600
feet. IX. 4, 1957. (R.)

Chiefly Covillea, some tall grass and weed
patches. No Bortettia. Everything swept
from Covillea.

Rhabdoceratites numerous, ♀♀ only.
Encarsia covilleae, 1 ad. + no. of juvs.

Catch. 14 + 2511 = 2525.

Other vis. 1 + 911 = 912.

1951.227 1 mile W. of Vanar, upper
eastern slopes of San Simon Valley,
Cochise Co., Arizona. Elev. (ch.) 3850 feet
IX. 4, 1951. (R.)

Everything taken from
Covillea entirely. No Bortettia.

Rhabdoceratites, num. ^{mostly} ad., nearly
all females.

Encarsia covilleae 1 ad., all seen.

Catch. 17 + 2525 = 2542

Other vis. 0 + 912 = 912.

1957. 228 Valle de los Playas, 5 miles E.
of Road 7th, Hidalgo Co., New Mexico.
Elev. (an.), 4275 feet. IX. 4, 1957. (R.)
Bunch grass on ^{the} otherwise dry mud plays.
Very little O:

✓ Paropomala very scarce, few taken all
time.

Cycloptilum, 1 inst.

Litanentria, 1 inst.

Orth. 4 + 2542 = 2546.

Other ins. 0 + 912 = 912.

1957. 229 4.5 miles W. of Lordsburg,
Hidalgo Co., New Mexico. Elev. (an.), 4500
feet. IX. 4, 1957. (R.)

Covillea on silt with gravel & stone

Fopping. Nothing in Cov. except 1

juv. Lucania covilliae. Trim. pallidip.

one on ground, another seen.

Orth. 2 + 2546 = 2548.

Other ins. 0 + 912 = 912.

1951. 230. 2 miles W. of Continental
Blonde, E. of Sagar, Grant Co., New
Mexico. Elev. (an.), 4520 feet. IX. 4. 1951.
(R.)

Short curly sun-cured bunch grass, also
taller bunch grass along shallow wash.

Pitandria 1 in short bunch grass.

Parabambusa 2 in same.

Hesperomera ? sp., 2♂ + 1♀ in tall
bunch grass.

✓ Paropomela, local in short bunch grass.

Aulocara in area of short bunch grass.

Leptis, a few juv. in short bunch grass.

Orth. 21 + 2548 = 2569.

Other ins. 4 + 912 = 916.

1951. 231 15 miles W. of Hennessey, Luna
Co., New Mexico. Elev. (an.), 4560 feet.
IX. 4. 1951. (R.)

Curly sun-cured bunch grass, low
mesquite and various weeds.

Parabambusa sp.

✓ Paropomela a few in bunch grass.

Mel. decultus ? sp.

Orth. 5 + 2569 = 2574.

Other ins. 0 + 916 = 916.

1951.232 5 miles E. of Hering, Luna
Co., New Mexico. Elev. (av.) 4500 feet.
IX. 5, 1951. (R.)

Sandy silt, in places with a little
gravel.

Nothing except Trin. pallidip. -
Herstromma h. latirivatum.

[Kuhn got 1 Trin. Texana.]

$$\text{Cuth. } 2 + 2574 = 2576.$$

$$\text{Other ins. } 4 + 916 = 920.$$

1951.233 10 miles E. of Hering, Luna
Co., New Mexico. Elev. (av.), 4050 feet.
IX. 5, 1951. (R.)

Covillea almost entirely.

Very few C. Cycloptilum 1 swept from Covillea.
Botettia very scarce in Covillea.

Atelopus (?) sp., 1 ♀ swept from ditto.

$$\text{Cuth. } 3 + 2576 = 2579.$$

$$\text{Other ins. } 0 + 920 = 920.$$

1951.234 16 miles E. of Cambray, Dona
Ana Co., New Mexico. Elev. (an.) 4175
feet. IX. 5, 1951. (R.)

Nearly pure sand in low dunes about
mesquite clumps with scattered yucca
and a few composites. Extensive areas
virtually bare sand.

No C. except a few Trin. Tuxana
on sand.

Wish. 2 + 2579 = 2581.

Other ins. 0 + 920 = 920.

1951.235 13 miles W. of Las Cruces,
Dona Ana Co., New Mexico. Elev.
(an.) 4300 feet. IX. 5, 1951. (R.)

Shallow reddish sandy silt on caliche.
Cover: short brush grass, low weeds and
mats + low stands of mesquite on low
dunes.

Sole C. a few Trin. Tuxana - very
local.

Wish. 1 + 2581 = 2582.

Other ins. 2 + 920 = 922.

1951. 236 Between Mesquite and Vado,
Homa Ana Co., New Mexico. Elev. (an.),
3600 feet. IX. 5, 1951. (R.)

Roadside vegetation, i.e. Atriplex, rabbit
weed, numerous other Rio Grande
bottom-land types, with small areas of
bare silt.

Very few C.

Cycloptilum, 1 swept.

Melanoplus ? audus, 1 ditto.

Orth. 2 + 2582 = 2584.

Ather ins. 5 + 922 = 927.

1951. 237 4 miles S.E. of Tornillo, El
Paso Co., Texas. Elevation (an.) 3200
ft. IX. 6, 1951. (R.)

Bush edges with Covillea, some rabbit
weed, mesquite + tall grasses, and near
roadway various weeds.

Rhabdoceratites, all juvs., latter numer.
in Covillea.

Pseudocumyia, a few in rabbit weed
and tall grasses.

Boottia infreq. in Covillea.

Cycloptilum several swept from same.

Orth. 25 + 2584 = 2609.

Ather ins. 31 + 927 = 958.

1951. 238 Road pass between Finlay
and Britman Mts., Hudspeth Co., Texas.
Elev. (an. - ch.) 4500 feet. IX. 6, 1951. (R.)

Low pass with corn chiefly
Covillea, black brush (Flourensia) and
mesquite.

Rhabdocmatites ^{juv.} ov., swept from Covillea.
Bostettia ads. + juv. in ditto.

Crematodes, a single ♀ swept from
Covillea.

[Goniaton taken here by Kohu.]

Orth. 21 + 2609 = 2630.

Asterics. 0 + 958 = 958.

1951. 239 4 miles W. of Sierra Blanca,
Hudspeth Co., Texas. Elev. (an.) 4500 ft.
IX, 6, 1951. (R.)

Open or scattered black brush (Flourensia)
and low mesquite on gravelly silt.

Also small lots of short sun-cured
brush grass.

Sole U. taken by J.R. 2 ♂ Eremianis
virgata in brush-pass. Wants all
in black brush. [Kohu took Goniaton.]

Orth. 2 + 2630 = 2632.

Asterics. 3 + 958 = 961.

1951.240 3 miles W. of Eagle Flat, Hud-
speth Co., Texas. Elev. (an. - ch.) 4275 feet.

IX, 7, 1951. (R.)

Com. Covillea, black brush, Koeleria,
mesquite, tall ^{brush} pass - low shrubs.

Pseudoceryle, 2 ♂♂ swept from short
brush pass.

Chrysomitris 1 ad. ♀ + 1 juv. ♀ swept from
tall brush pass.

Postettia not freq. in Covillea.

Campylorhynchus 1 ♂ swept from black
brush.

Orth. 11 + 2632 = 2643.

Orth. vis. 6 + 961 = 967.

1951.241 Allamore, Hudspeth Co., Texas.

Elev. (ch.) 4625 feet. IX, 7, 1951. (R.)

Dense tall woods, wild ground, tall
brush pass, mesquite, etc. in wood.

Mimus mac., frequent, very wild, 1 juv.

also taken. Usually in tall brush
pass.

Troglodytes lign. on ground.

Melanerpes formiciv. 1 ♀ in tall grass.

" leucis a few adults, numer. juvs.

Orth. 19 + 2643 = 2662.

Orth. vis. 10 + 967 = 977.

1951. 242 5 miles S. of Van Horn, Culberson Co., Texas. Elev. (am.) 3650 feet.

IX. 7, 1951. (R.)

Black brush in rather heavy stand, with areas of short scrubby brush pass & a little rabbit weed.

Trin. pallidip., 1 on bare ground.

Mel. subnervus type, 1 in black brush.

Campoplexanthus 1 ♀ in " "

Blischopygella juv ♂ & ♀. swept from black brush.

Cycloptilum, numerous in black brush.

leth. 15 + 2662 = 2677,

leth. vis. 4 + 977 = 981.

1951. 243 14 miles NW. of Valentine, Jeff Davis Co., Texas. Elev. (am.) 3900 feet.

IX. 7, 1951. (R.)

Roadside tall brush pass.

only 1, 1 ad. ♀ Blispheromera = 1 juv.

leth. 2 + 2677 = 2679.

leth. vis. 7 + 981 = 988

1951. 244 7 miles SE. of Valentine,
Jeff Davis Co., Texas. Elev. (av.) 4600
Sept. 14. 7. 1951. (R.)

Tall brush pass, low brush pass ^(partly new-growth) and
some low woods.

Parabairillius inletus relatively abundant
in Tall brush pass, but 1 ♀ found.

Mermiria maulipi: a few, 1 ♀ taken from
Tall brush pass.

M. mexicana in same environment,
flying long distances, particularly ♀♀.

✓ Syrtola fusco-vittata, 1 ♂ in low woods.
Cremnias vigata local in low brush
pass.

Boopis sp., new juv. nupt.

Melanophus labinus, a few.

Phoebastria, 1 juv. nupt.

Arthropus local in Tall pass, but 1 female
taken.

Conophalus virtually all immature, in
Tall brush pass.

Orth. 56 + 2679 = 2735

Orth. ins. 14 + 988 = 1002.

1951.245 6 miles W. of Marfa,
Presidio Co., Texas. Elev. (an.) 5000 feet.

IX.7.1951. (R.)

[Work stopped by heavy storm.]

Roadside pass.

Melanoplus sp. 1 specimen.

U.S. 1 + 2735 = 2736.

Other no. 1 + 1002 = 1003

1951.246. Intersection of U.S. 90 and U.S. 67
9 miles E. of Alpine, Brewster Co., Texas.

Elev. (an.), 4475 feet. IX.8.1951. (R.)

Tall pass, both brush and scrub stands,
short brush pass, var. meads.

Parabacillus, 1♂, 1♀, kept.

Pseudoceryle, no. ♂, 1♀ kept.

Heiphronina 2♂, 3♀, kept.

Heterantia, 1 ad. running on ground.

Mercuria mac., frequent, very few ♀♀,

flying strongly.

Alpina, not common, on ground.

Aelocara 1 ad. + 1 juv. all seen.

Trachyphakia brisa subsp. very few.

Campoplex anthus, very few in meads, none juv.

Phaenocarpa, chiefly immature.

Melanoplus th. w. sp. few.

" long-winged sp. ditto.

Cnecophalus tristis? 1 ad. ♂.

Aeschna varia, nupt.

Cycloptilum, a single in nupt.

leth. $53 + 2736 = 2789$.

later in. $19 + 1003 = 1022$.

1951. 247 4 miles W. of Marathon,
Brewster Co., Texas. Elev. (an.), 4100
feet. IX, 8, 1951. (R.)

Tall grass, black brush, grass (low and
usual brush type), mesquite

some yuccas var. other low plants.

Diaphoromera 2 ♂, 1 ♀, nupt.

Parabittus " " "

Pseudocorymba 1 ♂ nupt.

Syrphula auticornis 4 ♂.

Merminia varia 1 ♂.

Agenotetha 1 ♀ in low com.

Alpis varia.

Trachytrichia var., not numerous.

Campylacantha, mod. numbers.

Melanoplus labialis common

" long-wing. very few

1957-247 (cont.)

Phytolites 1 juv. taken.

Allochopetala
1 juv. mpt

Cremophanes thirtus 1 ♀ mpt.

Ucaetatus, common! mpt.

Uths. 45 + 2789 = 2834.

Uths. ins. 6 + 1022 = 1028.

1957-248 5 miles S. of Marathon,
Brewster Co., Texas. Elev. (an.)

3850 feet. 1 X. 8. 1957. (R.)

Mixed tall and low grass, some
black brush, a little Covillea, a few
mesquite, etc. Kochulinia, and
numerous other shrubs and annuals.

Alciapherona 2 juv. ♀ mpt.

Parabailus 1 juv. mpt.

Pseudoceryle, 2 ♂ mpt.

Bortettix a few in Covillea.

Campylacantha numerous, chiefly juv.

Neurostictus, a few.

Melanoplus labialis numerous.

Paraidemona 1 ♀ taken.

Phytolites 1 juv. mpt.

Allochopetala 1 ad. ♂, 3 ♀ 1 juv. mpt.

Acetasea 1 ♂, mpt.

Cremophanes thirtus, a few mpt.

(over)

Cyrtoptilum, a few swept.

Catch. $42 + 2834 = 2876$.

Catch. ins. $19 + 1028 = 1047$.

1951. 249 1 mile S. of Twin Mills
(Double Windmill), Brewster Co., Texas.
Elev. (an.), 2850 feet. IX. 8, 1957. (R.)

Tall grass, wilds, Covillea, low mesquite,

some very dry sun-cured composites, etc.

Chrysomela, ♂ + ♀, in fair numbers,

swept from var. plants.

Proctos, in fair numbers in Covillea.

Mermis marip: 1 ♀, others seen.

Melanops labium: 1 large ♀ ♂ taken.

" hook type, ♂, 1 ♀ taken.

Campoplex abundant, chiefly
adults.

Neotoma? occasional, always
in brush.

Paraidium ditto.

Agroctetix 1 ♀ swept.

Chistocera juv. imm. adults very
wild. [Ch. took 1 ad. ♂. capt.]

Chrysomela marip. ♂ ♀. swept.

Arctura, adults all ♀, juvs. also
taken.

1951. 249 (cont.)

Acantodes, numerous, swept.

Cycloptilum comum, swept.

1 with. $72 + 2876 = 2948$.

1 with. $3 + 1047 = 1050$.

1951. 250. "The Basin", Chisos Mts., Big Bend National Park, Brewster Co., Texas. Elev. (6. m.) 5500 feet. 1X. 9. 1951. (R.)

Small flats of sun-cured tall + low brush grass, with low mesquite, acacia, lechuguilla, a variety of cactus cacti, large agave, some serotina, etc. with grass-like stands or thickets of oak, piñon and juniper, all on the slopes or shoulders of the west draining canyon emerging through "the window." [Testing everywhere difficult.]

Parabasilus, 1 swept. 1 swept.

Pseudoceryle, ov. juv. swept.

Diapheromera 1 juv. swept.

Syblula ^{Arctocampa} frisco-vittata, few, 1 taken.

Mormonia Texana, local + few, partial to lechuguilla, btw. the leaves of which it seems to take refuge.

Aphis pseudoviridana, numerous, not shy.

Lepus, local, and not particularly

active until pursued.

Mesochorus plattii-type. local, usually
on more stony areas.

Mesochorus capito-type. few, 1 ♂, 2 ♀
taken.

Jaw. vilioid - ?? Crematodid - very small
was swept.

Melanoplus sp. w. 1 ♂. in bush.

Proctotridis, largely immatures

Agromotellix, 1 ♀ in tangle of vegetation.

Cyloptilum, 1 swept

Chrysanthus, 1 juv. swept
57 + 2948 = 3005.

Other ins. 6 + 1050 = 1056.

1951.251. Ridge east of ~~the~~ Basin and down
to east of Ridge, Chisos Mts., Big Bend
Nat. Park, Brewster Co., Texas. Elev. 5800-
5900 feet. IX, 9, 1951. (R.)

Conditions as 1951.250 except
larger areas of small stones and a
narrow wash.

Parabrachius 2 ♂♂, swept.

Mermiria texana 1 ♀ in dense growth.

Syrphobla fusco-vittata, 2 ♂, active in
grass clumps, flying considerable
distances.

1951.251 (cont.)

Opsia, relatively numerous, ^{about} infrequent on stony areas.

Eriteteris 1 ad. ♀ in same situation, numerous juvs. found.

Hippisus numerous, in tall grass areas.
Ligula, a few only.

Argia panduraria a number, few flying.

Melanophus th. w. 1 ♂ only seen - taken.

Phaenocarpa (?) 1 ad. ♀, 1 juv. ♀ taken.

Cyclopterus numerous, swept.

Uranotaenia a single juv. swept.

Orth. 51 + 3005 = 3056.

Other was. 6 + 1056 = 1062.

1951.252 3 miles NE. of Basin Headquarters, Chisos Mts., Big Bend Nat. Park, Brewster Co., Texas. Elev. (am.) 5200 feet. IX. 10, 1951. (R.)

Slopes and flats on north slope of mts., with sun-cured grass, dotted with

Fangles of low vol., juniper, piñon, ^{Quercus} ~~Quercus~~, ~~Yucca~~, agave, yuccas and numerous other shrubs.

Litanotus, 1 juv. on ground.

Pseudocorymbus, 1 ♀ swept.

Parabrevulus 1 ♂ swept.

Urena, numerous - active.

Mectruqua capito Type, several, on
bare p. but near sun-cured pass.

Platylactista 1, all new, on stony area.

Rhyssa, a number, long flying when
frightened, in early AM (P. 20 AM)
otherwise very torpid.

Cycloptilum, a few, swept.

With. $22 + 3056 = 3078$,

Other vis. $0 + 1062 = 1062$.

1951.253 10 miles N.E. of Basin, Chisos
Mts., Big Bend Nat. Park, Brewster Co.,
Texas. Elev. (am.), 3600 feet. IX. 10, 1951.

(R.)

Stony lower slopes, largely of broken stone;
plant cover sparse, yucca, low mesquite,
cacti, lechuguilla, curly sun-cured grass,
sphera. Chethrub and numerous other
species. Few O.

Pseudoceryle 1 ♂ + 1 juv. swept.

Parabasilus 1 swept.

Trimerotropis pallidip. 1 on bare area.

Mectruqua capito-Type - 1 all new.

Cycloptilum 1 swept.

With. $7 + 3078 = 3085$.

Other vis. $0 + 1062 = 1062$.

1951. 254 15 miles N.E. of Basin, Chisos
Mts., Big Bend National Park, Brewster
Co., Texas. Elev. (am.), 2750 feet. 1X. 10. 1951.
(R.)

~~Forest section of~~ Adjacent to the low bushes
flanking Tornillo Wash on the Chisos side.
Silt and sandstone mesa, with Covillea,
lechuguilla, sotillo, some agave, sun-cured
grass. Limited amount of fl.

Rhabdomastix 1 ad. - 1 juv. swept from Covillea.

Botettia, ads. - juvs. ditto.

Cycloptilum ^{1 juv.} ~~ditto~~ " "

Uranichus 1 juv. ditto.

Urch. 19 + ~~3100~~ 3085 = 3104.

Other ins. 0 + 1062 = 1062.

1951. 255 East side of main Tornillo Wash,
due E. of Rosillos Mts., Big Bend National Park,
Brewster Co., Texas. Elev. (am.), 2625 feet.
1X. 10. 1951. (R.)

Silt areas with ^{patches} ~~areas~~ of stone thistle fl. Com:

Covillea, cacti, Acacia, black brush, etc.

Botettia, swept from Covillea.

Cycloptilum ditto.

~~Texas~~ Taenipoda on ground (road surface in
one case) or in small groups in a variety of
plants.

Urch. 15 + 3104 = 3119.

Other ins. 1 + 1062 = 1063.

1951. 256 1 mile S. of Perimeter Gap,
Santiago Mts., Big Bend Nat. Park,
Brewster Co., Texas. Elev. (ch.) 2700
feet. IX. 10, 1951. [R.]

^{partly} Slope draining toward Miravalles Wash,
Corillea, some low rabbit weed and much
tan granular silt.

Bortettia, smp from Corillea.

Cycloptilum, a very few ditto.

Dichopetalum, 1 juv ditto.

Orth. 16 + 3119 = 3135.

Other no. 1 + 1063 = 1064.

1951. 257 1 mile N. of Perimeter
Gap, Santiago Mts., Brewster Co.,
Texas. Elev. (ch.) 2830 feet. IX. 10. 1951.
[R.]

Roadside Tall weeds - a dominant
one pro. solanaceae and other types,
in a damp spot.

Chlapheromera 1♂, 1♀, Tall weeds.

Pantocerosmyla, 1♂ smp.

Tamiope 1♀ in Tall weeds.

Chistocoma, prob. smp, 1 juv. in same.

Coryphocoma, smp. - general, but more
partial to certain
weeds.

1957. 257 (cont.)

~~Phaenotettix?~~
Phaenotettix, numerous, apparently non-
partial to the solanaceous-like weed.

Agrostotettix, 2 ♀, rupt.

Melanoplus hirsutus type. In the tallest
weeds, very active.

Hemiptera 1 ♀, rupt.

Durania 1 rupt.

Count. 43 + 3135 = 3178.

Station no. 7 + 1064 = 1071.

1957. 258 4 miles N. of Twin Mills

(North Windmill) [N. of Chalk Blaw],

Brewster Co., Texas. Elev. (ch. - sea),

2960 feet. IX, 10, 1957. (R.)

Roadside weed tangles in damp spot -
a little standing water.

Chistocerca raga 1 ♂, 2 ♀ (one funeral) and
juv. in their nests. Free flying
(adults) in tall weeds.

Campylorhiza numerosa in various
weeds.

Hemiptera rupt. 3 ♀♀, 1 juv.

Arthropoda rupt. 3 adults.

Count. 23 + 3178 = 3201.

Station no. 3 + 1071 = 1074.

1951. 259 5 miles N.E. of Maravillas
Gap (^{later on} 22 miles S. of Marathon), Brewster
Co., Texas. Elev. (bar. - ch.), 3500 feet.

IX, 10, 1951. (R.)

Roadside tall weeds with a few
Covillea, num. mesquite, etc.

Stagmomantis limbata 1 ♀ in heavy
tangle.

Blattella germanica 3 on Terminal of tall
weeds.

Boettcheria, a few in Covillea.

Opis, 1 on ground.

Melanoplus leuc. typus, 1 Taken in tall
weeds.

Amelanypha incolita, on Terminal
of tall weeds, flew readily and
for long distances.

Orth. 14 + 3201 = 3215.

Other ins. 7 + 1074 = 1081.

1951. 260 14 miles S. of Marathon, Brewster
Co., Texas. Elev. (am.), 3850 feet. IX. 10,
1957. (R.)

In small roadside drain, with ^{very} tall rank
weeds, catclaw, Kochulinia, some trunkle
weed, etc.

Mermiria maul. 1 ♂.

Upeia 1 ♂ on ground.

Melanoplus rh. w. 1 ♂, 2 ♀.

Amelanypha insulata 1 ♂, flying across
road.

Hicropetala, in tall weeds. ^{1 juv.} 3 ♀♀ 1 juv.

Ceanothus no. juv. - nupt.

Cyloptilum, nupt from weed.

leth. 17 + 3215 = 3232.

Uther ins. 6 + 1081 = 1087.

1951. 261 13 miles E. of Marathon,
Brewster Co., Texas. Elev. (am.) 4260
feet. IX. 11, 1957. (R.)

Very ^{high} stony shrub ~~with~~ and
tall weeds and coarse grass in roadside
drain.

Pseudocermyx, males abundant, a few
females taken, in a variety of
vegetation.

Parabellus, a single female swept.
Heteromera 2 ♂, 1 ad. ♀, 1 juv. ♀
swept.

Merula neomexicana common and
flying vigorously.

M. mandib. a single female taken.

Repus 1 ♀ on ground.

Campylorhynchus, a few.

Tropidoleptus 1 ♂, all seen.

Desmodillia, a few, very local, but
not in rabbit wood as far as I could
note.

Phoebastria, several swept.

Melanophes long-winged, 1 swept.

" 2 th. w. species taken.

Chloropitula, 2 ♂ ♂ swept, ♀ both lacking
one leg.

Coryphalbus stricklandi, 1 ♂, 1 ♀ swept.

Theridion, a few swept.

Utth. 69 + 3232 = 3301.

Utth. ins. 8 + 1087 = 1095.

1951. 262 1 mile E. of Longfellow,
Pecos Co., Texas. Elev. (approx.) 3175 feet.
IX. 11. 1951. (R.).

Areas of tall sun-cured grass, or other
tall grass still green, much short
curly sun-cured grass, low mesquite,
a few Covillea, and areas of bare
whitish gravelly tilt.

Blispheronura numerous in tall grass.
Pseudosermyla " " generally in
tall grass.

Paratrillax 1 mpt.

Boottellia, a few in Covillea.

Mermiria texana a very few, 1 taken.

" maulii. 1 taken.

" monax. more numerous.

Syrphula acuticornis, no. new? 1 taken.

Chrysanthosterna 1 ♂ taken.

Cyba, ~~numerous~~ capitate-like, 1 on p.
numerous on ground.

Phoctalidia juv. numer., few adults.

Phaenotettix? 1 ♀ taken.

Melanoplus th. w. a few, both new taken.

Despondettia, a few.

Melanoplus diff. a few, 1 taken.

Elchopetala 1 juv. ♀ mpt.

Walden
Hollis

Arctostaphylos, 2 pp. msp.

Amblygonia huasteca (?) 1 ♀ msp.

Conocarpus 1 ♂ msp.

Utth. 51 + 3301 = 3352.

Other no. 0 + 1095 = 1095.

1951. 263 9 miles W. of Hryden,
Terrell Co., Texas. El. (an.), 2025
feet. IX. 11. 1951. (R.)

Whitish stony surface of Fortin
Plateau.

Scattered tall grass, mesquite,
scattered strands of Covillea.

Boottia in Covillea, few.

Alpeia, few on ground.

Melanophus E. w. sp. 1 in tall grass.

Utth. 11 + 3352 = 3363.

Other no. 0 + 1095 = 1095

1951. 264 3 miles S.E. of Langtry,
Val Verde Co., Texas. El. (an.)

chuk! IX. 11. 1951. (R.)

Mesquite, a few Covillea + various
other shrubs.

1957. 264 (cont.)

Bortettia 1 juv. in Coullia.

Syrphula auctrii, 1 ♀ taken

Uts. 2 + 3363 = 3365.

Uts. in. 0 + 1095 = 1095.

1957. 265 7.5 miles E. of Comstock,
Val Verde Co., Texas. Elev. (ch.) 1100 feet.

1X. 11. 1957. (R.)

Low mesquite, brush with broad bean,
yucca, Daphnion, ^{mass pollen} low brush pass on
broken limestone. [Wind very high -
almost impossible to work.]

Bliphonema 2 juvs., inst.

Bortettia, 1 juv. in Coullia.

Syrphula anticornis 1 ♂, 1 juv. ♀.

Proclonus Tex. 1 ♀ on ground.

Platylactista 1 ♀ on bare limestone.

Uts. 7 + 3365 = 3372.

Uts. in. 0 + 1095 = 1095.

1957. 266 21 miles N. of Del Rio, Val Verde
Co., Texas. Elev. approx. 1600 feet. 1X. 12.

1957. (R.)

Roadside fall, largely over-cured,
pass, low mesquite. Other thorny bushes
with an occasional yucca.

1957. 267 (cont.)

Haichopetala 1 spec only.

Quercus sp. swept.

Cycloptilum sp. swept

Wet. 24 + 3398 = 3422.

Wet. ins. 4 + 1100 = 1104

1957. 268 Carter Valley, Edwards Co.,
Texas. Elev. (am.) 2006 feet. IX. 12, 1957.
(R.)

Broken limestone surface with short grass
corn, few patches of tall grass, under
groves of low oak. Most adjacent areas
completely grazed off. Very dry.

Syrphula 1 spec., all seen.

Mesochorus 1 taken

Cycloptilum normal swept.

Wet. 5 + 3422 = 3427.

Wet. ins. 0 + 1104 = 1104

1957. 269 Mid-way between Carter Valley
and Rockspings (17 miles from each),
Edwards Co., Texas. Elev. (am.) 2400
feet. IX. 12, 1957. (R.)

Very dry short grass and low, relatively
dry, shrubs on low limestone.

Syrphula acuticornis 2♂, 1♀, in vesp.

Mesochorus, several, on lower areas

Cycloptilum, several swept.

Orth. 7 + 3427 = 3434.

Other ins. 0 + 1104 = 1104.

1957. 270 13 miles W. of Rocksprings.

Edwards Co., Texas. Elev. (am.), 2400
feet. IX, 12, 1957. (R.)

Roadside low curby pass and tall
brush pass on broken limestone surface.
Very dry.

Mesochorus a few swept from ground.

Syrphula 1 juv. only.

Orth. 5 + 3434 = 3439.

Other ins. 0 + 1104 = 1104

1957. 271 23 miles SW. of Junction,

Edwards Co., Texas. Elev. (am.), 2200
feet. IX, 12, 1957. (R.)

Short low-curved pass on broken limestone.

Syrphula 1♂, all seen.

Mesochorus, sev.

Orth. 3 + 3439 = 3442.

Other ins. 1 + 1104 = 1105.

1951.272 6 miles N. of Junction, Kinney
Co., Texas. Elev. (am.), 1900 feet.

IX.13, 1957. (R.)

Roadside tall grass and weeds. [Weather
blowing - overcast, cold with rain spots.]

Orth. 5 + 3442 = 3447.

Other ins. 7 + 1105 = 1112.

1951.273 = 3 miles N. of Menard, Menard
Co., Texas. Elev. (am.), 2250 feet. IX.13, 1957.
(R.)

Roadside grass and bare areas.

[Wet, cold and overcast.]

Blipheromera 1 juv. ♀ swept.

Microctonus sp. juv. swept.

Campoplex 1 ad. ♂.

Acantus 1 ♂ swept.

Orth. 5 + 3447 = 3452.

Other ins. 11 + 1112 = 1123.

1951.274 8 miles S. of Eden, Comanche Co.,
Texas. Elev. (am.), 2325 feet. IX.13, 1957. (R.)

Roadside grass (short chiefly), weeds and
bare broken limestone.

Pseudoceryle 5 ♂ and 1 juv. ♀ swept
from grass.

Microctonus juv. only, swept from ground surface.

Syrphula adrian. 1♂, 1♀ taken.

Aganostella 1♂, 1♀ taken, all seen.

Chrysanthus 2♂, 1 juv.

Melanoplus ^{N.S.} sp. wood brown. 1♂ kept.

" " ^{N.S.} contracted color. 1♀ ditto.

Conophorus 1♂ kept.

Misgonyx? 1 juv. kept.

Utah. 21 + 3452 = 3473.

Utah ins. 40 + 1123 = 1163.

1951. 275 11 miles N. of Eden, Comcho
Co., Texas. Elev. (am. J., 1950 feet
1x, 13, 1957. (R.)

Typical com. for open prairie of this
area - short and long grass, low mesquite,
cacti, etc., with thin spots of limestone
fragments.

[Very little ♀. Not clear, still the net
was on very cold - considerable wind.]

Syrphula, 1♂ taken.

Mesochorus juv. only, kept.

Asphix 1 juv. on ground.

Cyrtopogon, 1 kept.

Utah. 8 + 3473 = 3481.

Utah ins. 6 + 1163 = 1169.

1951. 276 Hatchel, 8 miles N. of Ballinger,
Runnels Co., Texas. Elev. (an.), 1725 feet.
IX, 13, 1957. (R.)

Tall coarse grass, low mesquite, various
weeds on damp ground. [Florby
cleaning.]

Syrphula admiris - antivornis, numerous
and actris - former more numerous.

Agromyza, 2 males, all seen.

Alpina 2♂, 1♀.

Hippiscus supercus 2♀♀ taken, a few
others seen.

Conocéphalus Conocéphalus tritus 1♀,
mpt.

Neocnecophalus 1♀ in tall grass.

Ulae mpt.

pygmaea, on ground.

Ulae. 25 + 3481 = 3506.

Ulae ins. 7 + 1169 = 1176.

1951. 277 3 miles N. of Winters, Runnels
Co., Texas. Elev. (an.), 1460 feet.

IX, 13, 1957. (R.)

Low yucca, tall brush pass, low grass, numerous
composites, areas of damp soil.

[Cleaning.]

Syrphula admir. numerous.

Melanoplus foderus-Fyfe, a few, two females taken, strong flying.

Cratichneumon, 18 swept.

Ucaerithus 1 swept.

Orth. 8 + 3506 = 3514.

Ucaerithus 8 + 1176 = 1184.

1951. 278 State Roadside Park 12 miles
S. of Abilene, Taylor Co., Texas. Elev. (approx),
2000 feet. IX, 13, 1951. (R.)

In moist-high thin oak scrub, yucca,
cot claw and grass under scattered
junipers, at the base of low hills. Some
areas of virtually bare ground.

Syrphula aeneicornis locally common in Taylor.

Mesochorus maulii. a few only.

Aspilota 1 juv. taken in grass.

Melanoplus th. w. wood brown sp. 1 ♀ - one juv.

In very dense tangles, most diff. to
trace.

Melanoplus th. w. gray species. 1 ♀
all seen, also in heavy tangle.

[Chalcid sp. juv. several.

large binote 1 seen, chased
into juniper high up and finally

1957. 278 (cont.)

made a very long flight and could not
be named.

Orth. $21 + 3574 = 3535$,

Other ins. $0 + 1184 = 1184$.

1957. 279 5 miles E. of Elmdale, Callahan
Co., Texas. Elev. (arb.) 1950 feet. ix. 14, 1957.
(R.)

Roadside tall weeds, grass - prairie.

Syrphid adon. a few. ^{very fine ♂.}

Agenotettix 1 taken.

Melanoplus f. r. 1 taken.

Conosphaerus frictus 1 ♂ 1 ♀ taken.

Orth. $6 + 3535 = 3541$.

Other ins. $16 + 1184 = 1200$.

1957. 280 3 miles E. of Putnam, Callahan
Co., Texas. Elev. (arb.), 1860 feet. ix. 14,
1957. (R.)

bluish sun-cured grass, tall prairie
weeds and areas of dry packed silt.

Pseudosumyle 2 ♂, 1 juv. ♀ swept.

Mesochorus mae. 1 ♂ taken.

Syrphid adon. common.

" ventriosus 1 ♂ taken.

Mesochorus mae. swept from ground
Agrocyba mae. swept from ground, 1 taken.

Nadestetteria trifasciata, 2 ♀♀ taken,
all seen.

Campoplexanthus 1 ♀ 1 juv. all taken.

Nephesthetes pumilus 1 ♀ taken, all seen.

Melanogaster sp. w. 1 ♂ taken.

Campoplex stratus 1 ♂ taken except

larva. 20 + 3541 = 3561.

Utters ins. 9 + 1200 = 1209.

1951. 281 4 miles E. of Ranger, Eastland
Co., Texas. Elev. (approx.), 1250 feet. IX. 14,

1951. (R.)

Short pass and in low oak grove. Very
dry, cactuses dying all about. Nothing
seen except those taken.

Syrphula admir. 1 ♂, 1 ♀ taken.

Aganotellus a few on bare fr.

Campoplex and Hypochlora alba 1 single
male, all seen, taken by sweeping where
there was no white type.

Mesochorus num. juvs. on bare ground.

larva. 14 + 3561 = ~~3575~~ 3575.

Utters ins. 0 + 1209 = 1209

1951. 282. 9 miles E. of Ranger, Eastland
Co., Texas. Elev. approx. 1100 ft. 1X. 14. 1951.
(R.)

Tall sticky yellow flowered sun-flower like
weeds, tall grass, thin grass, blue ground,
etc. Very little C.

Syrphula ambicornis 1♂, 2♀ taken.

" admirabilis 1♀ taken.

Melanophus lucorum 1♂, 1♀ taken

Campylacantha 1♂, 1♀ juv. taken, all
clearly recognized.

Sudderia 1♂ (both could be lucorum)
misp.

Conoclyptus stratus 1♀ misp.

West. 10 + 3575 = 3585.

Eastern. 5 + 1209 = 1214.

1951. 283 11 miles SW. of Weatherford,
Parker Co., Texas. Elev. approx. 1000
ft. 1X. 14. 1951. (R.)

Open oak woods with grass and
weeds, or a few bare spots. Very

little except masses of Syrphula.

admirabilis, which looks general.

Campylacantha 1 ad. ♀ 1 juv., all seen.

Melanoplus diff. 1 ♂ in Fall woods.

Cassiope Prunus 1 ♂ imp.

Orth. 16 + 3585 = 3601

Other ins. 0 + 1214 = 1214

1952. 1 Lake Sequoyah, 2 ms. NW. of Highlands.
Macon, N. C. Elev. 3680 feet. Aug. 13, 1952.
(R.)

Roadside cut over area with blackberry, wild
papa, Smilax, grass, etc., ^{deciduous} wood edge (largely
tulip-poplar, and outcrops of bare granitic
rock. Work very largely sweeping.

Nomotettix 1 juv. swept.

Chortophaga very small juv. swept.

Blissotettix carolina a few - several, more
evident on bare rock areas - 1 juv. also taken

Melanoplus walsbyi 1 ad. ♀ - wood edge.

" curvidens a few adult ♀♀,
numerous juv. several.

Melanoplus app. h. - w. 1 ♂ & 1 ♀ juv.

Along wood edge. No adults seen.

Amblyscapha rotundifolia 1 ♀ swept
from unchanged forest foliage.

Orth. 19

Other ins. 51

1952. 2 Along Cullasaja River, 3/4 m.
below Hazy Falls, NW. of Highlands, Macon
Co., N. C. Elev. 3240 feet. Aug. 13, 1952. (R.)
Edge of mixed deciduous forest with a
few white pine. Cover largely maple and

oak, some tulip.

Nomotettix sev. adults + 1 juv. swept from
mound roadside.

Melanoplus sp. - w. species with P. curv.

1 ad. ♂ + a few juvs. In limited area of
low growth at forest edge. App. longicornis

Scudderia 1 ♂ roadside.

Nesochinus juvs. ditto.

Orth. 15 + 19 = 34.

Orth. ins. 12 + 51 = 63.

1952. 3 Along Cullasaja River, 3 mi.

below Dry Falls, ab. 8 miles NW. of Highlands

Macon Co., N.C. Elev. 2800 feet. VIII. 13. 1952. (R.)

Cut on roadside tangle.

Melanoplus natchi 1 ♂, all seen.

Cnephallus juvs. (prosp. allardi) seen.

Orth. 5 + 34 = 39.

Orth. ins. 2 + 63 = 65.

1952. 4 Borders of Lake Ravenel at Highland

Biological Station, Highlands, Macon Co.,

N.C. Elev. 3900 ft.
Aug. 13, 1952

Along trails in lakeside forest of mixed
deciduous trees and conifers. Understory
heavy, tall rhododendrons in places,

1952.4 (cont.)

blackberry tangles in other. A few old tall chestnuts alive, numerous low saplings of same.

Sole C. 1 ad. ♀ Mel. natchi in a small sunny spot with blackberries.

leth. $1 + 39 = 40$.

leth. ins. $20 + 65 = 85$.

1952.5 Along Cullasaja River 1.5 miles N. of Highlands, Macon Co., N. C. Aug. 14, 1952. Elev. 3720 feet. (R.) very wet.

Roadside edge of ~~tuba~~ hemlock and mixed deciduous forest.

Nothing adult exc. 1 ♂ Melanophus fem-rubrum. Juv. of same, luridus - of the same sp. w. species as taken yesterday. Nomophila - Tettigidea both repr. by juvs.

leth. $11 + 40 = 51$.

leth. ins. $18 + 85 = 103$.

1952.6 Near Upper Ravenel Lake, 4.5 ms. NE. of Highlands, Macon Co., N. Car. Elev. (am.) 4150 feet. Aug. 14, 1952. (R.)

Cut-over oak scrub, with sassafras, bracken, Smilax - olden rod, also forest

edge (mixed decid.) and wood road sides.

Titlignidea 1 ad. ^{1 juv.} empt.

Chloromorpha 1 ♂, 1 ♀, taken separately.

Chlorobis canop. 1 ♂ in tangle - no more could be located.

Asphidia sp. 1 juv. empt.

Mel. walshi 1 ♀ near blackberry tangle. 1 ♂ seen & lost.

Mel. th. ev. (prob. lyricornis). A few adults [3 ♂, 1 ♀] some juvs. but not numerous.

Mel. lucidus ? juvs only.

Sudderia sp. 1 ♂, empt. juvs. of juvs seen but not taken.

Amblycorypha rotundifolia 2 ad. ♂, empt.

Sonocorypha 1 juv. empt.

$$\text{Total } 24 + 51 = 75$$

$$\text{Other inv. } 15 + 103 = 118$$

1952. 7 Horse Cove, 4 ms. E. of Highlands
Bladen Co., N.C. Elev. 2940 feet. Aug.

15. 1952. (R.)

In open, cut-over mixed hardwood and pine woods, with open spots and adjacent fields. Much intrusive weedy growth.

1952.7 (cont.)

Nomotettix, a few in drier, more open spots.

Tettigidea sp. juv. 1 mpt.

Arphia juv. 1 mpt.

Cnecophanes brivip. 1 ♀ in ^{tall} grass.

Uchulium vulgare 1 juv. ditto.

Uchulium vulgare + juv. mpt. = 83

Uther vis. 15 + 118 = 133.

1952.8 Base of Little Bear Mountain, 3/4 m. N. of Highlands, Macon Co., N.C. Elev. 3900 feet.

Aug. 15, 1952. (R.)

Edge of forest area, decid. - pine, with patches of sunny clearing.

Cryptorhynchus, 3 in decaying log, ^{prob.} apparently an old chestnut? All seen after considerable work.

Mel. th.w. species. 1 ♀ forest edge.

Uther 4 + 83 = 87.

Uther vis. 2 + 133 = 135

1952.9 Along U.S. 64, 3/4 m. above Short Off

Church, 3.5 miles ^{N.W.} from Highlands,

Macon Co., N.C. Elev. 4000 feet. Aug. 15, 1952.

(R.)

A dry sphagnum bog and old field
poron with various grasses and tall

woods, and largely carpeted with wild
strawberry, scattered planted pines -
Bordering woods pine and mixed
deciduous.

Homotellus a few, swept.

Cephalella pellid. 1 ♀ in old field.

Cenocrotopus indider 1 ad. & imm. juv.
in old field.

Chloraltis crispata 1 ♀ in old field.

Mel. lucidus 1 ad. ♂. ditto

" funer-rubrum 1 ad. ♂. 1 ad. ♀. juv.
ditto.

Mel. tribulus local but more general
than following - in old field, but
usually near wood edge. 3 ♂,

Mel. decoratus 1 ♂. colony in old field.
^{4 ♀.} ^{Friday took a number.}

1 both & ad. ♂ and 4 ad. ♀. Friday
took a number.

* Ambycorypha rot. 1 ♀. swept.

Suddia furcata 1 ♂ in old field.

" curvicauda 1 ♂ " "

" fasciata 1 ♀ flushed in
old field, alighted in pine.

Aschelinus 1 juv. swept.

Nemobius fasc. 1 juv. swept

1952.9 (cont.)

Orth. $38 + 87 = 125$.

Other ins. $2 + 135 = 137$.

1952.10 Lake Fairfield, 2 ms. E. of Cashiers,
Jackson Co., N.C. Elev. (an.) 3150 feet. VIII.16. 1952.
(R.)

Roadside weedy growth & oak scrub along
pruned mixed deciduous woods. No *C.*
except *Tetrigids* () and
juv. *Chortophaga*.

Orth. $2 + 125 = 127$.

Other ins. $14 + 137 = 151$.

1952.11 3 ms. E. of Cashiers, Jackson Co.,
N.C. Elev (an.) 3200 feet. VIII.16. 1952.
(R.)

Pockets of low corn along border of heavy
woodland (mixed decid. - pine), with
hick, wild strawberry, blackberry & var.
other low plants and shrubs.

Cyph. pelidna a few adults (σ & ϕ) scattered.

Cyphina 1 juv.

Mel. lucidus a few adults & juvs.

Fritulus 1 ad. σ & num. juvs. Local,
partic. near wild strawberry.

Atlantius mount 1 σ . Next few found -
no more seen.

Conoclypeus hesigerianus 1 ad. ♀.

Neurod. giss. - a few.

Orth. 25 + 127 = 152.

Other ins. 7 + 151 = 158.

1952.12 Betw. Ashers and Cowee Gap,

1 m. N. of former, Jackson Co., N.C. Elev.

(alt.) 3025 feet. VIII.16. 1952. (R.)

Pickets along roadside, some cut sphagnum
area with Habenaria.

Homotettix no. giss. rupt. 1 ad. ♂ ^{Alphix xanth.}

Tettigidea 1 ♂ 1 ♀. rupt. 1 juv. ♂

Cephusella psid. 1 ad. ♀ near sphagnum.

Melanoplus tender 1 ♀ on dry roadside.

" tribulus 2 juv ♂♂.

Suddena 1 ♂ in tall weeds.

Oreanthus latip. 3 ♀♀ rupt.

Orth. 14 + 152 = 166

Other ins. 9 + 151 = 160

1952.13 E. side of Cowee Gap,

Jackson Co., N.C. Elev. 4150 ft. (alt.)

VIII.16. 1952. (R.)

Roadside of mixed decid. & pine
woodland. little O.

1952.13 (cont.)

Tettigidea no. juvs / rupt.
Amelgana ret. 1 ad ♂. rupt
lith. 3 + 166 = 169.
lith. 5 + 160 = 165.

1952.14 Slopes along Cullasaja River, about
1.5 miles below Cullasaja Falls, Macon Co.,
N. C. Elev. (app.) 2100 feet. VIII.16.1952. (R.)

Road margin in gorge on one side, steep
slope on other. Moist edge (hardwoods).

Tettigidea no. juvs. rupt.

Mel. luridus 1 ♀.

" celatus 2 ♂, 1 juv. ♀. - very local, all seen
taken

Chortoph. juv.

Conocephalus juv. in mud.

Neconocephalus 1 juv. rupt in mud

Oreanthus lat. 1 ♀ 2 juvs. in mud.

Phylleristis 1 ♀ rupt.

lith. 15 + 169 = 184.

lith. 0 + 165 = 165.

1952.15 Short Creek, Cullasaja River,
ab. 8 miles NW. of Highlands, Macon Co.,
N. C. Elev. 2000 ft. (ch.) VIII.16.1952. (R.)

Cut on roadside - very little.

Monotettix ✓ 1 ad.
Tettigidea 3 juvs.
Menenius 1 juv.

Uth. 5 + 184 = 189.

Uth. ins. 3 + 165 = 168.

1952. 16 1/4 m. N. of Sealy, Macon Co.,
N. C. Elev. (ch.) 35-50 feet. Aug. 17, 1952.
(R.).

Roadside scrub, partly cut out, along
edge of hardwood forest. Much tulip,
rhododendron, sassafras, etc.

Md. curvipes 1 ♀ juv.

Erithia 1 juv.

Tendonea 1 ♀.

Sept. Cuneiph. bre. 1 ♂ 1 juv.

Uth. 6 + 189 = 195.

Uth. ins. 5 + 168 = 173.

1952.17 Salt Rock Gap, 1.5 m. W.E. of Sealy,
Macon Co., N. C. Elev. 3850 feet. (an.)

VIII. 17, 1952. (R.)

Border of cut-out hardwood forest, with
tangles of briars, blackberries, wild straw-
berry, etc. Very little O.

Chortophaga 1 juv.

Mel. trichus 1 ad. + 2 juv. males, all seen

Tendonea 1 ♀ in full growth.

Colth. 5 + 195 = 200.

Other ins. 1 + 173 = 174.

1952.18 "The Catfairs", 1.5 m. E. of Salt Rock
Gap (N. C. 106), Macon Co., N. C. Elev. 3750 feet
(chart). VIII. 17, 1952. (R.)

Pocket of roadside blackberry, briar,
low honey locust, etc., at overlook on low
country to S.E. slopes very precipitous.

Nomotettix 1 ad. nymph from ground.

Mel. luridus 1 ad. ♀ + sev. juv.

Cnecops. trivip. 1 ad. ♂ 1 juv.

Colth. 6 + 200 = 206.

Other ins. 11 + 174 = 185.

1952.19 Whiteside Cove, at S. base of
Whiteside Mtn., Jackson Co., North
Carolina. Elev. (d.). 2775 feet. VIII. 17. 1952.
(R.).

Same openings in hemlock, pine & mixed
deciduous woodland along head of
Norton Creek. Very little O.

Nomotettix } largely juv.
Tettigidea }
Arypha 1 very imm. juv.
Mel. tubulus 2 ad. ♂.

All O. seen.

With 11 + 206 = 217.

Other ins. 17 + 185 = 202.

1952.20 Same station as 1952.9 but
VIII. 18. 1952. Same elevation. (R.)

Work done entirely in old fields.

Nomotettix, a few, chiefly juv. except
Arypha sp. sev. juv.

Eumecurus juv. only in imm. instar

Chortophaga 1 ad. in roadway grasses

Pardalipennis 1 ad. in ground cover

Mel. ^{Hippinus} hesleri sev. juv.

Furcula rubra 1 ad. taken, numerous
juv. seen

1952. 20 (cont)

Melan. tribulus rather unusual in field
but mostly immature, not common.
3 ad. ♂, 2 ad. ♀ = 5 juvs. Taken
around some preference for wild
strawberry areas.

Surdaria 3 ♂♂ of 2 spp. Mostly swept
from tall weeds.

Urosal. 2 juvs. (app. ulysae)

Oecanthus 1 ♂, 3 ♀ swept.

Theraps a few juvs. - no adults seen

Pygmaea 1 ad. ♂ in field.

Urosal. 37 + 217 = 254.

Urosal. 13 + 202 = 215.

1952. 21 Along Big Creek, 1.5 m. S. of state
line, (Chattooga drainage), Rabun Co., Ga.

Elev. (av.) 2100 feet. VIII. 18, 1952. (R.)

from up old fields and wood edge (mixed
decid. + pine), with briars, blackberry,
wild strawberry, golden rod, etc.

Tettigidea 1 juv. swept.

Chloromorpha 1 ad. + 1 juv. all seen - in
grassy spot.

Arphia xanthoptera a number seen - 2 taken

Chistura ann. two juvs. 2 taken

Mel. lurida 1 ♀, all seen.

Cnecophus hew. 14 taken, all noticed.

Arth. 9 + 254 = 263.

Uther in 4 + 215 = 219.

1952. 21 Sassafras Gap, 4.5 miles S. of
Highlands, Macon Co., N. Car.

Elev. (ch.) 2820 feet. VIII. 18, 1952. (R.)

Roadside woods & grasses - no level areas
to walk. No O. seen except those taken.

Aophia xanthoptera. 1♂.

Leucanthus sp. 1♀ impt.

Arth. 2 + 263 = 265.

Uther in 0 + 219 = 219.

1952. 22 South Slope of Satulah Mtn.,

2 ms. S. of Highlands, Macon Co., N. C.

Elev. (ch. an.) 3250 feet. VIII. 18, 1952. (R.)

Roadside patches on very steep timbered
slopes. Almost no O.

Neotettix femoratus 1 adult.

Chortophaga hew. junos.

Arth. 3 + 265 = 268.

Uther in 5 + 219 = 224.

1952.23 Wolf Ridge, N. E. of Satulah Mtn.,
1 mi. SE. of Highlands, Macon Co., N. Car.
Elev. 3950 - 4120 feet (ch.) VIII. 19. 1952.
(R.)

Weather became dull and finally a thunder-
storm. Almost nothing stirring. At Summit
Rock (upper elev.) ^{considerable} exposures of massive
granitic rock, deeply cut and channelled
and potholes by weather erosion. Remains
of work along the sides of a woodland
road on a rocky bed.

Helicostema on small sandy area in
front road. Two seen - 1 taken.

Trimerotropis saxatilis - only on Summit
Rock on bare granitic surface, with patches
of a sphagnum type of ^{low} vegetation in the
depressions. 1 taken, another seen but
lost - all noticed. (H 120 ft.)

Amblycorypha rot. 1 swept along
sides of woodland road.

Orth. 3 + 268 = 271

Other no. 3 + 224 = 227

1952.24 W. side of Chattooga Ridge, E. of
N. Fork of Chattooga River (S.C. 28), Oconee
Co., So. Carolina. Elev. (am) 1350 feet.

VIII.20, 1952. (R.)

Border of heavy mixed deciduous and
pine woodland. Quite cut. Heavy rain
yesterday P.M.

Aspasia grisea. numerous.

Melanoplus walshii 1 ♂ in heavy tangle.

" similis 1 ♂ (rel. femoral)

except from low tangle.

Sudderin 2 ♀ species - in under-
growth.

Pterophylla 1 ♀ swept from under-
growth.

Concephalus br. a few in ground
com.

Ueth. 12 + 271 = 283.

Other ins. 17 + 227 = 244.

1952.25 SW. base of Stamp House Mtn.,
4 ms. NW. of Walhalla, Oconee Co.,
So. Carolina. Elev. (am.) 1050 feet.

VIII.20, 1952. (R.)

In open pine woods with vegetation
of ~~the~~ huckleberries, etc., and along edge

1952.25 (cont.)

of mixed hardwood and pine forest
Amblytropidia a few juvs. in ground
corn in open pine woods.

Pardaphora phoenic. 1 ♀ in same.

Spharagmus bolli 1 ♀

Mel. luridus 1 ♂ wood edge in ^{ground} trayles

" similis 1 juv. ♂ + sev. juvs. ditto.

Syrbula 1 juv. in open pine woods.

Chistocerca juv. sev. " " " "

Amblyscapha uhleri 1 ♂ 1 ♀ ditto.

Nesobryth. 2 juvs. ditto

Adontoxyphidium 1 ♂ 1 ♀ ditto. all seen.

Phyllerentis 1 ♀ unsp.

Oleanthus latip. 1 ♂ unsp.

Orth. 23 + 283 = 306.

Other ins. 6 + 244 = 250.

1952.26 Mountain Rest, Chattooga Ridge
near Taylor's Creek, Oconee Co., So. Carolina.

Elev. (an.) 1400 feet. VIII.20, 1952. (R.)

Edge + interior of pine, oak + hickory
woods. Much cut over. Total 1 ~~to~~

Microcentrum minus caudal
larva.

Orth. 1 + 306 = 307

Other ins. 5 + 200 = 205

1952.27 South slope of Satulah Mtn, along
N.C. highway 20, 2 ms. S. of Highlands,
Macon Co., N. C. Elev. (am.) 3300 feet.
Aug. 20, 1952. (R.)

Very small ravines crossing road, and
along road edge. Borders slopes up and
down, very steep, rocky & unworkable.
found some blackberry, etc.

Nomotettix 1 ad. ^{+ 1 juv.} & nupt.

Metotettix " " " "

Chortophaga a few very small juvs.

Hippisus 1 ad. ♀ in low gr. cover.

Mel. luridus 1 ad. ♀ ditto.

Orth. 7 + 307 = 314.

Orthids 6 + 255 = ~~255~~ 261.

1952.28 One mile W. of Cashiers
(along U.S. 64), Jackson Co., N. Car.
Elev. (am.) 3450 feet. VIII. 21, 1952. (R.)

Wood edge of mixed deciduous
forest and also old field overgrown
with sumac and briars.

Nomotettix 1 ad. ♀ + 1 juv. nupt from
ground cover.

Spharagnum lilli 2 ♂♂ all seen,
in tangle low growth.

1952. 28 (cont.)

Mel. trichus 2 ♂ 1 ♀ in wood edge
com.

Mel. leucurus 1 juv. ♀.

Aphid. sp. 1 juv.

Pezomachus 1 ♂, 1 ♀ flying into taller
wedge com.

Nemobius carolinus 2 ♂ most

Orth. 13 + 314 = 327.

Utherius. 10 + 261 = 271.

1952. 29 1 m. N. of Cowie Gap, E. side
of Cowie Mts., Jackson Co., N. Carolina.

Elev. (ch.) 3800 feet. VIII. 21. 1952. (R.)

Edge of and beneath mixed deciduous
woods, chiefly tall oaks. Road edge
largely overgrown with briars, Hackberries
and sumac.

Dryin. oedip. 1 taken

Spharagmus bolli 1 ♀, all seen.

Mel. leucurus 1 ♀.

Orth. 3 + 327 = 330

Utherius. 11 + 271 = 282.

1952.30 Crooze Gap, Cowan Mts.,
Jackson Co. side, North Carolina.

Elev. (ch.) 4200 feet. Aug. 21, 1952. (R.)

Very steep and narrow strip of low
roadside corn, in part with buckle-
berries, slopes above and below with
white pine and mixed deciduous.

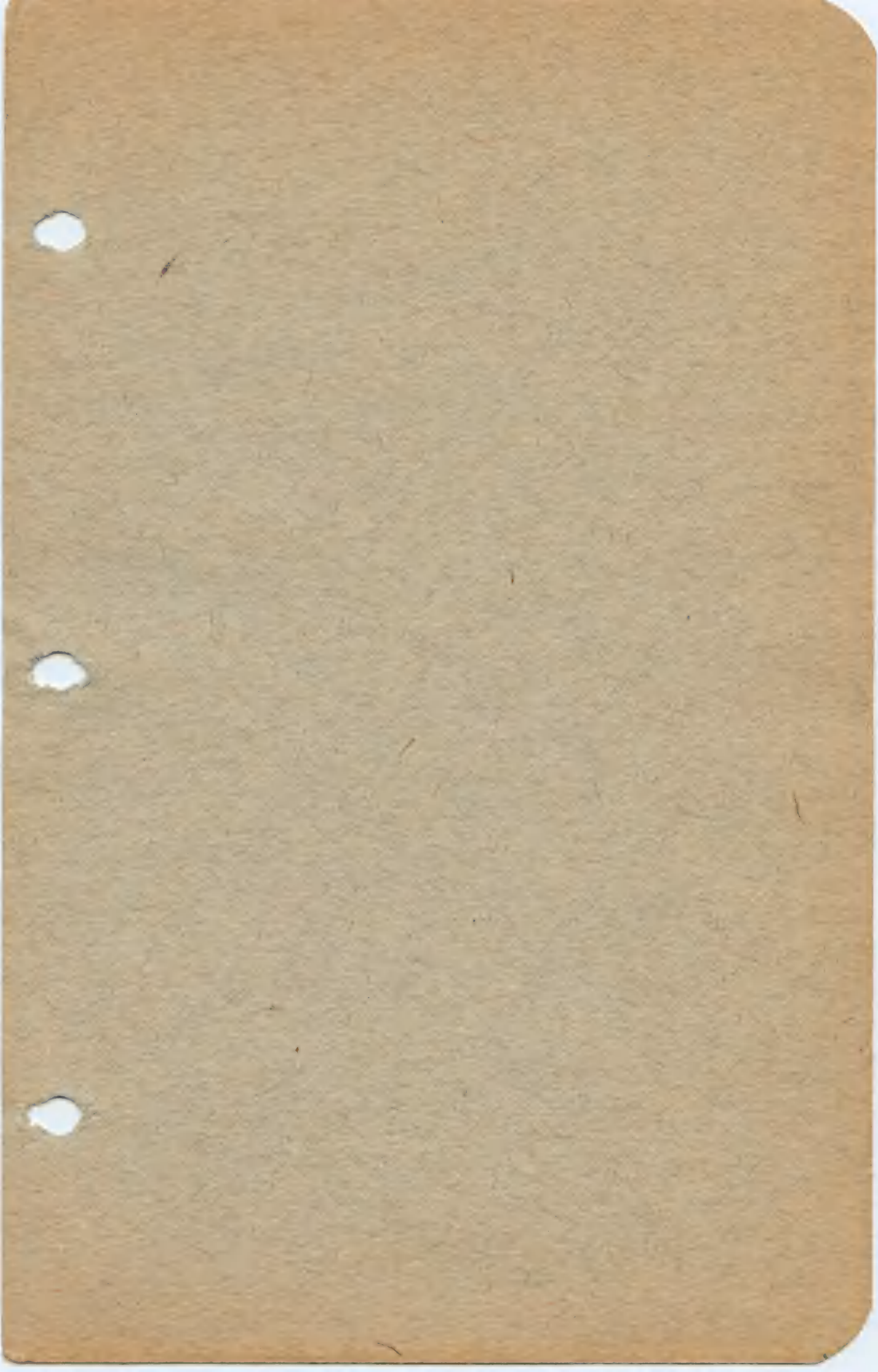
Below slopes precipitous.

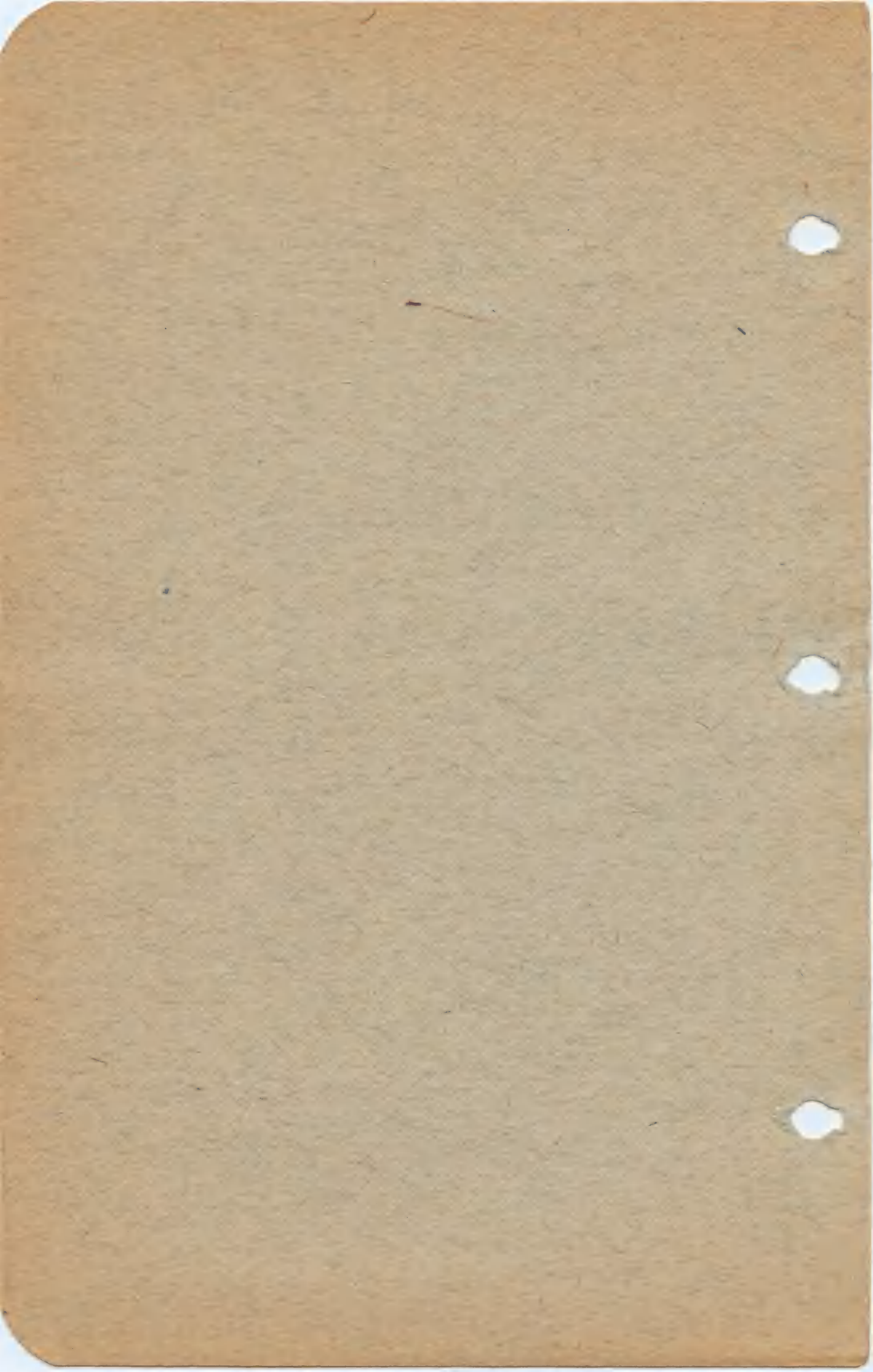
Spharagnum Willi 1 ♂.

Mel. Tribulus 1 juv. ♀.

Orth. 2 + 330 = 332.

Utricularia 9 + 282 = 291.





1953

1953. 1 W. side of Timber Ridge, 1.5 miles
E. of Capon Bridge, Hampshire
Co., W. Va. Elev. (am. chart) 1000 feet. Aug.
6, 1953. (R.).

Highly and uneven, everything cut. Road-
side crowding. Only adults 1 ♂ Mel. fuscus-velum
+ 1 Tetops. Immat. Chortophaga, hichromorpha
+ Melanophus. 1 adult hissortina seen.
Both. 9
Other in 5

1953. 2 Along N. Fork of South Branch of Potomac
^{4.5 miles E. of Cabriety.}
River, ^{of Pendleton Co.} Grant Co., W. Va. Elev. (am. chart) 1500
feet. Aug. 6, 1953. (R.).

Uneven + very wet. Much done in patches of short
grass and weeds, with scattered stony spots,
along edge of mixed hardwood stands.

Syrbula adra juvs. of both sexes, no adults seen.

Chortophaga vivid. Sev. adults (♂♀) all seen.

Hippiscus rugosus Numerous, mostly adults,
as usual quite sluggish + easily captured.
A very few juvs seen. Rather found on the
patches examined.

hissortina carolina. A few, 2 taken, in
drain as well as on road.

Melanophus differentialis 2 ♂ seen + taken -
all retained.

Melanophus fuscus-velum Several adults (taken)
" mexicanus " " "

Melanoplus juvs. sp. ? Numerous.

Conoscephalus stratum a few females, not quite adult.

With. 40 + 9 = 49.

Other ins. 0 + 5 = 5.

1953.3 Along Sincra Creek about 4 miles
E. of Chicago, Pendleton Co., W. Va. Elev. ab.
2750 feet. VIII. 6. 1953. (R.).

Lowest with high fog.

Roadside in steep gully - few spots level enough
to walk and there almost entirely mowed
recently.

Nomotellus - 1 juv. swept from ground.

Acydus Tetrix - 1 ad. swept from ground.

Melanoplus sp. 1 juv.

Amblyonychia rotundifolia 1 ♀ swept
from fallen weeds.

Conoscephalus sp. 1 ♂.

Ucaetis 1 juv. swept.

With. 6 + 49 = 55.

Other ins. 5 + 5 = 10.

1953.4 Slopes along road above crossing of
Key Fork River, S.W. of ^{an} Harman, Randolph Co.,
W. Va. Elev. (ann.) 3000 feet. Aug. 6, 1953. (R.)
Roadside weeds and grass. ^{much cut off,} skull, trying to
clean.

Tetrigidea ov. juss. - Nidivini??

Chromomorpha viridis 1 ad. ♀.

Conocoryphus brisp. A number.

Nemobius fac. numerous adults - many juvs.

Urch. 17 + 55 = 72.

Urch. ins. 11 + 10 = 21.

1953.5 5 ms. E. of Elkins, Randolph Co., W.
Va. Elev. (ann.) 2600 feet. Aug. 6, 1953. (R.)

Roadside.

Tetrigidea sp.

Chromomorpha can. A number, three taken.

Melanoplus curvus 1 ad. ♂

" walshi? 1 juv.

" sp. br. juss.

Urch. 8 + 72 = 80.

Urch. ins. 0 + 21 = 21

1953.6 4 ms. due S. of Elkins, Randolph Co.,
W. Va. Elev. (check on topographic charts) low?
Aug. 7, 1953. (R.)

Urchain (roadside) with heavy weeds, motherwort,
wild carrot, tall grass, etc.

Melanoplus viridatus. Few adults, some juvs.

" funn. rubrum Few adults.

Conocoryphus juss. only.

Urch. 4 + 80 = 84.

Urch. ins. 12 + 21 = 33.

1953.7 2.5 ms. S.E. of Nortonville,
Randolph Co., W. Va. Elev. 2250 feet (ch.)
~~last check on charts.~~ VIII. 7. 1953. (R.)

Roadside, Fall woods, milkweed, sumac,
wild carrot, wood edge of mixed decid. forest.
A few rather bare spots of thaly silt. Almost
nothing new.

Amphispiza xanth. 1 ad. - 1 juv. taken - others seen.

Empidonax rufidorsus 1 juv. taken - all seen.

? Hippisus sp. Very small juvs - two seen, one taken.

Melanerpes formicivorus Few adults, many
juvs.

Melanerpes lundus 1 ♂ taken.

Dendroica 2 females taken - several others
flushed.

Conocephalus - abundant juvs (1 taken), no
adults.

Urethya 1 ad. taken.

Merula fasciata. Many juvs, few adults
(no. taken).

Orth. 18 + 84 = 102.

Other ins. 5 + 33 = 38

Corner top of Cheat Mtn.

1953.8 W.S. 250, 1.9 ms. S.E. of Nortonville,
Randolph Co., W. Va. Elev. 3798 feet (ch.)

~~charts.~~ Aug. 7. 1953. (R.)

Roadside in heavy forest, chiefly mixed
deciduous but with some remnants of oaks.

1953.8 (cont.)

hemlock. Tall grass, drain with sphagnum & brake, ~~but~~ huckleberries, some wild carrot, etc.

Clypeodella spinosa 1 ad. (all seen) & numerous juvs. in drier areas.

Hesperiina - a few, 1 taken.

Tulochya 1 in instar preceding maturity; all seen after long search, in tall growth but no hazel evident.

Melanoplus ~~biotta~~ virittatus. ~~2~~ Few adults seen & taken, numerous juvs.

Melanoplus luridus very few adults, numerous juvs.

Amblycorypha retundifolia. 1 ad. ♂ swept.

Orth. $24 + 102 = 126$

Uthuris. $5 + 38 = 43$.

near Top of Allegheny,

1953.9. ~~at 2000~~ 6 miles E. of Bartow,

Pocahontas Co., W. Va. Elev 39500 feet - (OK)

Check on topog. maps. Aug. 7, 1953. (R.)

[In valley of ~~Tributary of Greenbrier River~~ ^{Wiley Creek}]

Heavy forest largely mixed hardwoods with a few ~~but~~ hemlocks left. Much dense roadside in heavy con. consist to shoulder high, various shrubs, with wild carrot, etc. very little sun. Unmist with occ. drizzle.

Hesperomys viridis. 1 ad. ♀.

Melanoplus f. r. 1 ad. ♂.

Sudderia sp.? 1 ♀ swept.

Nematus fasc. adults fairly numerous.

Auth. 7 + 126 = 133.

Other vis. 4 + 43 = 47.

1953.10 Shenandoah Mtn. road crossing
of U.S. 250, Highlands - Augusta Cos., Va.

Elev. (t. m.) 2950 feet. VIII. 7. 1953. (R.)

Drizzle + fog. Work limited by terrain to a few
small patches! Almost nothing seen in water.
Nothing seen in undergrowth of mixed hardwood
forest where reachable!

Helicostes can. 1 taken.

Nematus fasc. - 1 swept.

Auth. 2 + 133 = 135.

Other vis. 3 + 47 = 50

1953.11 1 m. E of Reservoir, Nelson Co., Va.

Elev. (aner.) 1450 feet. Aug. 8, 1953 (R.)

Roadside vegetation in forest of mixed deciduous
and evergreen of character. Insects largely carabids,
beetles, wild paper, etc.

Neophaenocarpa, a number of juvenes - green - brown
phases.

Blisostoma can. seen on roadside.

Blisostoma - a few, all seen (1 ♂ 1 ♀) taken.

Amphicorypha whitii 1 ♂ swept.

Phyllorhynchus pubescens A few, 1 ad. taken.

Anax ipha Much more numerous in small streams.
In stream (shoulder bank) common.

1953. 7) (cont.)
Orch 18 + 135 = 153.

Utter ins. 12 + 50 = 62.

1953. 12 1/2 m. SW. of Tye River Gap.

Blue Ridge Parkway, Nelson Co., Va.

Elev. (an) 3200 feet - checked. VIII, 8, 1953. (R.)

In grassy open patch in deciduous forest, largely oak.

Low marginal growth largely oak scrub.

Chrysomitris 1 juv. swept.

Syrnula adm. A few juvs.

Ceryle perisore 1 ♂ - all seen.

Hechromorpha 1 ♂ - all seen.

Amphispiza xanthoptera 1 ♀. - sev. others seen.

Nipponoceros reversus Numerous. (juvs. taken also.)

Spharagemon belli Two taken in diff. spots.

Melanoplus lucida sev.

" ferus - suber A few adults. } juvs. seen.

Tritax 1 swept.

Amphispiza uhleri 1 ♂ swept.

Corvus stricklandi 1 ad. ♀.

Merula americana.

Orch. + 153 = 31. 184

Utter ins. 4 + 62 = 66.

1953.13 14 ms. S.E. of Tyne River Gap,
Blue Mtn. Parkway, Amherst Co., Va.
Elev. (an.) 2200 feet. VIII.8. 1953. (R.)

Cut on slope ~~overgrown~~ overgrown with
well mixed deciduous forest.

Spharagnum belli 1 ♂ - all seen.

Melanoplus diff. 1 ♀ - one other seen lost.

" pub. lunatus juv. only.

Utter. 7 + 184 = 191.

Utter in. 1 + 66 = 67.

1953.14 Blue Ridge Parkway,
14 ms. S.E. of Snowden, Bedford Co., Va.
Elev. (an.) 1875 feet. VIII.8. 1953. (R.)

grassy + bushy roadside in mixed
hardwood forest. All seen taken - work
stopped by storm.

Bliphurum 1 juv.

Spharagnum belli 1 ♀.

Hippiscus nyctus 1 juv.

Eurostolus h. juv.

Chimacoc Chatykaya 1 very small juv.

Tettigidea lat. 1 ♂.

Mel. lunatus from adults - 1 juv.

" ferus - rule. 1 ad.

1953.14 (cont.)

Anthomyia whitii 1♂, 1♀.

Muscia 1.

Ceratomyia 1 juv.

Urch. 18 + 191 = 209.

Other ins. 0 + 67 = 67.

1953.15 1.5 ms. S. of Abbott, Craig Co., Va Elev.
(an.) 1500 feet. VIII. 9. 1953. (R.)

In cut-over low pine and oak, with much
oak scrub.

Syrphula admir. 1 juv. - all seen.

Spharagmus belli A number seen, 3 taken.

Large in oak scrub, a few roadside (admir.).

Melanophus sp. 1 roadside.

" lucida very few, chiefly immat.

Surdania sp. 1♀ taken from oak scrub.

Cnephala stritum 1♀ + 1 juv.

Araxipha 1 swept

Urch. 11 + 209 = 220.

Other ins. 0 + 67 = 67.

1953.16 2.5 ms. W. of Newcaste, Craig Co.,
Va Elev. (an.) 1960 feet. VIII. 9. 1953. (R.)

Roadside + edge of low oak woodland.

the same Sph. belli - Microsternia var.

Melanophus lucida few adults - many juv.

" sp. Many juv.

Syrphula admir. 1 juv. - all seen

Conopthalus sp. 1 ad. ♂ only adult seen.

Nematus sp. 1 taken.

Anaxipha. 1 nymph.

Orth. ♂ + 220 = 228.

Other ins. 3 + 67 = 70.

1953. 17 S. side of Potts Mountain, 6.5 miles W.
of Newcastle, Craig Co., Va. Elev. (am.) 2400 ft.
VIII. 9. 1953. (R.).

Roadside and in ground cover of open low decid.
forest, largely oak. Undergr. chiefly oak scrub,
sassafras, buckthorn, etc.

Blisasteria sumneri. 1 taken.

Spharganium bolli a few. 1 taken.

Mesochorus thomasi 2 pairs on broken
straw of road turn-out - not together -
no others seen.

Melanophus f. a very few.

" curvatus. local, in scrub.

" diff. a few, 1 taken

Orth. 11 + 228 = 239.

Other ins. 0 + 70 = 70

1953. 18 Road crossing (Va 311) of Potts
Mountain, Craig Co., Va. Elev (E. m.) 3450 ft.
VIII. 9. 1953. (R.).

Open spots and roadside in heavy deciduous
forest. Nothing in forest undergrowth.

1953.18 (cont.) Walk out there by heavy rain. ^{going into woods.}

Missotera carolina Abundant, 3 taken.

Sphragnum lilli. Locally numerous. 3 taken.

Melanoplus lucidus. A few juvs. - no adults seen.

Utch. 8 + 239 = 247.

Utch. vis. 7 + 70 = 77.

1953.19 4 ms. S. of Salt Sulphur Springs,
Monroe Co., W. Va. Elev. (an.) 1950 feet.
VIII. 9, 1953 (R.)

Roadside and drain - nothing seen except what was taken - rain again interrupted.

Sphragnum lilli - 1.

Melanoplus lucidus 1 juv.

Nemobius - 1.

Utch. 4 + 247 = 251

Utch. vis. 0 + 77 = 77.

1953.20 5 ms. NW. of Floyd, Floyd Co.,
Va. Elev. (an.) 2300 feet. VIII. 10, 1953. (R.)

Roadside and edge of wood screen, very wet from rain and dew! Almost nothing.

Mel. f. 2. juv.

Tetris 1 juv.

Sueddina 1 ♀ swept from wood edge.

Conocphalus strictus 1 ad. ♀.

Urosanthus latip. swept juv.

Utch. 9 + 251 = 260.

Utch. vis. 4 + 77 = 81.

1953. 21 3 ms. E. of Willis, Floyd Co., Va.
Elev. (an.) 2700 ft. VIII. 10, 1953. (R.)

Old field (abandoned cemetery), road
turnout and drain. Most all surface
vegetation cultivated.

Tettigidea a number of juvs. except
Cyphobella spec. 1 ♂ old field.

Spharagmon belli a few seen, 1 taken,
old field.

Mictobryna l. Thomasi. 1 very small colony
on broken stone of turnout - 2 taken.

Melanoplus lucidus Des. 1 ♀ taken mostly
" f. ^{non marginatus} " 1 ♂, mostly grass. ^{field.}

Nemobius a few, 2 taken.

Orth. 14 + 260 = 274.

Other ins. 0 + 81 = 81.

1953. 22 Near Cañon, 6.5 ms. W. of Willis,
Carroll Co., Va. Elev. (an.) 2750 ft. VIII. 10, 1953.
(R.)

Old field + roadside. Country almost
entirely cultivated. Old field heavily
grown up with briars, blackberries, etc.

Tettigidea 1 ♂ adpt.

~~Both~~ Cyphobella speciosa. Local, in
barren and drain areas.

Cyphobella xanth. a few - 1 taken

1953. 22 (cont.)

Ennopterygus trud. 1 ad. seen - Taken, also
a few juvs.

Spharagmus lilli. A number seen - 1 Taken

Melan. f. r. abundant, largely juvs.

Scudderia 1 ♂ taken from Fall meads.

Conoclypeus strictus 1 ♂ - sev. ♀.

• ? salinus 1 juv. taken.

Orth. 20 + 274 = 294.

Orth. im. 0 + 81 = 81.

1953. 23 Along New River 5 ms. SW. of
Galax, Grayson Co., Va. Elev. (an.) 2300 ft.
VIII. 10. 1953. (R.)

Hillside old field pointing up in pine and oak,
chiefly former.

Manomera Blatchleyi 1 ♀ impt.

Tetrix 1 impt.

Neotetrix 1 impt.

Synchlora 1 juv. on ground.

Cephus opac. 1 ad. Taken.

Arphia xanth. A number - 1 Taken.

Microsternus car. the larger spots - one taken.

Melanophus luridus juvs. only.

Scudderia 1 ♂ Taken - a number of
others seen.

Corynephalus strictus 1 ♀ taken.

" altanus? 1 juv. taken.

Oecanthus ♂ 1 impt, a juv. also taken.

Orth. 14 + 294 = 308.

Other ins 0 + 81 = 81.

1953. 24 5 ms. N of Independence,
Grayson Co., Va. Elev. (an.) 2800 feet. VIII.
10, 1953. (R.)

Roadside edge of woods & old field conditions.

Chironotus car. a few, 1 taken.

Melanophus f. r. Abundant, almost all juv.

" lucidus 1 juv. taken

" sp.?? A number of juvs. taken
wood edge.

Amblypogon uhleri 1 ♀. impt.

Corynep. strictus juvs. only seen & taken.

Nemobius fas. A number.

Oecanthus juvs. only.

Orth. 19 + 308 = 327.

Other ins. 2 + 81 = 83.

1953. 25 West side of road crossing
(Va. 16) of Iron Mtn., N. of Troutdale,
Smyth Co., Va. Elev. (chart) 3300 feet.
VIII. 10, 1953. (R.)

1953.25 (cont.)

Open area at road intersection in
deciduous forest, a low area with an old
field adjoining, also a broken road
stone. Many species restricted taken.

Tettigidea. 1 juv. taken of old field.

Syrphula adum. Numerous in grass - wood,
but all immat. except a single ♂ taken.

Aphidella spec. Locally numerous, in shorter
grass & on lower sprouts.

Empothisia trid. No. juvs, taken.

Hippisus rufus taken - taken.

Pharagmon elli Local in all situations

Alisostira abund. 1 taken.

Mesochorus h. thomasi. Several small

specimens on or near the broken road stone.

5 taken.

Melanoplus f. r. Numerous, many adults

" lucida Few adults.

" diff. 1 ♂ taken - all seen. Old field.

Amblyco uhleri 1 ♂ pupa.

Dacnusa 1 ♀ pupa.

Conoph. 1 ♂ 1 ♀ taken.

Microgaster fusc. Numerous.

" brunnei? 1 ♀ taken on wood edge.

Orth. 49 + 327 = 376

Orth. in. 0 + 83 = 83

1953.26 South Slope of Pine Mtn., above
West Fork of Wolf Creek, Washington Co., Va.
Elev. (an.) 2350 feet. VIII.10, 1953. (R.)

Old field in deciduous + pine forest
heavily grown up in blackberries, smilax,
and wild strawberry. Also in woodland.
Nothing seen in latter. All seen taken except
Wissotia carolina.

Syrphula adua. 1 juv.

Melanoplus pub. lucidus. juvs. only.

Scaevola sp. 2 ♀♀ lighting in tall weeds.

Cnephala altus? juvs. only.

Acanth 1 juv. swept.

Col. 10 + 376 = 386

Other no. 5 + 83 = 88

1953.27 Road curving (Va. 80) of Rich Mtn.,
Clinch Mtn. Ridge, Russell-Washington Co.,
Va. Elev (an.) 3100 feet. VIII.11, 1953 (R.)

Road edge of deciduous forest, chiefly oak
and locust. Nothing in woods. Everything
seen taken.

Wissotia very common - 1 taken.

Melanoplus lucidus few adults (1 taken),
numerous juvs.

1953. 27 (cont.)

Cryptonotus - One swept from vegetation
on bank overlooking road.

Uth 5 + 386 = 391.

Uth in. 3 + 88 = 91.

1953. 28 2 ms. N. of Chickensville, Washington
Co., Va Elev. (am.) 2100 feet. VIII. 11. 1953. (R.)

Roadside weeds - clover - drain. Everything
recognized taken except 1 Melanoplus
differentials - num. Hissasteria.

Chortophaga viridifasciata 1 ad. ♀ + 1 juv.
All seen, in ^{dry} drain.

Melanoplus f. - several but mostly juv.
Adults taken.

Melanoplus mex. 1 ♂ 1 ♀ taken, in ^{dry} drain.

Tendleria 1 ♀ in weeds.

Conophthalmus 2 species. In both situations

Uth. 16 + 391 = 407

Uth in. 0 + 91 = 91.

1953. 29 About 1/2 mi. E. of Rose Hill,
Lee Co., Va Elev. (am.) 1350 ft. VIII. 11. 1953.
(R.)

Roadside and edge of old field. Nothing
seen but what was taken.

Syrphula albina. 1 ♂ in old field area.
Hippisus rufus 1 ♀ roadside, then
seen.

~~the~~ Empidopterus indicus. two juvs.
no adults noticed.

Melanopler vittatus. 1 ♀ in old field.

" sp. 1 juv. blitto.

" lucidus 1 ♀ blitto.

Ferdinandia sp. 1 ♀ Edge of wood screen border
of old field.

Conoclyptus stritatus a few

Cerantus sp. ♂ + ♀ swept.

$$\text{Arth. } 13 + 407 = 420.$$

$$\text{Arth. ins. } 0 + 91 = 91$$

1953. 30 Along Greasy Creek, 4 ms S.E. of
Four-mile, Bell Co., Kentucky. Elev. (am.) 1075 feet.
VIII. 12. 1953. (R.)

In old fields and roadside. All species seen
taken.

Syrphula 1 ad. - 1 juv all seen - old field.

Anthytrapidia 1 juv. all seen - same loc.

Hippisus rufus 1 ♂, two. then seen - old field.

Melan. f. r. few.

" diff. 1 ♂ 1 ♀ 1 juv. all seen - both environments.

Conoclyptus 2 sp. Mostly juvs. both areas.

$$\text{Arth. } 13 + 420 = 433.$$

$$\text{Arth. ins. } 0 + 91 = 91.$$

1953.31. 5ms. E of Siler, Whitley Co., Kentucky.
Elev. (an) 1175 feet. VIII. 12, 1953. (R.)

In wood from narrow side valley and forest edge. Everything recognized taken. except

Microsternia car. 1 taken - a number seen.

Hippisus rufus 1 taken, thus seen.

Melanophus diff. 1 taken in fall woods. Thus seen.

Melanophus vittatus no. in side valley, one badly battered - clearly old.

Conoscephalus sp. A number.

~~Other~~ with 8 + 433 = 441

Other ins. 0 + 91 = 91.

1953.32 1m. E. of Siler, Whitley Co., Kentucky
Elev. ~~1175~~ ^{c. 1100} feet. VIII. 12, 1953. (R.)

Old field and wood road. Most things given

Nothing recognized not taken.

Melanophus ^{Chertophorus} ~~diff.~~ ^{1 juv.} a very few. 1 taken.

Amblycophis rotund. 1 ♀ swept from wood undergr.

Archelidum sp. 1 juv. ♀ swept in the field.

Conoscephalus juv. only.

Acanthia corp. 1 ♀ swept ^{juv.}

Phyllisoptus 1 ad. ♀ " from wood road bordering undergr.

With. 7 + 441 = 448.

Other ins. 0 + 91 = 91

1953. 33 4.5 ms. W. of Millersburg,
Whitley Co., Kentucky. Elev. (an.) 1450 feet.
VIII. 12, 1953. (R.)

Along front edge and roadside.

Everything very sparse. Taken except
Hirsutiaria carolina.

Stagnomantis carolina 1 juv. kept ^{collected}

Melanoplus sp.? Num. juvs - some
collected

Cromaphys sp.? ?? found.

Oenanthus lat. 1 juv. kept

Wth. 11 + 448 = 459.

Wth. ins 1 + 91 = 92.

1953. 34 4.5 ms. W. of Holly Hill,
McCreary Co., Kentucky. Elev. (an. + ch.)
1550 feet. VIII. 12, 1953. (R.)

Pine woods of a barren type, some
opened up by cuttings. Absolutely
nothing etc. 1 Melanoplus taken, and
1 juv. Nemobius sp.?

Wth 2 + 459 = 461.

Wth. ins. 0 + 92 = 92.

1953. 35 1.5 ms. S. of Kentucky line,
near Sham, Scott Co., Tennessee. Elev. (an.)
1475 feet. VIII. 12, 1953. (R.)

In mixed woods, heavier undergrowth & open
spots in same, slashings, etc. Much
dead branches and twigs.

1953.35 (cont.)

Absolutely nothing except what was taken.

Hichromorpha in the heavier woods,
♂ & ♀ in cortex.

Spharagnum Wlbi 1, all seen, in
woods.

Melanophus sp. All juvs. (none taken)
Conoph. 1 ad. taken.

Orth. ♂ + 461 = 469.

Other ins. 0 + 92 = 92.

1953.36 4.5 ms. S.E. of Wartburg, Morgan
Co., Tenn. Elev. (an. - ch.) 10-50 feet. VIII. 23, 1953.
(R.)

In wood road and along border of pine
& deciduous forest, and roadside. All
specimens taken.

Diapheromera 1 juv. rupt.

Nonotettix 1 juv. pupa in wood road.

Hichromorpha 3 all in forest on wood road

Syrphula 1 ad. roadside.

Spharagnum Wlbi in woods.

Melanophus luridus 1 ♂ ditto.

" sp. juv. ditto.

Juridaria 1 ad. ♀ + 1 juv. Former in
wood clearing brush, juv. rupt.

Crematophora sp. juvenis - all juvs.

Phylloscopus 18 1♀, both swept from
wood under foliage.

Uths. 21 + 469 = 490.

Uther ins. 0 + 92 = 92

1953. 37 1.5 ms. N of Harri-man,
Morgan Co., Tenn. Elev. (an.) 1350 ft. VIII. 13, 1953.
(R.).

Edge of mixed woods - roadside.
Very little present - all seen taken.

Syrphula - 1 ad. ♂.

Melanoplus luridus 1 ad. ♂.

" sp. a number of juvs.

Uths. 8 + 490 = 498.

Uther ins. 0 + 92 = 92.

1953. 38 Top of Walden Ridge, 6 ms. from
E. of Pikeville, Blount Co., Tenn. Elev.
(an. - ch.) 2050 feet. VIII. 13, 1953. (R.)

In pine and oak woods and roadside of
same. Everything definitely recognized
taken ex c. Blisrost. carol.

Chortoph. 1 very small juv. Roadside.

Syrphula 1 juv. ditto.

Melanomerpha in woods.

Melanoplus luridus 1 ad. ♂ in woods.

1953.38 (cont.)

Melanoplus sp. Numerous juvs. in
with situations.

Furderia 1♀ in sun spot in woods in
fall under logs.

Conocrochilus juv. only, roadside.

With. 12 + 498 = 510.

Other ins. 0 + 92 = 92.

1953.39 1 m. S. of Mt. Airy, Squatchie Co.,
Tenn. Elev. (an. ch.) 875 feet. VIII.13, 1953.
(R.)

Border + edge of mixed deciduous and
pine forest and roadside through same.

Everything seen taken.

Chia pheromera 1 juv. swept

Syrbula adum. Adults of both sexes & juvs.
General.

Chia chromopha Both sexes, chiefly in woods.

Hippiscus reynolds 1♂, roadside grass.

Spharogaster telli In woods & roadside of same.

Achistura 1 im. juv.

Melanoplus sp. 1 juv.

Furderia 1♀ in shrubbery along woods.

Chia lat. 1 juv. swept.

With. 19 + 510 = 529.

Other ins. 0 + 92 = 92.

1953.40 7 ms. W. of Guntersville,
Marshall Co., Ala. Elev. (am.) 1100 feet
VIII.14.1953. (R.)

In old field, part heavily grown up, along
edge of pine ^{oak} woods and roadside.
The old field work was most productive.

Everything recognized taken.

Brunnicia 2 juvs. (diff. instars) in tall
woods.

Chaperonius juv. in tree edge of woods.

Syrphula ♂ num. ♀ juv. in old field chiefly.

Anthydropidia juvs. road edge.

Chortophaga 1 ♂ 1 ♀ ad. roadside

Hippisus nyctus Old field - roadside.

Melanoplus diff. Chiefly old field.

" sp. num. juvs. - pupal.

Schistocerca amer. virginica, active, old
field chiefly. 2 ads. Taken.

Anthyomyza whitii 1 ♀ swept in wood edge.

Cross Neocneph. sp. 1 juv. old field.

Cneph. tristis Old field - roadside.

With. 36 + 529 = 565.

Other ins. 0 + 92 = 92.

1953.41 Between Joppa and Baileytown,
Cullman Co., Ala. Elev. (am.) 1150 ft.
VIII.14.1953. (R.).

1953. 41 (cont.)

In partly cut-out pine woods with low cover left and wood road in same. Anything recognized taken, except Schistocerca americana,^{ad.} which was fairly numerous, Diaperomera juv. - a number swept from low cover.

Syrphula - no adults, juv. taken.

Schistocerca 1 juv. taken - adults none.

Melanoplus juv. Numerous juv.

Utholium 1 juv. - roadside

Ceanothus 1 juv. swept low cover.

Orth 19 + 565 = 584.

Utholium 0 + 92 = 92.

1953. 42 6 mo. W of Clarkston, Cullman Co., Ala. Elev. (an.) 1000 feet. VIII. 14. 1953. (R.)

In culled pine - decid. woods and roadside edge of same, also in ^{very} dry hollow with sedges.

All species recognized taken exc. ad.

Schistocerca amer.

Syrphula adam 1 female ♀ - juv. wood edge.

Anthropodicia juv. ditto.

Utholium peledna 1 ♀ roadside tangette, low cover.

Cephus xanth. 1 ditto.

Sphragnum belli 1 to wood edge.

Wippisus negans roadside - cut over tangette.

Melanoplus diff. 1 ♀ in sedge area.

" Sudderi 1 ♂ wood edge.

" sp. juv. found.

Sudderia sp. juv. wood edge.

Chelimeris sp. juv. in sedge -

Colth. 16 + 584 = 600.

Other ins 0 + 92 = 92

1953. 43 4 ms. E. of Double Springs,
Winston Co., Ala. Elev. (an.) 700 feet.

VIII, 14, 1953. (R.)

Edge of pine forest - roadside.

Anything recognized taken.

Heteromorphus 1 ♀ here roadside.

Chortophaga 1 ♀ roadside.

Amblytropidia 1 juv. in wood edge.

Rhondia 1 ♂ just in open edge of woods
on leaves & among slashing material.

Colth. 4 + 600 = 604

Other ins. 0 + 92 = 92

1953. 44 6 miles SW. of Haleyville,
Marion Co., Ala. Elev. (an.) 755 feet.

VIII, 14, 1953. (R.)

Roadside - open pine & woods with
natural grass cover.

All species recognized taken.

1953.44 (cont.)

Syrphula few.

Amblytropidia 1 juv. taken.

Cyphura fulvipes roadside 1 ♀.

Melanoplus mix. 1 ♂ roadside

" sp. (long-w.) 1 ♂ wood edge.

" sp. juv.

Count 8 + 604 = 612.
Other in. 0 + 92 = 92.

1953.45 1 m. E. of Hamilton, Marion Co., Ala. Elev. (an.) 250 feet. VIII. 14, 1953. (R.)

Edge of pine + oak woods - roadside. Nothing noticed in woods. Everything recognized taken.

Chrysanthus juv. edge of woods, swept.

Syrphula Roadside 1 ♂ - juv.

Amblytropidia juv. road edge of woods

Hippisus mix. 1 ♂ road side.

Syrphogaster whitii 1 ♂, edge of woods.

Amblycrypta whitii 1 ♀ swept edge

of woods.

Melanoplus sp. juv.

Count 15 + 612 = 627.
Other in.

0 + 92 = 92.

1953.46 4.5 m. W of Tremont, Itawamba Co., Mississippi. Elev. (an.) 475 ft. VIII. 14, 1953. (R.)

In tall and medium-height roadside woods - grass, with bare spots. Everything

recognized taken

Crumeria 1 nearly adult nymph.

Synaldis 1 ♂.

Mercuria livittata 1 ♂ roadside, all seen.

Mercuria picta 1 ♂ ditto - all seen.

the two species but a few feet apart.

Hippiscus negrosus 1 ♂, several others seen.

Roadside.

Aphis xanth. 1 ♂, ditto. Others seen.

Schistocerca amer. 1 juv. taken.

Melanoplus curvidus 1 ad. ♂.

" long. w. sp. 1 ♀ taken.

" sp. juv. taken.

Orth. 11 + 627 = 638.

Other in. 0 + 92 = 92.

1953. 47 3 ms. N. of Tupelo, Lee Co., Mississippi.
Elev. (am.) 330 feet. VIII. 15, 1953. (R.)

Tall grass and weeds on rolling roadside,
backed by deciduous woods. Everything
recognized. Taken exc. 1 ad. Schistocerca amer.

Stagnare, 1 juv. nymph.

Synaldis a number, chiefly juvs. 1 ad. - 1 juv.
taken.

Mercuria livittata 4 ♀, green + brown phases.
Active fliers.

Amblytropidia 1 juv.

1953.47 (cont.).

Nippisus negrus Numerous. 1 taken.

Melanoplus diff. a few. 1 taken.

" sp. juv.

Uthulium sp. 1♂, 1♀. Rather frequent,
in tall grass - all noticed.

Uth. 13 + 638 = 651.

Uth. inc. 0 + 92 = 92.

1953.48 1 m. S. of Booneville, Prentiss
Co., Mississippi. Elev. (am.) 475 feet. VIII.15,
1953. (R.).

Broad roadside barrette with low corn,
at border of deciduous woods, chiefly oak.

Almost nothing but Spharagemon bellii
seen in woods. Everything else recognized
on bar. taken except Schistocerca amer.

Chrysoperma gives numbers - 1 kept.

Syrphula - a few.

Mermiria picta - a few, 1♂ 1♀ + juv. taken.

Aphid xanthoptera a few, 1 taken.

Nippisus negrus - Numerous.

Spharagemon bellii 1 taken, in woods.

Melanoplus hirtellus a pair, taken separately,
in deep corn.

Melanoplus nox. 1 ad.

" sp. 1 juv.

Scudderia sp. 1♀ from woods border.

Arctophila colubini 1♀ kept.

Uth. 19 + 651 = 670.

Uth. inc. 0 + 92 = 92.

1953.49 5ms. E. of Corinth, Alcorn
Co., Mississippi. Elev. (an.) 575 feet.
VIII, 15, 1953. (R.)

Roadside drain with very tall and
coarse grass. (Brunneria only there)
in midst pine - oak woods area,
and on cleared shoulder bordering road.
Everything neogn. Taken.

Brunneria numerous in a limited area
(see above) - few adults taken, while
there were much more numerous juvs.
Diapheromera no juvs. - swept on
shoulder.

Syrphula 1 ad. taken - 1 juv. - other adults
seen.

Mermiria juvs. only.

Melanoplus diff. a few, one taken.

" max. 1 ad. taken

Chistocerca ann. 1 juv. taken - no
adults seen.

Orth. 21 + 670 = 691.

Orth. 0 + 92 = 92.

1953.50 3ms. E. of Iuka, Tishomingo
Co., Mississippi. Elev. (an.) 575 feet.
VIII, 15, 1953. (R.)

1953.50 (cont.).

Roadside drain and barrette with Fall
grass. Everything recognizable taken.

Syrphula adum. Numerous.

Mercuria littata 1♂ taken.

" picta More numerous. Both sexes
taken, most adults terminal, juvs.
also above numerous.

Amblytropidia 1 juv. taken.

Aphid xanth. 1 taken.

Melanoplus diff. Abundant - both sexes taken.

" sp. lucis. a number.

Scudderia 1♀. kept.

Orchelimum vulgar 1♂ kept.

Cynophalus sp. A few.

Urch 21 + 691 = 712.

Urch ins. 0 + 92 = 92

1953.51 E. 3 ms. E. of Tusculum, Colbert
Co., Ala. Elev. (an.) 600 feet. VIII. 15, 1953.
(R.).

Roadside strip bank on stony outcrop with
dry + tough native com. Desprotettix
only in a very limited area, all seen taken.

Chlorophoromera juvs. numerous - a few
taken.

Stagmomantis 1 juv. taken.

Brunnicia 1 juv. taken

Hydrula 2 taken - numer.

Hippiscus rufus Munn. a pair taken.

Melanoplus diff. Abundant.

" sp. w. 2 adults - juv.

Neoperotellus brevipes 1♂, 2♀
taken (see above)

Orth. $23 + 712 = 735$.

Other ins. $0 + 92 = 92$.

1953.52 1 m. W. of Greenbrier,imestone
Co., Ala. Elev. (approx.) 800 feet. VIII. 15. 1953
(R.)

Old field and dried-out bottom of part
of a pond (remaining nearly), alongside
of deciduous woods.

Tetragnids - all in old pond bottom -
was virtually dry.

Paratettix } see above - numerous.

Tettigidea }

Chironomus 1 juv. - 1 ad. ♀.

Chortophaga 1 ad.

Hippiscus rufus 1 ad. 1 ♀.

Mel. mex. a few - pair taken.

" sp. w. 1♂.

" diff. a few - 1 taken.

Chironomus 1 large juv. taken.

Orth. $34 + 735 = 769$.

Other ins. $0 + 92 = 92$.

1953.53. 1 m. N. of Paint Rock, Jackson Co., Ala.
Elev. (ch.) 574 feet. VIII. 16 1953. (R.)

Roadside only. Very poor, nothing but captures seen.

Syrphula 1 taken.

Sch. amer. 1 juv. taken - adults seen.

Arctulium 1 juv. ♀ taken

Conosiphales - a number.

Urch. 7 + 735 = 742:

Other ins 0 + 92 = 92.

1953.54 Betw. Woodville and Kimrock,
Jackson Co., Ala. Elev. (an. ch.) 600 feet.
VIII. 16, 1953. (R.)

Roadside with tall grass and weeds.
Very little. Everything seen taken etc.

Schist. amer.

Urch. 8 + 742 = 750

Other ins. 0 + 92 = 92.

<u>Angitia</u> xanth.
<u>Melanophus</u> var.
" diff.
" juv.
<u>Conosiph.</u> sp.

1953.55 6 ms. S.E. of Scottsboro, Jackson
Co., Ala. Elev. (an.) 850 ft. VIII. 16, 1953. (R.)

Roadside tall weeds - little open to
soil. Hillside. Everything seen taken.

Diapheromera - two large juvs. kept.

Melanophus diff. numerous - 2 taken.

" levidus 1 ♂ taken.

" Th. w. 2 ♂

" sp. juvs.

Cynoph - a few - 1 taken.

Orth. 13 + 750 = 763.

Other ins 0 + 92 = 92.

1953.56 1 m. W. of Rainesville,
De Kalb Co, Ala. Elev. (an.) 1375 feet.
VIII. 16, 1953. (R.)

Roadside with mixed woods on one side.
Very little. Everything seen taken exc.
Chist. amer., Chironostoma carolinia -
Aypha xanthoptera.

Melanoplus diff. num. - 1 taken.

Orth. 2 + 763 = 765.

Other ins. 0 + 92 = 92.

1953.57 2 ms. S.E. of Mentone, Ala
Kalb Co., Ala. Elev. (ch.) 1600 feet. VIII. 16, 1953,
(R.)

Roadside through mixed woods. Everything
seen taken exc. Chist. amer. - Sudderis
sp.

Diapheromera 1 juv. unsp.

Syrphula a number - 1 taken.

Chortophaga 1 juv. unsp.

Melanoplus Th. w 1 ♂ taken

" sp. juv. num.

Orthel. 1 ♂ + 1 juv. ♀. In Falla grass.

Orth. 10 + 765 = 775.

Other ins. 0 + 92 = 92.

1953. 58 3.5 ms. E. of Mendo,
Chattooga Co., Ga. Elev. (an.) 550 feet
VIII. 16, 1953. (R.)

Roadside in mixed woods.

Nothing ex. 1 Melanoplus th. w. J.

Utth. 1 + 775 = 776.

Utth. vis. 0 + 92 = 92.

1953. 59 8 ms. W. of La Fayette, Walker Co.,
Ga. Elev. (an.) 950 feet. VIII. 16, 1953. (R.)

Roadside bordering mixed woods.

Everything here taken exc. Histerotaria
cardina.

Blapheromera 1 juv. impt

Amblytropidea 1 juv.

Chortophaga v. 1 ad.

Wippicus rufus 1 ad.

Melanoplus juv. 1.

Utth. 5 + 776 = 781.

Utth. vis. 0 + 92 = 92

1953. 60 South base of Fort Mountain, 3 ms.
E. of Chatsworth, Murray Co., Ga. Elev. (an.)
1200 feet. VIII. 17, 1953. (R.)

Longest - gray. Roadside and wood edge in
mixed forest. Everything recog. taken. except
juv. Schist. curv. & S. sublinea sp.

[Faint, illegible handwriting at the top of the page]

[Faint, illegible handwriting in the middle section]

[Faint, illegible handwriting at the bottom of the page]

Syrbula adum. 1 ♂ - all seen
Amblytrypidea no juvs.
Chloromphala 1 ♀ - all seen
Hippiscus rufus 1 ♂ - no. seen.
Hirsutiaria car. no. seen - 1 taken
Ucheliurus vulgare 1 ♂.
Cremophanes 2 spp. ? 1 ad. + no. juvs.
Cyananthus 1 juv.
 Orth. 10 + 781 = 791
 Uther ins. 0 + 92 = 92.

1953.61 South slope of Fort Mountain, 6 ms.
 E. of Chatsworth, Murray Co., Ga. Elev. (an.)
 2325 feet. VIII. 17. 1953. (R.)

Steep road border in heavy mixed forest.
 very little. Everything seen taken.

Hippiscus rufus 1 ♂ - all seen.
Cyananthus sp. 1 ♂ swept
 Orth. 2 + 791 = 793.
 Uther ins 2 + 92 = 94.

1953.62 Braestown Gap, 2 ms. NE.
 of Young Harris, Towns Co., Ga. Elev.
 (an.) 2210 feet. VIII. 17. 1953. (R.)

Everything soaked by rain - fog. Narrow gap
 in deciduous forest. Nothing evident etc.
 there taken.

Tetrix - 1 swept from ground. *Chortophaga*
 1 juv. *Melanophus* sp. juv.
 Orth 3 + 793 = 796
 Uther ins. 0 + 94 = 94

1953.63 2 ms. SW. of Glade Gap, Clay
Co., N.C. Elev. (ab.) 2600 feet. VIII. 17. 1953.
(R.).

Everything soaked by recent rain + fog.
Roadside shoulder and adjoining cut
bank. Everything seen taken

Amblytropidea no. juv.

Schistocerca amer. 1 very small juv.

Melanoplus luridus 1 ad. ♀.

With 4 + 796 = 800.

Other vis 1 + 94 = 95.

1953.64 ~~lot~~ no lot.

1953.65 Singecat Ridge Crossing,
Blue Ridge Parkway, Macon Co.,
N.C. Elev. (b.m.) 3406 feet. VIII. 18, 1953.

In rain Road edge of deciduous forest
and grassy patches. Everything seen
taken.

Melanoplus divinus? 1 ♂ in low cone and
dead leaves of ground litter.

Mel. sp. 4 juvs.

Chortophaga 1 very small juv.

Atlantides monticola 1 ♂ in same habitat as

M. divinus >

Oecanthus sp. 1 juv.

With 6 + 800 = 806.

Other vis. 1 + 95 = 96.

1953.66 Near Buck Creek Crossing, Blue
Ridge Parkway, McDowell Co., N.C. Elev.
(an.) 3800ft. VII. 18, 1953. (R.)

bug cut, after rain + fog coming in.

Edge of deciduous forest + cut bank.
Everything seen taken. Insects almost
paralyzed by cool fog + rain

Chortophaga 1 pair - taken separately
in that pass.

helicosterna can 3 taken in pass, almost
numb. + 1 juv.

Melanoplus mus, 1 ♂.

Dryfly arimilis 1 ad. in pass.

Remotus sp. 1 juv " "

Utth. 9 + 806 = 815.

Utth. in 0 + 96 = 96.

1953.67

1953 64 Blue Ridge Parkway, 8 ms. N.E.
of Asheville, Buncombe Co., N.C. Elev. (app.)
3150 feet. (R.) VIII. 18, 1953

On narrow shoulder on side of road with
small patch of natural cover.

Chortophaga very small juv. Road edge.

Melanoplus divinus? 1 ♂. In dead leaves
at edge of woods.

Melanoplus sp. juv. in roadside.

Attractus monticola. Same habitat as
Mel. divinus?

Other species seen: Microsterna car.,

Aphid xanth, and ad. Chortophaga.

Orth 6 + 800 = 806.

Orth vis. 1 + 95 = 96.

1953.65 Blue Ridge Parkway ^{near Craggy Meadows,} N.W. of
Mt. Mitchell (12 ms. from 1953.64), Buncombe
Co., N.C. Elev. approx. 5500 feet. VIII. 18, 1953.
(R.) Lookout point - pass.

Heavy fog and drizzle. Everything
taken.

Chortophaga 1 pair - taken separately in
that pass.

Microsterna car. 3 taken in pass, almost
numbered - plus 1 juv.

Melanoplus max. 1 ♂. in pass.

Gryllus assimilis 1 ad. in pass.

Nemobius sp. 1 juv. " "

Orth. 9 + 806 = 815.

Orth vis. 0 + 96 = 96.

1953.66 Singersat Ridge Crossing,
Blue Ridge Parkway, Mc Howell Co., N. C.
Elev (s. m.) 3406 feet VIII. 18, 1953. (R.)
In rain. Road edge of deciduous
forest and grassy patches. Everything
seen there.

Chironomophya 1 ♂.

Melanoplus f. - 2. 1 ♂, 2 ♀.

" sp. det. juv.

Orth. 7 + 815 = 822.

Orth. in. 2 + 96 = 98.

1953.67 Near Buck Creek Crossing,
Blue Ridge Parkway, Mc Howell Co., N. C.
Elev. (an.) 3800 ft. VIII. 18, 1953. (R.)

Wet - after rain.

Edge of deciduous forest and celt bank.
Everything seen taken.

Melanoplus mex. 1 ♂.

" curvus 1 ♂, 2 ♀

" divinus? 1 ♂.

Orth. 5 + 822 = 827.

Orth. in. 2 + 98 = 100.

1953.68 Chestoa View, Blue Ridge Parkway,
near Linville Falls, Burke Co., N.C. Elev. (6. m.)
4110 feet. Fog and drizzle. Anything
drained VIII, 18, 1953.

Edge of deciduous forest and grassy road
edge. Anything seen taken. Net work
almost impossible.

Nonotettix 1 juv. rupt.

Syrphula adum. 1 ♂.

Melanoplus f. r. 2 ♂.

" luridus 1 ♀.

Orth. 5 + 827 = 832.

Uther int. 2 + 100 = 102.

1953.69 Along South Fork of New River,
4 ms. S. of Independence, Grayson Co., Va.
(Immediately N of N.C. state line.) Elev. (ch.)
2400 feet VIII, 19, 1953. (R.)

Roadside slopes + drain and pocket of ^{low} corn
extending into deciduous woods. Rather unusual
loc. sole place for M. divinus. Acanthos sp.
rupt from tree foliage. Anything seen
taken.

Overcast with heavy light fog,
Cryphidella plidua 1 ♀ - had no caudal limbs!
Aeshia xanth. 1 ad. ^{roadside.}

Chrysopa 1 juv. luridus 1 ad. in drain.

" funer. rubrum ads. both sexes, roadside.

" divinus: 3 ♂, 4 ♀, 1 juv. see above. None
lost as far as I know.

Melanoplus sp. Numerous juvs.

Conorhynchus memoralis? A few, in same habitat as M. devius.

Conorhynchus straight wing. 1 ♀ roadside

Neurobis 1 ♀ Roadside.

Uerts 31 + 832 = 863.

Uerts no. 2 + 102 = 104.

1953. 70 Along Peach Bottom Creek, ~~#~~ 4.5 miles NW of Independence, Grayson Co., Va.

Elev. (an.) 3250 feet. VIII. 19, 1953. (R.)

Roadside through ^{Overcast with high fog.} cleared land with patches of deciduous forest. Everything seen taken.

Melanoplus devius? 1 juv.

" sp. 1 juv.

Conorhynchus memoralis? 1 juv.

Neurobis fasc. 1 ♂.

" carolinus 1 ♂, 2 ♀.

Uerts ^{an.} 7 + 863 = 870.

Uerts no. 4 + 104 = 108

1953. 71 South Hope of Iron Mountain, E. W. of Corner Rock, 13 ms. N. of Independence, Grayson Co., Va. Elev. (an.) 3125 feet. VIII. 19, 1953. (R.)

Overcast, high fog, cool.

1953.71 (cont.)

Roadside and in cove in mixed forest.
Everything seen taken except Hiscostaria
carolina.

Hippisus nyonius 1 sm. juv.

Sphragomon belli 1 taken at wood edge in
cove, cove.

Melanoplus f. 2. Numerous in cove.

Cnecrophalus sp. 1 juv.

Uranotheris sp. 1 ad, 1 juv.

Orth 11 + 870 = 881

Uther ins. 6 + 108 = 114

1953.72 Road crossing of Brushy Mtn.,
2 ms. N. of Sugar Grove, Smyth Co., Va.

Elev. (ch.) 3100 ft. VIII, 19, 1953. (R.)

Roadside in mixed heavy forest. Nothing
at all, etc. 1 juv. Teffis.

Orth. 1 + 881 = 882

Uther ins. 0 + 114 = 114

1953.73 Road crossing of Walker Mtn., 8.5
miles N. of Marion, Smyth Co., Va. Elev.

(6.m.) 3453 feet. VIII, 20, 1953. (R.)

Narrow road edges (mainly with
wood) and at crossing under a very
steep but cut rock face (too steep to walk).
Anything recognizable.

Chlorosternia caudata numerous, 2 taken
Spharagnum billi a few, 1 taken.
Melanoplus diff. 1 juv. taken
" sp. 1 juv. taken.
Scudderina sp. 1 ♂ taken.
Decanthurus sp. 1 small juv.
Orth. ♂ + ♀ + 2 = 890.
Other in. 4 + 114 = 118

1953-74 Road crossing of Brushy Mtn.,
-Taylorsville
4 ms. N. of Chatham Hill, Smyth Co., Va.

Elev. (l. m) 3064 feet. VIII. 20, 1958. (R.).

Roadside to deciduous forest. Area
limited & much disturbed. Everything
recog. taken.

Tetrix sp. 1 impt.

Tettigidea sp. 1 impt.

Chloromorpha u. 1 ♂.

Chlorosternia ca. a few, 1 taken.

Spharagnum billi 2 taken.

Melanoplus diff. 1 ♂ taken.

" curbens 1 ♂ taken.

Orth. ♂ + ♀ + 2 = 898.

Other in. 5 + 118 = 123

1953.75 Cove Creek, on Clear Fork, Tazewell
Co., Va. Elev. (ch.) 2350 feet. VIII. 20, 1953. (R.)

Mountain valley roadside vegetation,
flanked by cultivated fields on the side and
stream side tall growth on the other.

Everything recogn. Taken ex. Hirundo
car.

Tettigidea two pupae.

Chlorophanes v. 1 ♂, 2 ♀.

Melanerpes f. v. 1 ♂.

Contopus a few adults of both sexes.

Merula both sexes adult.

Phylloscopus 2 ♀♀ kept from tall
weeds, etc.

Orch. 14 + 898 = 912.

Other ins. 4 + 123 = 127.

1953.76 4 ms. SW. of Bland, Bland Co., Va.
Elev. (an. - ch.) 2750 feet. VIII. 20, 1953. (R.)

Edge of deciduous woods and broad stretch
of roadside vegetation.

Everything recogn. taken.

Syrnium adm 1 juv. all seen.

Empidonax ord. 1 juv.

Hirundo car. A number - 1 taken.

Sparangium Wli " " " "

Melanerpes aff. 1 ♂ taken - others seen.

" lucidus 1 ad. ♂ " 1 juv. taken

" f. v. Numerous. Both sexes taken.

Succinea sp. 1 ♂ taken.

Campoplex Reprs. of 2 spp. taken.

Nematus " " " " " "

Chasmodon 1 ad. ♂ taken, unsp.

Orth. 19 + 912 = 931.

Other in. 3 + 127 = 130.

1953.77 South slopes of Walker Mtn.
Wythe Co., Va. Elev (am) 3450 feet. VIII.20. 1953.
(R.)

Roadside on steep slopes of mixed forest,
small areas of rock outcrop with resultant
rock wash.

Everything recognizable taken exc. Blasio sp. c.

Cephus pellidus 1 in grass - all seen.

Melanoplus f. ? Numerous - 2 taken.

" lunatus 1 ad. - 1 juv. taken.

Orth 5 + 931 = 936.

Other in. 1 + 130 = 131.

1953.78 Blue Ridge Parkway, near
Blue Ridge Springs, Botetourt Co.,
Va Elev. (am. - ch.) 825 feet VIII.21, 1953.
(R.)

Along edge of decid. forest and grassy
roadside. Everything seen taken.

1953. 78 (cont.)

Syblula adum. Num., adults & juvs.

Chortophaga a few juvs.

Asphix xanth. Num. ads. & a few juvs.

Hippiscus negrosus 1 ♂ taken

Melanoplus sh. w. ♂ & ♀ taken small ones,

" juvs sp. ? juvs. taken.

" lunatus 1 ♂ - 1 ♀, all seen.

Nemobius sp. 1 ♂ swept

Orth. $32 + 936 = 968$.

Other ins. $2 + 131 = 133$.

1953. 79 Blue Ridge Parkway, innamed. above

Lynchburg Mines, Botetourt Co., Va. Elev. (sea).

1875 feet. VIII. 21. 1953. (R.)

Edge of deciduous & pine forest and grassy
sandy. Everything seen taken except

Hier. st. cas.

Syblula adum. ♂ & ♀ only seen & taken.

Hippiscus negrosus a few. 1 ♂ 1 ♀ taken.

Melanoplus f. r. Abundant.

Conocphala stritum a few.

Quaestus sp. 1 ♀ swept.

Orth. $14 + 968 = 982$.

Other ins. $1 + 133 = 134$.

1953.80 Blue Ridge Parkway, NW. of
Buford, Bedford Co., Va. Elev (an.)
2250 feet. VIII. 21, 1953. (R.)

Roadside - in low pine-oak woods.

Melanoplus f. r. in various roadside.

Anything recognized taken exc. Missot's
carolina. Much more seen in woods.

Syrphula adu. Numerous. Males only taken.

Pharagmus belli a few in woods, 2 taken
along road

Melanoplus f. r. see above.

" lucida 1♂ in wood edge.

Scudderia sp. 1♀ swept.

Pterophylla 1♀ swept from low ground
corn, largely swept from.

Conosyphus stricklandi a few.

Oreanthus 3 adults taken, swept.

With 16 + 982 = 998.

Other ins. 0 + 134 = 134

1953.81 Near Bearwallow Gap, Blue
Ridge Parkway, Bedford Co., Va. Elev. (an.)

2125 feet VIII. 21, 1953. (1.5 m. NE. of 1953.80)

Roadside and decid. forest, virtually
nothing in latter. Anything recogn. taken

exc. Missot-car. & Cyphia xanth.

Chortophaga 1 ad. ♀ very battered

Melanoplus f. r. Numerous.

1953.81 (cont.)

Melanophus diff. A few, both sexes taken.

Coccyzus 1 ♀ empty

With. 6 + 998 = 1004.

Other vis 0 + 134 = 134

1953.82 Union Mtn. Lookout, Blue Ridge
Parkway, Bedford Co., Va. Elev. (on b.m.) 3195
feet. VIII. 21, 1953. (R.)

Edge of decid. forest and very dry roadside
with mowed short grass. Everything seen taken
exc. Hispid. car.

Syrnula adm. adults - 2 instars juvs.

Chortophaga ad. ♀ - juvs in 2 instars.

Aupha xanth. 1 juv.

Hippisus reprobus 1 juv.

Melanophus ♀, on dead.

" diff. sp. 1 taken

Coronyphalus a few

With. 16 + 1004 = 1020.

Other vis. 2 + 134 = 136.

1953.83 Arnold Valley Lookout, Blue
Ridge Parkway, Bedford Co., Va. Elev.

(b.m.) 3660 feet. VIII. 21, 1953. (R.)

Edge of decid. forest with a few hemlocks,
and a grassy shoulder. Very dry. Everything
seen taken.

Syrnula ad. a few.

Chortophaga. no juvs. taken.

Nippisicus rufus Numerous, both sexes
Taken.

Desmoria can. A number. 1 Taken.

Melanoplus f. 2. Numerous.

" trittatus A single male seen - Taken.

Schistocerca americana 1 juv. Taken

With 12 + 1020 = 1032.

Other ins. 0 + 136 = 136.

1953. 84 Blue Ridge Parkway about
8 mi. S of Snowden, Bedford Co., Va.

Elev (approx) 1375 feet. VIII. 21, 1953. (R.)

Border of decid. forest - grassy roadside.

Most material taken at immed. wood edge.

Nothing in woods. Everything seen Taken.

Tillyidea 1 juv.
Chortophaga. A few adults.

Desmoria can. A few.

Nippisicus rufus Quite.

Pharyngon lili 1 Taken

Aphria xanth. 1 Taken.

Melanoplus f. 2. A few.

" curvipes 2 males Taken.

" sh. w. Small series of both
sexes - wood edge only.

Arctostemum sp. 1 ♀ juv.

Encephalodes 1 juv.

Uleacanthus 1 ♀

With 18 + 1032 = 1050.

Other ins. 0 + 136 = 136.

1953.85 - 4 ms W of Broadway.

Rockingham Co., Va. Elev. (ch.) 1000 feet.

VIII. 22, 1953. (R.).

Roadside, bordered by decid. woods, and
wood road in latter with heavy undergrowth.

Anything seen taken.

Tetrigidae 1 swept.

Wichman. vir. 1 ♀ along wood road.

Chortoph. 1 juv. swept.

Melanoplus f. 2. Numerous roadside

" Th. w. 1 ♀ on wood road

Orchel. vulgare A few adults in tall
roadside weeds.

Conocrepis num. ditto.

Anaxipha Abundant, ditto sweeping in
wood road thicket.

Hapithus ditto.

Cecanthis swept.

Orth. 65 + 1050 = 1115.

Other ins. 7 + 136 = 143.

1953.86. 4 ms due N. of Fulk's Run, Rocking-
ham Co., Va. Elev. (an.) 1250 ft. VIII. 22.

1953. (R.).

Old field and stony dry stream bed.

Anything seen taken etc. Schist. curv.

Spharagmus Wli. 1 taken.

Melanopl. f. 2. Num. 1 taken.

Cecanthis sp. swept.

Orth. 4 + 1115 = 1119.

Other ins. 7 + 143 = 150.

1953.87 2.5^{mi} ^W of Lost River (Town),
Lost River Valley, Hardy Co, W. Va. Elev.
(an.) 1400 feet VIII. 22, 1953. (R.).

Old quarry floor and roadside very
little. Everything seen taken exc. bliss
can.

Sphagnnum lilli A number - 2 Taken.
Melanoplus sp. 2. Num. 1 Taken.
Cnecoph. trilinea 14 Taken.

Crab. 4 + 1119 = 1123.

Other vis. 1 + 150 = 151.

1953.88 1/2 m. NW of Hanging Rock,
Hardy Co, W. Va. Elev. (an.) 1300 ft.
VIII. 22, 1953. (R.)

Edge of mixed forest, roadside and
woody border of Lost River. Anything seen
to Taken exc. bliss, can.

Melanopl. luridus - a few.

" tr. 10, forest edge.

Amblycorypha rot. 10, swept.

Cnecoph. - a few.

Al. canthos - 1 swept.

Anaxipha - four swept.

Crab. 11 + 1123 = 1134

Other vis. 0 + 151 = 151.

1953.89 Road crossing of Sandy Ridge
above Lost Pine, Hardy Co., W. Va. Elev.
(v.m.) 1467 feet. VIII, 22, 1953. (R.)

In and along edge of mixed decid. & pine
forest. Everything seen taken exc. Missot
car.

Spharagnum Wli 1 taken.

Melanoplus trittatus 1 tattered ♀ taken,
all seen.

Melanoplus luridus small series of
with moss.

Sp Chistura sp. app. not amer. Imm
juvs. swept.

Orth 12 + 1134 = 1146.

Orth ins. 0 + 151 = 151.

1953.90 Intermont, Hampshire Co., W. Va.
Elev. (an. & ch.). 960 feet. VIII, 22, 1953. (R.)

Border of mixed decid. & pine forest and
old field. Everything seen taken exc.
Missot car.

Chistura sp.

Syrtula adem. Ads. & juvs. seen & taken.

Spharagnum Wli a few, 1 taken.

Encyrtophorus trid. 1 ad. & 1 juv. taken - all seen.

Melanopl. f. r. seen

" sp. juv.

Conocoph. strictus - 1 taken.

Uranthus - 1 swept.

Orth. 17 + 1146 = 1163.

Orth ins. 0 + 151 = 151

1953.91. 3.5 ms. SW. of Gore,

Frederick Co., Va. Elev (am.) 1125 feet.

VIII. 22, 1953. (R.) Roadside and border
of and in mixed woodland. Very little
at all. Everything seen taken.

Syrphula - 1 ad. taken.

Melanoph. f. 2. A number - 2 taken

Crematops 1 swept.

Orth 4 + 1163 = 1167.

Other ins. 0 + 151 = 151.

1953.92 3 ms. NW. of Vain, Frederick
Co., Va. Elev (am.) 745 feet. VIII. 23, 1953.

(R.)

Roadside, shoulder of same, a decid.
forest. Nothing in litter. Everything
seen taken exc. Discostera carolina.

Diapheromera 1 juv. swept.

Dichromorpha v. 1 ♀ - all seen.

Spharagmus belli 1 taken - sev. others seen.

Melanoplus f. - 2. Number.

" Ph. w. 2 ♂ taken.

Conneptulus sv. swept.

Orth. 12 + 1167 = 1179.

Other ins. 0 + 151 = 151

1953.93 4 ms. S. of Ridge (1 m. N. of Va-
W. Va line), Morgan Co., Va. Elev. (an.) 840 feet.
VIII. 23, 1953. (R.)

Edge of deciduous forest ^{wood} - in same nothing.

Everything seen taken except leucosterna
car. & th. w. Melanoplus (lost).

Diapheromera 2 juvs. nupt.

Chironomorph o. 1 ♀ taken.

Ctenoptilophus trid. 2 large juvs. Taken -
all seen.

Hippiscus negrosus 1 ♀ taken.

Melanopl. f. r. a few.

" diff. 1 ♂ taken.

Suddonia sp. 1 ♀ oak scrub.

Conoclypeus 1 ♂ taken.

Quadratus 1 ad. ♂ + sev. juvs.

Orth. 13 + 1179 = 1192.

Other ins. 0 + 151 = 151.

1953.94 4.5 ms. NNE of Berkeley Springs.
Morgan Co., W. Va. ~~Elev. (an.) about~~ VIII. 23, 1953.
(R.) Elev. ca. 500 feet (ch.)

Roadside in mixed woods - one side

fall woods, the other a steep rocky cut.

Melanoplus th. w. in both situations.

Everything seen taken etc. Melanoplus
f. r.

leucosterna carolina - 1 taken

Mel. th. w. A small series - seen above.

Conocophalus - Not used taken.

Arth. $14 + 1192 = 1206$.

Other ins. $0 + 151 = 151$.

1953.95 2 ms. W. of Green Ridge (on
U.S. 40), Allegany Co., Md. Elev. (an.) 800 ft.
VIII. 23. 1953. (R.)

Roadside and along thinned out decid.
woods - old fields.

Everything seen taken exc. Blissasteria
cardina.

Asphondylia operiosa 1♀ - all seen.

Melanoplus f. r. Sw taken - species
numerous.

Sudderia - 1♀ oak scrub.

Conocophalus - small series of ♂♂.

Cecanthus 1♀ particular species.

Arth. $9 + 1206 = 1215$.

Other ins. $0 + 151 = 151$.

1953.96 East base of Warrior Ridge,
3 ms. N. of Black Valley Gap, Bedford
Co., Pa. Elev. (an. + ch.) 1000 feet. VIII. 23. 1953.
(R.)

Roadside in deciduous woods. Everything
seen taken exc. Blissast. car. + 1 Hippisus
rupens.

1953.96 (cont)

Tetrix 1 swept from ground.

Diaphanomeria fen. 1 ♂ ad. swept.

Amblycorypha rot. 1 ♂ 1 ♀ taken separately.

Conocephalus 1 ♀.

Desautelsia 1 swept.

Orth. 6 + 1215 = 1221.

Other ins. 0 + 151 = 151.

1953.97 Clear Ridge, 3.25 ms. NE. of
Chambersville, Bedford Co., Penna. Elev.
(ch.) 1550 feet. VIII.23, 1953. (R.).

Roadside, on one side decid. ^{woods} forest, on
the other cultivated fields. Everything seen
taken.

Chloromorpha viridis 1 ♂.

Missotria cruciana a few, 1 taken.

Melanophus diff. 1 taken - w. juvs. also
seen.

" f. r. None 1 taken.

Sundevia hw. ♀♀ taken

Orth. 6 + 1221 = 1227.

Other ins. 0 + 151 = 151.

1953.98 2 ms. N. of Clearville.

Bedford Co., Pa. Elev. (ch.) 1480 feet.

VIII.23, 1953.

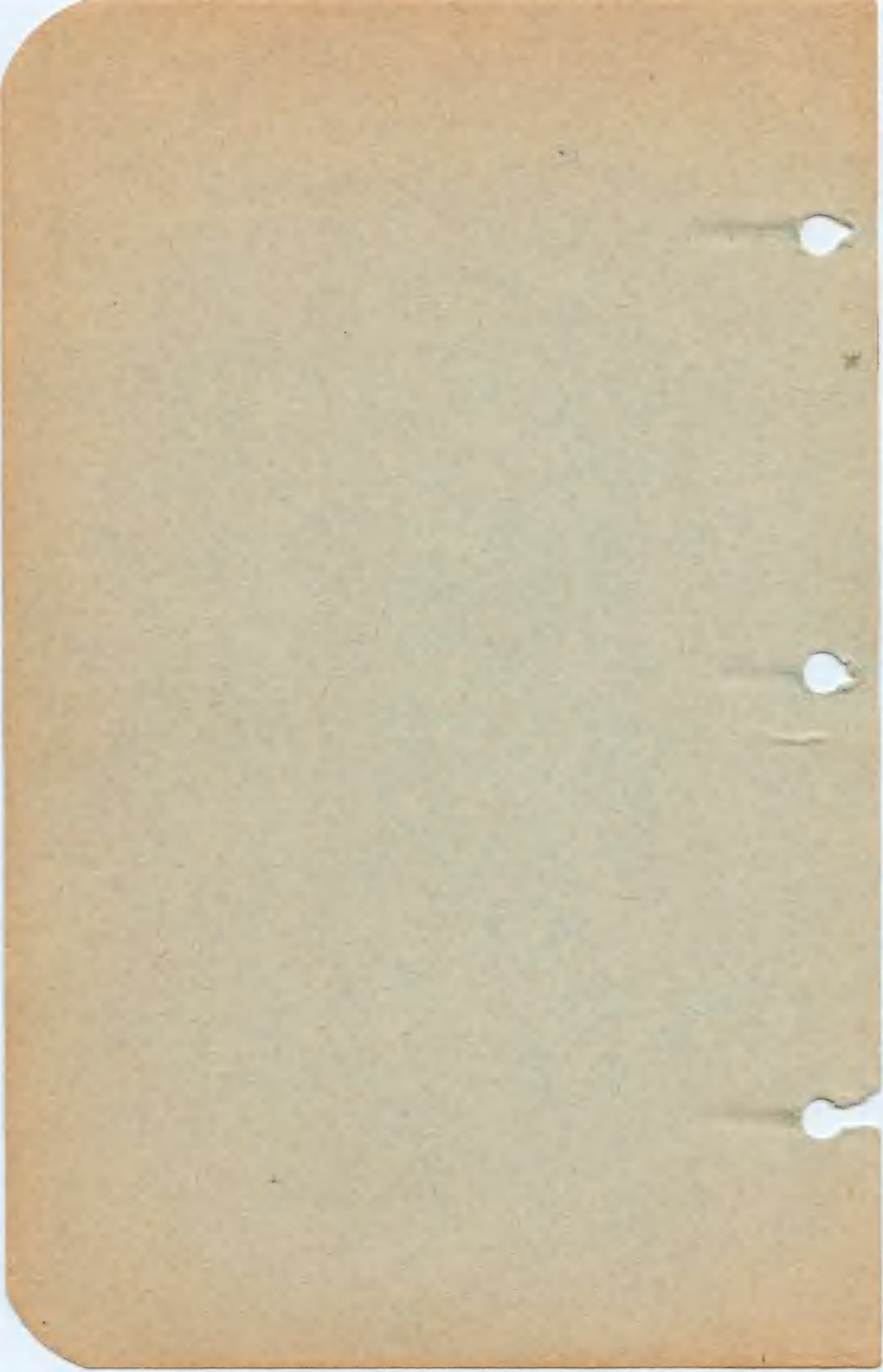
Roadside in decid. woods. Little
evident, but everything seen taken.

Sphragmum lilli 1 Taken, all seen.
Melanophus f. r. a few - 1 Taken.
Concyphalus - with mass Taken.

Neurobis 1 ♂ 1 ♀, unpaired.

Ueth 7 + 1227 = 1234.

Ueth vis. 1 + 151 = 152.



1954.

No number. 2 ms. W. of Brookshire,
Waller Co., Texas. IV. 9. 1954. (R.)

Roadside. Notes in personal diary.

Orth. 8

Chortophaga

Other ins. 0

Euphaea

Pediocetes

1954. 1 6.7 miles S.W. of Junction, Kinick Co.,
Texas. Elev. (ann.). 1960 feet. IV. 11. 1954. (R.)

Roadside along S. Blanco River under bluffs.

Grass patches in cattle ^{they} country, with some large
mesquite. Overcast & somewhat windy.

Microctonus 14. all seen.

Opius Two taken separately, all seen.

Euphaea. 1 juv. ♀. All seen.

Chortophaga Two seen, 1 taken.

Trachyphadus 1 ♀ taken, all seen.

Triclistus pallidip. Many juvs. in various stages.

Parasidomus ? 1 very small juv.

Melanoplus ? 1 juv. very small, swept.

Pediocetes 1 very small juv. swept.

Orth. 18 + ♀ = 26.

Other ins. 32 + 0 = 32.

✓ 1954. 2 8
70 m. S. of Telegraph, Kinick Co., Texas.

Elev. (ann.) 1860 feet. IV. 11. 1954. (R.)

On bank of Edwards Plateau limestone on W.

side of S. Klaus River. Surface solid or broken whitish limestone. Cover chiefly scattered dry brush brush and curly grass. Scattered open tree cover - some mesquite.

Microchloa. 1 taken (♀) - all seen.

Hippiscus 1 juv. taken - all seen.

Platylactista 3 seen - 2 taken. All on bare limestone.

Aypha. 1 ♂ taken, all seen.

Wt. 7 + 26 = 33.

Wt. no. 2 + 32 = 34.

1954.3 6.5 ms. SW. of Telegraph, Edwards Co., Texas. Elev. (an.) 2275 feet. IV. 11. 1954. (R)

Edwards plateau surface of rolling limestone. Work done roadside (climb cut out). Scattered brush and curly grass, low mesquite - thorn oak, with most of surface broken white limestone. Everything seen taken etc. 2 adult Hippiscus, which the high wind carried far away after the net being wind snagged.

Microchloa 1 ♂ 1 ♀ taken separately. ♀ has Porocera luddiana type of coloration.

Platylactista 1 ♀.

Hippiscus 2 ♀♀ in insect preceding mat.

Trim. pallidus. 1 ad.

Wt. 6 + 33 = 39

Wt. no. 3 + 34 = 37

1954.4 10 ms. SW. of Telegraph, Edwards Co.,
Texas. Elev. (av.) 2290 feet. IV. 11. 1954. (R.)
On Edwards Plateau limestone. Roadside.
Very little, all sun taken.

Mesochorus. 1 ad. ♀.

Colth. 1 + 39 = 40

Other ins. 2 + 37 = 39

✓ 1954.5 3 ms. W. of Roosevelt, Sutton Co., Texas.
Elev. 2400 feet. IV. 12. 1954. (R.)

Roadside. Edwards plateau surface - scattered
tough grass + curly grass, with other low plants.

No *C.* except *Mesochorus*. Two sun, 1 taken.

Colth. 1 + 40 = 41

Other ins 13 + 39 = 52

✓ 1954.6 9 ms. E. of Jovina, Sutton Co., Texas.
Elev. 2600 feet. IV. 12. 1954. (R.)

Roadside. Only *C.* ~~*Mesochorus*~~ = sun.
juv. *ocypoides*.

Colth. 2 + 41 = 43.

Other ins. 7 + 52 = 59.

1954.7 2 ms. W. of Jovina, Sutton Co., Texas.
Elev. 2200 feet. IV. 12. 1954.

Roadside. Only *C.* 1 *Mesochorus* = sun. juv.

ocyp. Colth. 3 + 43 = 46.

Other ins. 1 + 59 = 60

1954. 8 1 m. W. of Howard Creek, on U.S. 290,
Cochitt Co., Texas. Elev. 2550 ft. (am.)

IV. 12. 1954.

Roadside and woods on low finely broken limestone.
Heavily washed from recent flood that rained.
No C. except 2 immature Podocarpus & 1 juv.
oedipoid.

Wet. 3 + 46 = 49.

Other no. 0 + 60 = 60.

1954. 9 10 m. WSW. of Sheffield, Pecos Co., Texas
Elev. 2600 ft. (am.) IV. 12. 1954. (R.)

On lower slope of E. border of Strocton escarpment
Over mesquite, Covillea, Kochulinia & tall
dead grass in the marshes, all of which ran heavily in
the last 24 hours. Wet, overcast and
threatening.

No C. except 1 juv. Bostettia swept from
Covillea.

Wet. 1 + 49 = 50.

Other no. 1 + 60 = 61

1954.10. 10ms. W. of Fort Stockton, Pecos Co.,
Texas. Elev. (an.) 2910 feet. IV. 13, 1954. (R.)
No. 10.

O. 0 + 50 = 50
Other ins. 9 + 61 = 70

1954.11 9ms. E. of Balmorhea, Pecos Co., Texas.
Elev. (an.) 2680 feet. IV. 13, 1954. (R.)

Roadside. Wet. little corn. Sticky silt.

Sole O. 1 juv. Trimerotropis

O. 1 + 50 = 51.

Other ins. 5 + 70 = 75.

1954.12. 4.5 ms. S. of Toyahvale, Jeff Davis Co.,
Texas. Elev. (an.) 3750 feet. IV. 13, 1954. (R.)

Roadside. Low corn-thistle, acacia-minnow &
var. low plants, some in flower. Surface
heavily washed by recent rains.

No. 10

O. 0 + 50 = 50

Other ins. 5 + 75 = 80.

1954.13 Roadside pub along Limpia Creek,
opposite mouth of Dragier Canyon (12ms.

NE. of Fort Davis), Jeff Davis Co., Texas.
Elev. (ch.) 4500 feet. IX. 13. 1954. (R.)

In short curly grass and in dead oak leaves
on ground, largely under spreading oaks.

All *O. sem Fabrum*. None mature except 1 *Trim.
pallidipennis*. Tetrigid among dead oak
leaves close under frumpled flunders of
metamorphic rock.

Polocosa juvs. fairly numerous but
localized in areas. In sev. instans.

Criatellus 2 juvs. only.

Trim. pallidip. 1 ad. sev. juvs.

Tetrigid - as above.

Juv. Dictyoid. all seen.

Juvs. of at least three other genera.

$$O. \quad 31 + 50 = 81.$$

$$\text{Other ins} \quad 2 + 80 = 82.$$

✓ 1954. 14 Limpia Canyon, Blaris Mts., Bms.

NW. of Fort Blaris, Jeff Blaris Co., Texas.

Calc. approx. 5500 feet. 2V. 13. 1954. (R.)

Short yellow sun-dried grass with scattered
weeds and low cat-claw under scattered
tree cover, in part oaks.

All *O. sem Fabrum*. None adult.

Polocosa juvs. sev.

Criatellus 1 juv.

$$\text{Webs} \quad 3 + 81 = 84.$$

$$\text{Other ins} \quad 14 + 82 = 96.$$

✓ 1954.15 Musquiz Canyon, 10 ms. S.E. of
Fort Davis, Jeff Davis Co., Texas. Elev. 4500 ft.
(th.) 11.13. 1954. (R.)

Roadside. Tall sun dried grass, short
grass (pinn) - low araria.

All O. sun. Fawn, all pins.

Protospora. - *Existitia*.

$$O. 5 + 84 = 89.$$

$$\text{Other no. } 5 + 96 = 101$$

✓ 1954.16 Paisano Pass, Presidio Co., Texas.
Elev. (b.m.) 5116 feet. 11.14. 1954. (R.)

Roadside. Tall dry bunch grass, with low
annuals and scattered rosinas and narrow-
leafed grasses. Hillsides largely tan broken
rock - rock silt wash. Scattered juniper on
slopes.

Low. of 2 species (*Pseudosermyla* & *Parabacillus*)
of phosmita rept. 1 juv. *Protospora* rept. Then
I killed all O. seen.

$$\text{List. } 8 + 89 = 97.$$

$$\text{Other no. } 8 + 101 = 109.$$

1954.17 U.S. 67 - 21 ms. SW. of Marfa (21 ms. NE. of Shafter), N. edge of Frenchman Hills, Pecos Co., Texas. Elev. (ch.) 4900 feet. IV. 14, 1954. (R.)

Roadside in a heavily grazed district. Scattered yuccas, many *volvias*, some *Ephedra* and mesquite.

Grass very short - scanty, sun-cured.

All *C.* seen taken - all except, all juvs.
Centistes, *Prolocosa* *Q.* 4 + 87 = 101.

Other vis. 6 + 109 = 115.

1954.18 18 ms. SW. of Marfa (along U.S. 67), Pecos Co., Texas. Elev. (an.) 4600 ft. IV. 14, 1954. (R.)

Roadside. *Ephedra*, dry grass, scattered yucca + cat-claw. Areas of virtual stone pavement. *Hollus* mainly washed in last few days.

All *C.* seen taken.

Phrynotettix robustus (femoral - damaged) on stone pavement. Search yielded no others.

Juv. *Prolocosa* sev. Juv. *Pseudosymple* un. except.

C. 4 + 101 = 105

Other vis. 1 + 115 = 116

1954.19 Near Aragon, 8 ms. WNW of Marfa,
Presidio Co., Texas. Elev. 4900 feet (an.)
IV. 14, 1954. (R.)

Roadside. Scattered areas of sun-dried desert
grass among ocotillo, yucca & sotol, and areas
of broken stone. All O. seen taken.

1 juv. Pseudosermyla nupt. Juv. Perlossa
1 juv. Arctioid.

Orth. $4 + 105 = 109$.

Other ins. $2 + 116 = 118$

1954.20. Between Chispa and Wendell,
(15 ms. NW of Valentine), Jeff Davis Co.,
Texas. Elev. 4050 feet. IV. 14, 1954. (R.)

Roadside. Covillea, black brush, acacia,
Ephedra, etc., scattered fall dry bunch grass,
many low flowering annuals.

All O. seen taken. Very small juv. Boottetia
beaten from Covillea. 1 juv. Thim. nupt
from ground.

Orth. $4 + 109 = 113$.

Other ins. $2 + 118 = 120$

1954.21 7 mi. S. of Van Horn, Culberson Co.,
Texas. Elev. (an. of 3850 ft. IV. 14, 1954. (R.)
Roadside. Covillea, black brush and low
flowering annuals. All C. seen taken.
3 juv. Botettia swept from Covillea.
Aeth. 3 + 113 = 116.
Other ins. 2 + 120 = 122.

1954.22 At SW. foot of Baylor Mts. (on Tex. 54),
12 mi. N. of Van Horn, Culberson Co., Texas.
Elev. (brush mark) ^{4290 feet} 3648 feet. IV. 15, 1954. (R.)
Covillea - black brush and ~~other low brush~~ ^{in rocky soil.}
~~sun-dried grass in patches. Stony surface.~~
No C. except juv. Botettia swept from Covillea.
Aeth. 3 + 116 = 119.
Other ins. 1 + 122 = 123.

✓ 1954.23 1 mi. SW. of Salt Lake (was covered with
standing water), 20.5 mi. N. of Van Horn,
Culberson Co., Texas. Elev. (brush mark) 3648
feet. IV. 15, 1954. (R.)
Covillea, black brush and other low brush;
~~sun-dried grass in patches. Stony surface.~~
No C. except juv. Botettia swept from
Covillea. Aeth. 13 + 119 = 132.
Other ins. 5 + 123 = 128.

1954.24 About 4 ms. N. of Figure Two Ranch
(39 ms. N. of Van Horn), Culberson Co.,
Texas. Elev. approx. 3600 feet. IV. 15. 1954. (R.)

Saline impregnated silt and consolidated
clays. Low sun-dried bunch grass and
various low leafed perennials - a few
narrow-leafed grasses. Much bare
ground. Sol. C. - 1 juv. Crittentis, msp.

Utah. 1 + 132 = 133.

Other ins. 3 + 128 = 131

✓ 1954.25 Guadalupe Pass, Culberson Co., Texas
[Immediately S.E. of El Capitan - Signal
Peak in the Guadalupe Range.] Elev. (checked
with b. m.) 5400 feet. IV. 15. 1954. (R.)

Very short dry bunch grass in tufts, ground
heavily washed between some yucca,
cholla and spiny trees.

All species of C. seen taken. Post 1 ad.
Crittentis.

Pterocera delicatula local, all active and
relatively elusive. In small colonies.
Crittentis few, apparently partial to one
special locale.

Utah. 19 + 133 = 152.

Other ins. 0 + 131 = 131.

1954.26 1 m. W. of Grants, Lincoln Co., New Mex.

Elev. 6100 feet (aner.). IV.16.1954. (R.)

Roadside. Dry reddish silt with very tall dry bunch grass - various weeds. Air full of dust. All *C.* seen taken.

Juv. Trin. - Xanthippus all recognizable

C. 5 + 152 = 157.

Other in. 4 + 131 = 135.

1954.27 3 ms. SW. of Glueco, Sacramento Mts., Lincoln Co., New Mexico. Elev. (aner.) 7000 feet. IV.16.1954. (R.)

Roadside. Tall dry bunch grass, areas of pebbly silt and stretches of pebble pavement, latter with scattered mats of very low plant cover. Bordering slopes thickly dotted with juniper and piñon, with but little other cover. All species of *C.* recognizable taken. Cophia - saw 2 - 1 taken.

Ceritettix largely juv. some adults in tall grass largely.

Psolonus delicatula - few adults. more juv., on the pebbly and silty areas, not in grass.

C. 35 + 157 = 192.

Other in. 3 + 135 = 138.

1954.28 Between Bent and Mesalvo
(3 ms. W. of latter), Otero Co., New Mexico.
Elev. approx. 6200 feet. IV.16.1954. (R.)
Dry (sun-cured) grass, tall composites,
sphaerocarpus, etc., with juniper on bordering
flaps. Soil O. sun taken. W. W. Pollock
Q. - 2 + 192 = 194.
Otero no. 1 + 138 = 139.

1954.29 White Sands National Monument,
Otero Co., New Mexico. Elev. 4100 feet.
IV.17, 1954. (R.)

In bays between dunes of gypsum sand
areas where there is a saline hard clay and
a sparse vegetation of violins, sphaerocarpus,
tufts of grass, etc. Also on dunes of
pure gypsum. On the latter all but
one of the jaws of Artemia lutea were
taken. On the first one of the jaws.
Artemia, one Pollock delicatula on
hard pan, and the jaws. Phudocoryne
unscript. Diligent search was made
for more Artemia, but without result.

Oth. 7 + 194 = 201
Oth. no. 3 + 139 = 142

↓
1954.30 5ms. N. of Three Rivers, Lincoln Co.,
New Mexico. Elev. 4750 ft. IV. 15. 1954. (R.)
In Atriplex, mesquite - some dried grass on
reddish sand.

1 juv. Cibolarius on surface. 1 juv.
phasmid - prob. Pseudorhyncha trip.

Orth. 2 + 201 = 203.

Other in. 6 + 142 = 148.

↓
1954.31 Lava beds NW. of Carrizozo, Lincoln
Co., New Mexico. Elev. 5150 feet (an.).

IV. 18. 1954 (R.)

Surface lava with yucca, yucca - cholla,
with Atriplex - some grass where silt has
blown on.

Adip. juv. beaten from Atriplex. Saw
phasmid in general beating.

Orth. 3 + 203 = 206.

Other in. 5 + 148 = 153.

↓
1954.32 Hills, ^{10 ms. W.} west of Carrizozo, Lincoln Co.,
New Mexico. Elev. 5725 feet (an.) IV. 18. 1954.
(R.)

Rolling hills with juniper, cholla, yucca
(two species) and much dried short grass and
tall dead composites. All D. seen taken

(1954.32 cont.)

except, 1 ^{other} ad. Perdorena maulipennis,
which escaped.

Ground surface stony in areas.

Three ^{ad} P. maulipennis seen, two taken.

Juv. Perdorena sp. ?

Orth. 7 + 206 = 213

Other ins. 4 + 153 = 157

1954.33 Road crossing ^{to} U.S. 380 on the Sierra
Uscuna, 23 ms. ~~at~~ WNW of Carrizozo,
Socorro Co., New Mexico. Elev. 6380 ft. (an.)
IV. 18, 1954. (R.)

Rolling hills with park-like cover of juniper
and piñon. Patches of sun-dried short
grass in stony soil.

All O. seen taken. 4 juv. Centistes
+ 1 juv. Perdorena.

Orth. 5 + 213 = 218

Other ins. 0 + 157 = 157

✓ 1954.34 6 ms. SW of Tuzith on Cuernavaca
Sierra Co., New Mexico. Elev. (an.) 4025
feet. IV. 19, 1954. (R.)

Covillea + mesquite. Little. All O.

seen taken. Juv. Centistes + juv. mantid.

All taken.

Orth. 4 + 218 = 222

Other ins. 9 + 157 = 166.

1954.35 4 ms. WSW. of Hatch, Luna Co., New Mexico. Elev. 4375 ft. IV. 19. 1954. (R.)

Bank with sandy surface and nearly clean sand in washes. Covillea - Mesquite chief com. All O. seen taken. 1 juv.

Protella, swept from Covillea.

Uoth. 1 + 222 = 223.

Other ins. 2 + 166 = 168.

1954.36 Near Hockitt, Luna Co., New Mexico - Elev. approx. 4400 feet IV. 19. 1954. (R.)

Bank mesa with ^{small} low gray-white tuft of curly grass, sun-dried & scattered sphaerocarpus and narrow-leaved grasses, also a very few low mesquite. Everything taken was swept. All O. seen taken. Juv. approx. of Covillea - Psolocoma.

Uoth. 3 + 223 = 226.

Other ins. 4 + 168 = 172.

1954.37 5 ms. SW. of Florida, Luna Co., New Mexico. Elev. 4350 ft. (an. - ch.) IV. 19. 1954. (R.)

Covillea dotted with and pebbles. Sole O. 1 juv.

Protella swept from C.

Uoth. 1 + 226 = 227.

Other ins. 2 + 172 = 174.

1954.38 10.5 ms. S. of blening (Toward
Columbus), Luna Co., New Mexico. Elev.
4250 feet (ch.). IV. 19. 1954. (R.)
Roadside brush (chiefly mesquite) on
sandy soil. No O.

Usth. 0 + 227 = 227.

Other ins. 3 + 174 = 177.

✓ 1954.39 2.5 ms. NW. of Lordsburg, Hidalgo
Co., New Mexico. Elev. (an.) ~~4300~~ 4250 feet.
IV. 20. 1954. (R.)

Roadside. Tall dry grass, dense bushy
Composites (not in flower) and clumps of
low yellow ^{flowered} Composites (in flower).

All O. taken, or seen, were secured by
sweeping.

Juv. Blaph. or Pseudocampoplex swept from grass.

Juv. Mesoprotella from flowering composite.

Usth. 5 + 227 = 232.

Other ins. 38 + 177 = 215.

1954.40 6 ms. S.E. of Franklin, Hidalgo
Co., N.M. Elev. (an.) 5775 feet. IV. 20. 1954.
(R.)

Roadside. Scattered Crochelia ranging.

No O. Usth. 0 + 232 = 232.

Other ins. 3 + 215 = 218.

✓ 1954. 41 East side of road crossing (U.S. 70)
Peloncillo Mts., 9 ms. NW. of Blumcan
Greenlee Co., Arizona. Elev. 3975 feet (an.).
IV. 20, 1954. (R.)

Lower slopes of range, Bishop shale with
Covillea and patches of tall sun-dried curly grass
and tall, ^{low} dry composites.

Pseudoserphus juv. braten from ^{low composites} grass.
2 juvs. (diff. instans) of Insara covilleae braten
from Covillea.

Atelopus juv. braten from Covillea.

$$\text{Orth. } 4 + 232 = 236.$$

$$\text{Other ins. } 9 + 218 = 227.$$

1954. 42 Near top of road crossing (U.S. 70)
of Peloncillo Mts., 12 ms. NW. of Blumcan,
Greenlee Co., Arizona. Elev. (an.) 4150 feet.
IV. 20, 1954. (R.)

Roadside of reddish pebbles and stones,
with ^{dry} "bunch" grass and forb-like weed. All
Q. on stony surface.

1 juv. Trin. pallidipennis = 2 juvs.

Cibolarius. All seen.

$$\text{Orth. } 3 + 236 = 239.$$

$$\text{Other ins. } 0 + 227 = 227$$

✓ 1954.43 13 ms. E. of Solomonville,
Graham Co., Arizona. Elev. (aner.) 3300
feet. 11.20. 1954. (R.).

Roadside. Coriaria and dry grass on
stony silt. Much Coriaria in full bloom.
Soil. Taken except from Coriaria - juv.
Insecta coriariae.

Utth. 1 + 239 = 240.

Other ins. 12 + 227 = 239.

✓ 1954.44 13 ms. S. of Safford, Graham
Co., Arizona. Elev. 3575 ft. (aner.) 11.20. 1954.
(R.)

Semi-dried brush pass, some mesquite grass,
flattering of Coriaria, many composites with
old dry heads, a few low mesquite and an
occasional yucca. All O. next etc.

Trimerotropis pallidip. + Citrolarius, which
was on the rather stony ground.

Utth. 7 + 240 = 247. Juv. Pseudomorph.
Juv. Arthropoda
Juv. Hesperidicty

Other ins. 5 + 239 = 244.

✓ 1954.45 Railroad Pass, Cochise Co., Arizona.
Elev. 4600 ft. (aner.) but check, maybe too high!
Apr. 21. 1954. (R.). + 350 ft. (ch.)

Roadside. Grass tufts + weeds. All O.
seen taken. Es Con. carinata common
No juvs.

Utth. 25 + 247 = 272.

Other ins. 3 + 244 = 247.

1954.46 Near Cochise, Cochise Co., Arizona.

Elev. (ch.) 4212 feet. IV. 21. 1954. (R.)

Very clay playa with tufts of sun-cured
tall bunch grass and low curly grass.

All O. seen taken, all juv. - appar.

Eremicanus - Cordillarius.

Ueth. 6 + 272 = 278.

Ueth. vis. 4 + 247 = 251.

1954.47 Bonita Canyon Road, Chiricahua

Nat. Monument, Chiricahua Mts., Cochise

Co., Arizona. Elev. 6000 ft. IV. 21. 1954. (R.)

Pine, checker-barked juniper, manzanita,

etc. No insects - except butterflies - seen

except 1 bug! Ueth. 0 + 278 = 278.

Ueth. vis. 1 + 251 = 251.

1954.48 Bonita Canyon near mouth, ^{IV. 21} ¹⁹⁵⁴

Chiricahua National Monument, Chiricahua

Mts., Cochise Co., Arizona. Elev. 5200 ft. (an.)

Manzanita, oaks and piñon. Very dry,

oak leaves withering up! Strong tilt

with almost any curly grass. All O.

seen the juv. Taken!

Ueth. 1 + 278 = 279.

Ueth. vis. 0 + 251 = 251.

1954.49 Sulphur Springs Valley, 2 ms. W. of
El Morado School, Cochise Co., Arizona.
Elev. 5000 ft. (chart). IV. 21. 1954. (R.)

Roadside. Stony soil with tall sun-
dried bunch grass and other very low
com. All species of U. seen were
taken. Wind very high.

Trim. pallidipennis. 14. adults + imm. of juvs.

Curozsa carinata 1 ad.

Embittis 1 ad. ^{Cuddehousi}
juvs. which are clearly ref. to juvs. - Hadrotettix

Hactylotum, Polisson, Melanoplus: 1 dentidid (juv.?).

$$\text{Cuth. } 27 + 279 = 306.$$

$$\text{Other ins. } 2 + 251 = 253.$$

1954.50 Sulphur Springs Valley, WNW. of Sunflower,
Cochise Co., Arizona. Elev. 4600 ft. (chart). IV. 21. 1954 (R.)

Roadside. Patch with tall dry grass and stony
border of valley floor, the latter with short dry grass.

Very little U - all seen taken. 1 very small
juv. mantid + 2 very sm. juv. parashopper. All

insect. Cuth. 3 + 306 = 309

$$\text{Other ins. } 7 + 253 = 260.$$

✓ 1954.51 Sulphur Springs Valley, 5-25 ms.
N. of Pearce, Cochise Co., Arizona. Elev.
(b.m.) 4245 feet. IV. 21, 1954. (R.)

Tall dry grass in ^{dry} basin and ^{patches of} short
erly grass on reddish granular silt. Little
in most, ~~most~~ bulk taken on latter. All
specimens of both. seen taken, and all
specimens juv. of which the following genera
are readily recogn. - Postosora, Cucygra
caninata, Paropromela, Cordillarius.

$$\text{leth. } 18 + 309 = 327.$$

$$\text{leth. ins. } 2 + 260 = 262.$$

✓ 1954.52 10 ms. N. of Fort Huachuca (also
10 ms. W. of Fairbank), Cochise Co., Arizona.
Elev. 4400 ft. (chart). IV, 22, 1954. (R.)

Tall sun-dried grass with scattered mesquite
and yucca, on stony and granular reddish
silt. All C. seen taken. All juv.

Recognizable genera. Postosora, Eremianis,
Cordillarius - blastylocum. juv. mantis.
All swept.

$$\text{leth. } 18 + 327 = 345.$$

$$\text{leth. ins. } 1 + 262 = 263.$$

✓ 1954.53 Broad draw between the
Whitatum and Mustang Mountains,
15 mo. NNW. of Fort Huachuca, Cochise
Co., Arizona. Elev. (chart) 4700 feet. IV. 22, 1954. (R.)
Tall dry grass, low weeds and bare red silt
with pebbles and stones. All O. seen taken.
Mostly swept in grass and weeds. Juv.
Hadrotettix - adult Xanthippus on bare
ground. Other fauna major in grass. Erithalis
Postorosa - Parabrillius.

leth. 9 + 345 = 354

Other no. 1 + 263 = 264.

1954.54 Sonoita, Santa Cruz Co., Arizona.
Elev. (chart) 4800 ft. IV. 22, 1954. (R.)
In tall dry yellow grass with other dead
stems of shrubs on gravelly silt.
Sole O. Parabrillius, ^{1 juv. sp. det. id.} swept from a very
circumscribed patch.

leth. 4 + 354 = 358.

Other no. 1 + 264 = 265.

1954.55 2 mo. SW. of Patagonia,
Santa Cruz Co., Arizona. Elev. (chart)
3890 feet. IV. 22, 1954. Roadside wash
of fill - all O. seen taken except sev.

juv. Conyza carinata. Only species C.
carinata, 3 ads, num. juvs. in various
stages.

Ueth. 10 + 358 = 368.

Ueth. ins. 0 + 265 = 265.

1954.56 1.5 ms. NE. of Nogales, Santa Cruz Co.,
Arizona. Elev. (Chart) 3900 ft. IV. 22, 1954 (R.)
Silty hills with stone and gravel cover.
Short curly grass and scattered bunch
grass, mesquite and other trees. Repres.
of all species of O. sensu lato taken.

Xanthippus, ^{adult} on bare ground, all seen.

Other genera recogn. rep. by juvs.: Poliorosa,
Conyza (carinata), Eritettix, Agrostettix

Ueth. 17 + 368 = 385.

Ueth. ins. 1 + 265 = 266.

1954.57 1 m. N. of Tubac, Santa Cruz Co.,
Arizona. Elev. approx. 3200 ft. IV. 22, 1954
(R.).

Stony and gravelly red silt with
frankle weed and sun-dried bunch
grass. All species of O. sensu lato taken.

Trin. pallidus, num. adults + juvs.

Poliorosa ^{sp.} pusilla a few adults.

Ueth. 6 + 385 = 391.

Ueth. ins. 1 + 266 = 267.

✓ 1954. 58 10ms. N. of Tucson, near W. end of
Santa Catalina Mts., Pima Co., Arizona.
Elev. (am). 2500 feet. IV. 23, 1954. (R.).

On gravel with larger stones, short grass,
cholla, some mesquite - palo verde (much
of latter in full bloom). Everything in way
of ^{specimens} taken.

Juv. Leptantria running on ground.

Juv. Pseudomyle swept from grass.

Trin. pallidipennis, ^{ads.} on bare surface - others
run.

Podocosa Tex. parvella. On ground surface
among short grass - a few others run.

Blattella vir. gibb. taken on ground.

leth. 11 + 391 = 402.

leth. ins. 1 + 267 = 268.

✓ 1954. 59 Bush in wood. N. of ^{road} crossing of Canada
del Oro, Pima Co., Arizona. IV. 23, 1954. Elev.
2750 ft. (am.) (R.)

Pebbly silt with short mixed ever and park-like
acacia, cholla, nopal, palo verde, with several
species of yellow-flowered sunflowers or
daisy-like composites. All species of the
silk were collected.

Perilottix sanguineus juv. - in 3 instars - on
yellow-flowered sunflower-like composite.

Coryza carinata - a few, 2 adults
taken, on pond surface - local.

Trin. pallidip. 1 ad. taken - others seen.

Cibicoides 1 ad. on silt, all seen.

Poliorosa Tex. pusilla. 1 taken, no. others seen,
on pond surface, very active.

$$\text{Orth. } 11 + 402 = 413.$$

$$\text{Utheria. } 6 + 268 = 274,$$

1954.60 Big Wash crossing of Florence road,
1/2 m. N. of Grade Junction, Pinal Co.,
Arizona. Elev. 2900 feet (an). IV. 23. 1954. (R.)
Mesquite, acacia, cholla, yucca, with
short grass and much yellow flowered
composites. All species of C. neoguineae
were taken.

Coryza carinata largely juv. - 1 ad. taken,
local.

Trin. pallidip. a few ad. seen - 1 taken

Poliorosa Tex. pusilla juv. only, no.
taken.

$$\text{Orth. } 9 + 413 = 422.$$

$$\text{Utheria no. } 2 + 274 = 276.$$

1954.61 U.S. 80 9.5 ms. W. of Grade Junction.
Pinal Co., Arizona. Elev. 3025 ft (an.)

IV. 23. 1954. (R.)

Gravelly bank with Coriaria. All species of U.
seen were taken. No Prototax juvs. !

Trim. pallidipis a few 1 taken.

Encarsia coriariae 2 juvs. taken from Coriaria.

Ant-like wasp. taken.

Urch. 3 + 422 = 425.

Cether 1 + 276 = 277

1954.62 Mts. E. of Uckol Valley, 13 ms. W. of
Stanfield, Pinal Co., Arizona. Elev. (an.)
1620 feet. IV. 23. 1954. (R.)

Gravelly silt with Coriaria, mesquite and
palo verde. All species of U. seen taken exc.

Trim. pallidipis

Das. bitaenaria running on ground.

Encarsia coriariae juvs. swept from Coriaria.

Das. Neopodotia swept.

Juv. acidia with coral tibiae ? ? Uedemerus ?

Wasp.

Urch. 5 + 425 = 430.

Cether juv. 2 + 277 = 279.

1954.63 12 mo. W. of Uebel Wash
(draw between Maricopa and Sand Tanks
mts.), Maricopa Co., Ariz. Elev. 1220 ft. (am)
IV. 23. 1954. (R.)

Covillea. Only 1 taken near Quercus
crinita and 1 juv. desertioides, both taken
from Covillea.

$$\text{Arth. } 2 + 430 = 432.$$

$$\text{Arth. in. } 0 + 279 = 279.$$

1954.64 Road crossing (Ariz. 85) of Gator
Range, 30 mo. S. of Gila Bend, Maricopa Co.,
Arizona. Elev. (am.) 1200 ft. IV. 24. 1954. (R.)
Low hills and flats, latter of finely broken
reddish loam, with Covillea, sabunero,
palo verde, rotillo, etc.

See 10. juv. Botettia next from Covillea.

$$\text{Arth. } 5 + 432 = 437. \text{ (approx. 3 insects)}$$

$$\text{Arth. in. } 1 + 279 = 280.$$

1954.65 12 mo. SSE. of Ajo, Pima Co.,
Arizona (near Gainsight Hills). Elev. (am.)
1840 ft. IV. 24. 1954. (R.)

Covillea (in full bloom), scattered mesquite
and other trees and various low shrubs on

1954.65 (cont.)

partly and strong silt.

All species of *O.* seen were taken. Protettix juvs. quite numerous on Covillea.

Insula covilleae rev. juvs of same taken from Covillea.

Juv. mantid (v) ditto. Stagnonematis sp.

Orth. 30 + 437 = 467.

Uther ins. 9 + 280 = 289.

1954.66 30 ms. S. of Ajo, in Organ Pipe Cactus Nat. Monument, Pima Co., Arizona. Elev.

(an.) 1475 ft. IV. 24, 1954. (R.)

Sahuaro, Covillea palo verde, ocotillo, etc. on strong slopes.

All *O.* seen taken.

Protettix juvs. swept from Covillea.

Juv. Theraptettix swept from low ground com.

Orth. 5 + 467 = 472.

Uther ins. 0 + 289 = 289.

1954.67 5 ms. N. of Ajo, Pima Co., Arizona.

Elev. (an.) 1450 ft. IV. 24, 1954. (R.)

Covillea flat with scattered mesquite.

All *O.* seen taken.

Protettix num. as juvs. in at least 3 inches - 1 preceding inst., on Covillea.

1 juv. Insecta corillae beaten from same,
1 juv. Stagnomantis ditto.
1 ♀ in instar preceding maturity of a
protuberately colored dictyoid, genus
?, similarly beaten. Extension
branch produced no more.

$$\text{Ueth. } 16 + 472 = 488.$$

$$\text{Uther ins. } 1 + 289 = 290.$$

1954.68 1 m. W. of Piedra, Maricopa Co., Arizona.

Elw. circa 6500 feet. IV. 25. 1954. (R.)

Silt and desert pavement with Corillea,
little bush, joint cactus, a few cholla and a
little very low scattered ephemeral ground
cover. All C. seen taken.

Parabrillia (2) swept from little bush. Both [♀] with fully dev. [♀]

Juv. melanoplid ditto.

Juv. hignettii swept from Corillea.

Juv. Boottii ditto.

$$\text{Ueth. } 6 + 488 = 494.$$

$$\text{Uther ins. } 3 + 290 = 293.$$

1954.69 3 ms. E. of Sentinel, Maricopa Co.,
Arizona. Elev. (am.) 670 feet. IV. 25, 1954. (R.).
Reddish sand on lava, latter bare in many
places.

Open stand of Covillea, little bush and
other low cover. Along dry ditch much tall
sun-cured brush pass.

In Covillea ^{juv.} varipinnata, all seen taken ^{dead white} in life.
In Covillea juv. Bostettia + higuerottella.
leth. 12 + 494 = 506.
Other ins. 4 + 293 = 297.

1954.70 12 ms. W. of Winterhaven, Imperial
Co., Cal. Elev. (ch.) approx. 250 feet. IV. 26, 1954. (R.).
Almost bare silty sand with widely scattered
Covillea and a few other low whitish plants,
an occasional scotillo. Somewhat covered.
All O. taken were swept from Covillea -
nothing seen on ground surface.
Bostettia juv. - 2 instars, juv. A juv.
Melanoplid.

leth. 3 + 506 = 509.
Other ins. 0 + 297 = 297.

↓
1954.71 Near Gray's Well, west side of
sandhills on U.S. 80, Imperial Co., Cal.
Elev. 200 feet. IV. 26. 1957. (R.)

Widely spaced spreading and tall
Covillea covered with seed pods. On sandy
silt. All C. seen taken and all are on
Covillea - except Inocera covilleae juv. on only
a few plants. Boottellia juv. more general.
All Meloidae from one single Covillea.

Utch. 11 + 509 = 520.

Utter vis. 9 + 297 = 306.

1954.72 Sand dunes about 2 ms. SE. of
Desert Edge, Imperial Co., Cal. Elev. (Can.)
40 feet. IV. 26. 1954. (R.)

High dunes stabilized by mesquite
clumps and huge Covillea. All C. taken
taken from latter. - Boottellia juv. and
juv. Inocera covilleae.

Utch. 7 + 520 = 527.

Utter vis 3 + 306 = 309.

1954.73 Between Calixico and Bond's
Corner, Imperial Co., Cal. Elev. 50 feet. 11.26.1954.
Roadside silt, dry ^{irrigation} ditch and muddy edge
of cut alfalfa field. (R.)

Litanentria juv. running on ground.

Stagnumantes juv. swept.

Trin. pallidipennis 1 taken of several on
bare ground.

Melanoplus - juvs. apparently of two
species.

Oenanthus juv. swept.

Utter . 14 + 527 = 541.

Utter ins. 20 + 309 = 329.

1954.74 18 mi. N. of Gila River crossing of
Arizona 95, Yuma Co., Arizona. Elev. (approx.)
900 feet. 11.27.1954. (R.)

Broad area of desert pavement (with
"sarnish") - small washes of silt. Covillea,
a rounded, domed-like shrub with whitish
blue tomentose leaves, a few pale rods and
acacia along washes.

All D. seen taken.

1 juv. Poidotettix and juv. melanoplids in
whitish leaved wash. Postettix juv.

swept from Covillea. Trin. pallidip. adult

on bare surface.

$$\text{Length. } 13 + 541 = 554.$$

$$\text{Other no. } 2 + 329 = 331.$$

1954.75 Castle Home Plain, W. of Castle Home Peak, 31 ms. N. of crossing of Gila River by Ariz. H., Yuma Co., Arizona. Elev. (am.) 1330 ft. IV. 27, 1954. (R).

pleasant pavement (much with "varnish"), with cholla on ridges and palo verde in the washes. Corillea and whitish blue plant scattered.

Typhlobryce sp. on broken rock surface (not with "varnish" however). All ^{the} O. except from Corillea (only from Bortettia) on the whitish blue plant same.

$$\text{Length. } 5 + 541 = 546.$$

$$\text{Other no. } 2 + 329 = 331.$$

1954.76 La Posa Plain, 10 ms. W. of Kofa Mountains, Yuma Co., Arizona. Elev. (am.) 1725 ft. IV. 27, 1954. (R.)

Scattered Corillea, bunch grass, etc.

All O. now taken. 3 juv. Stagnomantis

except from Corillea. Bortettia juv. from

ditto (3 instars). 1 juv. Durania willmorei ditto.

$$\text{Length. } 12 + 546 = 558.$$

$$\text{Other no. } 3 + 331 = 334.$$

1954.77 5 ms. S. of Quartzsite, Yuma Co., Ariz.

Elev. (am.) 1320' alt. IV. 27. 1954. (R.)

On desert pavement 1 juv. Tyttostylis.

Silty wash with many stones, miles of
adult Cibolensis - all seen taken. Also ad. juv.

Trim. pallidip. From Conilla juv. Bortlettis
and other juv. acidid. Sw. Titanostoma many
on ground. Uth. 21 + 558 = 579.

Uth. ins. 1 + 334 = 335.

1954.78 9 miles N. of Blythe, Riverside Co., Cal.

Elev. approx. 300 ft. IV. 28. 1954. (R.)

River bottom edge of brush. Acacia, mesquite,
palo verde, dense stands of arrowweed and various
low shrubs.

Pocilotettix 1 ad. in grass thru brush.

Sw. Ducara conilla swept from Conilla.

" gessenski melanophilis swept from sw. diff.
brush.

Sw. Anemica swept from pale green brush.

Trim. pallidip. ads. on ground surface.

Uth. 14 + 579 = 593.

Uth. ins. 11 + 335 = 346.

1954.79 17 ms. N. of Blythe, Riverside Co.,
Cal. Elev. (an.) 500 feet. IV. 28, 1954. (R.)

Lower edge of brush along river valley -
Covillea, mesquite, acacia, Atriplex, arrow-
weed, etc. All O. seen were taken.

Boottettia juv. from Covillea.

Juv. from melanoplids in other brush.

Orth. 8 + 593 = 601

Orth. vis. 7 + 346 = 353

1954.80 About 3 miles S. of Vidal, San
Bernardino Co., Cal. ~~at~~ (just N. of
county line on H. 95) Elev. 800 feet. IV. 28, 1954. (R.)

Open brush with Covillea and other low cover,
much bare stony silt. All small dry brush
scattered over - covered brush grass - in latter

✓ 1 ad. Paropromela (1 other lost) and the two
Parabrevillus adults (taken separately).

All other O. swept from Covillea. These
included 1 ad. - juv. Trana
covilleae, juv. Boottettia, juv.

hignotettia.

Orth. 16 + 601 = 617.

Orth. vis. 8 + 353 = 361.

1954.81 1.5 ms. W. of Rice, San Bernardino Co., Cal. Elev. (approx.) 1300 feet. IV.28.1954. (R.)

Sandy silt with scattered Covillea; mesquite trees and a milk-weed like plant in a wash.

All C. taken were taken from Covillea, these including 4 immat. Onopeltus and Onopeltus taken from Covillea. (28 24). Juv. Tusara capillaris and Juv. Pezomachus.

Meloid was running on ground in wash.

Orth. 13 + 617 = 630

Other was 4 + 361 = 365.

1954.82 flat at N. base of granite mts., 21 ms. WSW. of Rice, Riverside Co., California. Elev. (approx.) 2050 ft. IV.28.1954. (R.)

Covillea, burn sage, dry scattered brush grass, all in sandy silt. Areas largely bare.

All C. taken except from Covillea except

Pezomachus from burn sage and

Pezomachus running on the ground.

All except forms incl. Juv. Tusara capillaris, Juv. Pezomachus capillaris.
Orth. 6 + 630 = 636

Other was 11 + 365 = 376.

1954. 83 Near Boulder Well, 11 ms. NE. of
Hesant Center, Riverside Co., Cal.

Elev 900 ft. IV. 24, 1954. (R.)

Multi-channelled rocky wash, with
sparse plant cover, this chiefly Covillea.

All C. taken except from latter. juv.

Portettix - 1 juv. Dusona covilleae.

Orth. 6 + 636 = 642.

Orth. no. 1 + 376 = 377.

1954. 84 East side of Shaver's Summit,
Riverside Co., Cal. Elev. approx. 1600 ft
IV. 28, 1954. (R.)

Covillea - vestita - var. other shrubs on
pebbly soil. at N. base of Urocopia Mt.

Everything taken was taken from

Covillea. There only juv. Portettix

- juv. Dusona covilleae.

Orth. 4 + 642 = 646.

Orth. no. 0 + 377 = 377.

1954.85 15 miles S. of Palm Desert, Riverside
Co., Cal. Elev. (am.) 403 feet. IV. 29, 1954. (R.).

Stony and silty desert washes, with Croton,
and Yucca trees and similar desert
scrubbery. No D. except juv. Portulaca, ^{3 imaged} swept
from Croton and 1 Parabacillus from
bunch grass.

Utah. 5 + 646 = 651.

Utah ins. 0 + 377 = 377.

1954.86 Piñon Flat, San Jacinto Mountains,
Riverside Co., Cal. Elev. (am.) 4050 feet.
IV. 29, 1954. (R.). (Piñon Park of Photos)

Park-like dispersal of piñon and juniper, with
much of the lower cover of thin-oh, Ceanothus,
a few manzanita and a little chamise. Trapped
bunch grass.

All species D. seen and taken.

1 ad. ♂ Trox swept from Ceanothus - no others seen. (juv.)
juv. unnamed swept/possibly.

Perilissus 2 taken from leaf littered ground -

traced lost. 1 juv. Amphitornis swept.

Cibolarius 1 ad. - 2 juvs. on bare ground - a few
others seen.

? juv. Idiospilotus? swept

Utah. 21 + 651 = 672.

Utah ins. 24 + 377 = 401.

↓ 1954.87 6.5 ms. W. of Piñon Flat, San Jacinto Mts., Riverside Co., Cal. Elev. (an.) 5000 feet. IV. 29, 1954. (R.). ^{1 juv. Fitzingeri}
Roadside. No *O.* except *Timema* taken from a variety of shrubs and low trees, those including Yucca, *Baccharis*, *margaritae*, *Ceanothus*. Very local in land. Most of *Timema* immature.

Length. 12 + 672 = 684,
Ocular vis. 13 + 401 = 414.

↓ 1954.88 Hermit Valley, 3.5 ms. N. of Kernworth, San Jacinto Mts., Riverside Co., Cal. Elev. 4570 ft. (an.). IV. 29, 1954.

Roadside pass in open timber (pine) with a few sage. Only *O. juv.* kept. At least 3 diff. *juv.* repr. but?

Length. 5 + 684 = 689.
Ocular vis. 4 + 414 = 418

✓ 1954.89 3 ms. NW. of Mountain Center (near Idyllwild), San Jacinto Mts., Riverside Co., Cal. Elev. (am.) 4800 ft. IV. 29, 1954. (R.).
Chapparral area with a variety of plants.

Timema swept from a number of plants (at least five different ones). All uninst.
Other inst. ^{also} taken in sweeping - 2 juv.
Tettigoniids, 1 juv. cunaxatoid - 1 juv. melanoplid.
Orth. 13 + 689 = 702.
Other ins. 8 + 418 = 426,

1954.90 N. slope of San Jacinto Mts.,
6 ms. S. of Banning, Riverside Co., Cal.
Elev. (am.) 3125 feet. IV. 29, 1954. (R.).

In chaparral - Adiantum and many other plants of equal height, also low ground cover of short grass - weeds.

Chimarrhopala in latter, ♂♂ very active.
Timema swept.

Juv. of at least three genera of acridids swept +
2 juv. of a deutrid swept from ground cover.
Orth. 11 + 702 = 713.
Other ins. 7 + 426 = 433.

1954.91 Travertine Bluffs, near Fish Springs,
Salton basin, Imperial Co., Cal. Elev. approx.
- 200 feet. IV. 30. 1954. (R.)

Silty sand with a very sparse cover of a
leafless bush. Solo C. ~~was~~ 1 ad. ♀
Artemesia integra on ground surface - flew
over, then after careful approach I was able to
pick up ^{full of eggs} with my fingers. Wind very light.

Catch. 1 + 713 = 714.

Other ins. 0 + 433 = 433.

1954.92 San Felipe Valley, 3.5 miles E. of
Banner, San Diego Co., Cal. Elev. (est.)
2500 feet. IV. 30. 1954. (R.)

In open piñon stand with chamise and
various other shrubs. Wind, fog -
rain. No C. at all.

Catch. 0 + 714 = 714.

Other ins. 4 + 433 = 437.

1954.93 Near Rio del Norte Springs, San Diego
Co., Cal. Elev. (est.) 3550 feet. V. 1. 1954. (R.)

Rolling mountainous surface - ground
composed of decomposed granite gravel and
grit. Low chaparral - largely chamise,

1954.93 (cont.).

sage and manzanita. All D. Fabian swept
from chamise.

1 ad. Cedalonotus - 1 juv.

1 juv. dictyoid - juv.?

Urth. 3 + 714 = 717.

Uther ins. 4 + 437 = 441.

✓ 1954.94 2 ms. E. of Alpine, San Diego Co., Cal.
Elev. (chart) 1500 feet. V. 1, 1954. (R.)

Roadside - weeds, chamise, some thin oak
and various other growth.

1 ad. ♀ Chimarocephala swept from roadside
weeds.

1 juv. leucydid swept from chamise? Platylabus?

1 very small juv. cunastoid from chamise.

1 ♀ ad. Chistocerca vaga seen, but flew
a very long distance.

Place our ham for ticks!

Urth. 3 + 717 = 720.

Uther ins. 6 + 441 = 447.

✓ 1954.95 San Vicente Valley, 3 ms. N. of Lakeside,
San Diego Co., Cal. Elev. circa ~~1500~~ 4800 (6. mi.)
V. 1, 1954 (R.)

Low hillside with bare spots, much chamise,
grass and a number of different low bushes.

1 ad. ♀ Chimarocephala in weeds.

Napaia - 1 ad. + a number of juvs. in
instar preceding maturity; chiefly in
dry ground corn, near or on dry
sticks - not fresh material.

Cedaleonetes juv. in a number of
instars - found on or near ground surface.
1 very sm. juv. Trixalid nupt.

$$\text{Uth.} \quad 28 \quad + \quad 720 \quad = \quad 748.$$

$$\text{Uth. in.} \quad 14 \quad + \quad 447 \quad = \quad 461.$$

✓ 1954.96 5 ms. NW. of San Pasqual, San Diego
Co., Cal. Elev. circa 500 feet. V. I. 1954. (R.)

Old field with weeds. All C. nupt.

Juv. Chimaphala. Juv. Cedaleonetes.
Juv. ^{other} melanophilid.

$$\text{Uth.} \quad 10 \quad + \quad 748 \quad = \quad 758.$$

$$\text{Uth. in.} \quad 2 \quad + \quad 461 \quad = \quad 463$$

1954.97 4 ms. N. of Escondido, San
Diego Co., Cal. Elev. 1060 ft. (on chart).
V. I. 1954. (R.)

Natural low corn with chamise
predominating, some thin oak and
var. other low elements.

All C. nupt.

1954.97 (cont.)

1 juv. Napaia - all new.

1 ad. ♀ Chimanecephala. 1 juv. melanoglid.

Coll. 3 + 758 = 761

Other inv. 3 + 463 = 466.

✓ 1954.98 Road crossing (Cal. 74) of Elsinore Mountains, 10 ms. W. of Elsinore, Riverside Co., Cal. Elev. (v.m.) 2650 feet. V. 2. 1954. (R.)

Few areas look enough to work. Low manganita, chamise, thin oak, etc. on decomposing granite.

Timema, 1 ad. ♂, 2 ad. ♀. swept from manganita in one very small area - further work developed

no more. Gammastethus 1 ad. ♂ swept from manganita - no more could be located.

Juv. Platylyra?; swept swept from chamise.

Juv. Cedaleminotus in general sipping over lower cover.

Coll. 7 + 761 = 768.

Other inv. 9 + 466 = 475.

✓ 1954.99 2.5 ms. W. of Road Summit of Elsinore Mountains, Riverside Co., Cal. Elev. (m.) 2400 feet. V. 2. 1954. (R.)

Chamise, thin oak and other cover (no manganita). Everything taken swept.

Napaia juv. in low ground cover.

1 juv. Platylyra? rupt.
juv. Cedronotus, juv. emmarisoid
and juv. melanoplid all rupt.

Utter . 9 + 768 = 777.

Utter ins. 9 + 475 = 484.

1954. 100 1.5 ms. SE. of Ordemont, San
Bernardino Co., Cal. Elev. 1600 ft. (ch.-an.).

V. 3. 1954. (R.).

Undisturbed natural cone - chamise, numerous
other shrubs.

1 ad. ♂ Ciblaris on ground. juv. Trin. uhlerii
(3 instans) ditto. juv. Platylyra rupt.
juv. melanoplid rupt. juv. Napaia? ditto.

Utter. 13 + 777 = 790.

Utter ins. 10 + 484 = 494.

1954. 101 Cajon Canyon, E 1.5 ms. NW. of
Cajon, San Bernardino Co., Cal.
Elev. (ch.) 3750 feet. V. 3. 1954. (R.)

Almost entirely tall chamise, with
tall mesquite along shallow washes.
Much bare gravelly hills.

All U. seen taken - taken from chamise.
There only juv. emmarisoid. Raphidia abundant.

Utter. 3 + 790 = 793.

Utter ins. 27 + 494 = 521.

1954.102 8 ms. NW. of Cajon, San Bernardino
Co., Cal. Elev. 4600 (est.) V. 3. 1954. (R.)

Mountain slopes with thin oak, scattered
~~juniper~~ juniper and numerous cypripites (just
above the Joshua trees).

1 ad. Chimaphila on gravelly surface.

1 ad. ♂ Cypripis ditto. juv. unmarked nupt.

juv. melanophilid nupt.

$$\text{Urch. } 4 + 793 = 797.$$

$$\text{Urch. } 1 + 521 = 522$$

1954.103 Desert Springs, 12 ms. NW. of
Cajon, San Bernardino Co., Cal. Elev. 4000 ft.
V. 3. 1954. (R.)

Scattered juniper and Joshua trees, com-
piles - other herb.

Xanthippus 2 ♀ on ground, all com.

Cordillaria juv. nupt from low ground
com.

$$\text{Urch. } 3 + 797 = 800.$$

$$\text{Urch. } 4 + 522 = 526.$$

1954.104 1 m. E. of Little Rock, Los
Angeles Co., Cal. Elev. approx. 3500 ft.
V. 3. 1954. (R.)

Scattered Cordillaria, low sage and other
similar com.

Almost no *O. juv.* Inzana crilliae
on Crillia. 1 ♂ Xanthippus on ground.

$$\text{Arth. } 2 + 800 = 802,$$

$$\text{Other ins. } 3 + 526 = 529.$$

1954. 105 2 ms. N. of Mohave, Kern Co., Cal.
Elev. (ch.) 2900 ft. V. 3. 1954. (R.)

Crillia, Atriplex, etc. No O.

$$\text{Arth. } 0 + 802 = 802.$$

$$\text{Other ins. } 10 + 529 = 539.$$

1954. 106 Along Brita Creek, 3.7 ms. N. of
Tehachapi, Tehachapi Mts., Kern Co., Cal.
Elev. 3750 ft. (an.) V. 3. 1954. (R.)

Roadside tall oak grove on partly
tilt with many bare spots and small
washes.

Chironomophala ad. juv. undecimnotata on
ground.

$$\text{Arth. } 2 + 802 = 804$$

$$\text{Other ins. } 22 + 539 = 561$$

✓ 1954. 107 6 ms. W. of Old River, Kern Co.,
Cal. Elev. ^{approx.} 325 feet (~~at Old River~~
~~Vista Lake chart~~) V. 4. 1954. (R.)

Roadside thunder and ditch with natural
valley plant cover.

All. seen taken - swept from woody cover.
Inv. Eupniodes in 2 instans. des. melanops
in 2 instans.

levth. 7 + 804 = 811.

levth ins. 33 + 561 = 594.

✓ 1954. 108 10 ms. W.E. of Ford City, Kern Co.,
Cal. Elev. ^{approx.} 300 feet.
~~(at Old River Vista~~
~~Lake chart)~~ V. 4. 1954. (R.)

Gentle slopes, largely bare silt, with considerable
areas of saline impregnated ground and
with the plant cover everywhere low and
scattered.

A small colony of Acronia on or very
near the saline areas - 2 ♂ 2 ♀ taken.

found there last. Single ad. Tricr. pallid.
in same area. Eupniodes juv. swept
from low woody cover.

levth. 7 + 811 = 818.

levth ins. 2 + 594 = 596

✓ 1954.109 Cuyama Valley, 5.5 ms. S. of Junction
of US. 399 - Cal. 166, Santa Barbara Co., Cal.
Elev. (approx.) 3000 feet. V. 4, 1954. (R.)

Many weeds and very tall Ephedra-like
bushes. No C. exc. 1 Xanthippus taken on
tree ground.

Utter. 1 + 818 = 819.

Utter vis. 21 + 596 = 617.

1954.110 Cuyama Valley 5.5 ms. S. of
Ventucopa, Ventura Co., Cal. Elev.
3200 ft. (ch.). V. 4, 1954. (R.)

Both hill slopes with great variety of
shrubs and open stand of juniper.
No C.

Utter. 0 + 819.

Utter vis. 6 + 617 = 623.

✓ 1954.111 Road summit on Pine Mtn.,
(US. 399), Ventura Co., Cal. Elev. (b.m.)
5100 feet. V. 4, 1954. (R.)

Steep mtn. slopes with manzanita
and other bushes, plus a small flat
largely of bare earth.

On the latter Chimarocephala ad.
Juv. ^{ditto?} ~~referred~~, juv. destrid

1954. 111 (cont.)
Other Leptomyia (genus ??).

and Platyphora? swept from low
ground corn in the mangrove area.

The juv. Leptomyia Leptomyia when fresh
was green with a multidotted brown pattern,
and the caudal margin of all abd. tergites
was spiculated ditto with some. Wings heavily
dotted. Antennae multiaennulate. Could it
be Cyrtophylaxis? The pronotal structure is
plumbea also.

Length. $6 + 819 = 825$.

Wing inc. $15 + 623 = 638$.

↓
1954. 112 Along Sycamore Creek, south of Pine
Mountain, Ventura Co., Cal. Elev. 3875 feet.
V. 4, 1954. (R.)

Very low, almost mat-like chamise, and
many other low shrubs, with scattered very
stiff, small leaved, thin oak.

All U. tubus were swept.

Juv. Erythroneura a few. Juv. Melanoplis.

Length. $7 + 825 = 832$.

Wing inc. $8 + 638 = 646$.

✓ 1954.113 Near Tajiguas, Santa Barbara
Co., Cal. Elev. 30 feet. v. v. 1954. (R.)

Roadside sweeping in open tall
grass among open trees. No O.

Length. $0 + 832 = 832$.

Other ins. $26 + 646 = 672$

✓ 1954.114 Between Las Cruces and Gaviota
Pass, Santa Ynez Mts., Santa Barbara Co.,
Cal. Elev. 675 feet. v. v. 1954. (R.)

Roadside. No O.

Length. $0 + 832 = 832$.

Other ins. $24 + 672 = 696$.

✓ 1954.115 2 ms. SE. of Los Alamos, Santa
Barbara Co., Cal. Elev. (an.) 800 feet. v. v. 1954. (R.)

Roadside. Disturbed conditions.

All O. run swept. Juv. Cedalonotus -
2 instars. Juv. ?? Cassidina ?? swept.

Length. $4 + 832 = 836$.

Other ins. $4 + 696 = 700$

✓ 1954. 116 Lower Solomon Canyon, 10 ms NW.
of Los Alamos, Santa Barbara Co., Cal.
Elev. (ch.) 825 feet. V. 5: 1954. (R.)
Roadside. Tall grass - wood. All O.
taken except.

Juv. Cedalonotus in 3 instars.

Juv. Clinoplaena?

1 juv. Tettigoniid?? Suggests that taken
at 1954. 111 in its sprinkled pattern.

1 juv. Draconota auricularia.

Orth. - Hem. 10 + 836 = 846.

Orth. mis. 8 + 700 = 708

✓ 1954. 117 Cuesta Pasa, 6 ms. N. of San Luis
Obispo, San Luis Obispo Co., Cal. Elev.
(ch.) 1520 feet. V. 6, 1954. (R.)

grassy hillside, with much tall oat grass
and various low shrubs.

In tall oat grass juv. Clinoplaena and
juv. Hectrota, latter locally common.

Orth. O. except. Juv. Cedalonotus -

juv. Orthotid. Juv. ? Platylyra?

Orth. 43 + 846 = 889.

Orth. mis. 32 + 708 = 740.

1954.118 4.5 mo. W. of Bradley, Monterey Co., Cal. Elev. (ch.) 598 feet. V. 6. 1954. (R.)

Roadside natural com, tall dark arid, ^{out} grass and much of a gray-blue plant. Sole C. juv. *Cedaleomotes*.
Arth. 7 + 889 = 896.
Other ins. 0 + 740 = 740.

1954.119 4 mo. NE. of Pleyto, Monterey Co., Cal. Elev. (an.-ch.) 1250 ft. V. 6, 1954. (R.)

Native ground cover with many compon-
ents, under scattered oaks.
Everything swept. 2 juv. *Hectrieta*,
1 juv. ? *Platytetra*?, and sev. juv.
melanoplids.
Arth. 6 + 896 = 902.
Other ins. 19 + 740 = 759.

1954.120 Valley of San Antonio River, 1-1.5 miles W. of Pleyto, Monterey Co., Cal. Elev. (ch.-an.) 750 feet. V. 6, 1954. (R.)

Spots of bare gravelly silt interspersed among stands of tall oat grass, some chardice. Countryside with park-like disposition of oaks.
Chimaphila on nearly bare ground, ^{Hitt}
Tsam. pallidipennis.

1954.120 (cont.)

All other *O.* empty. Num. of juvs. (at least 3 instars) of ? Platylyra. juvs. in two instars of Electrota. juv. of Cedalonotus.

$$\text{Arth. } 28 + 902 = 930.$$

$$\text{Other ins. } 22 + 759 = 781.$$

✓ 1954.121 3 ms. S. of Lockwood, Monterey Co., Cal. Elev. (an.) 1025 feet. V. 6. 1954. (R.)
Roadside among

Arth. only juv. Cedalonotus + 1 juv. ? Platylyra?

$$\text{Arth. } 4 + 930 = 934.$$

$$\text{Other ins. } 6 + 781 = 787.$$

✓ 1954.122 6 ms. N. of Jolon, Monterey Co., Cal. Elev. (an.) 9400 feet. V. 6. 1954. (R.)
Roadside in poppies and lupines. All empty. juv. ? Cedalonotus?

$$\text{Arth. } 2 + 934 = 936.$$

$$\text{Other ins. } 8 + 787 = 795.$$

1954.123 2 ms. NE. of King City, Monterey Co., Cal. Elev. (an.) 760 feet.
V. 7. 1954. (R.)

Roadside. No *O.*

$$\text{Arth. } 0 + 936 = 936.$$

$$\text{Other ins. } 5 + 795 = 800.$$

1954.124 2 ms. N. of Bitterwater, San Benito Co., Cal. Elev. (approx.) 1900 feet. V. 7. 1954. (R.)
Roadside. No O.

Unk. $0 + 936 = 936$.

Other ins. $4 + 800 = 804$.

1954.125 Dry Lake Valley near San Benito, 7 ms. N. of Bitterwater, San Benito Co., Cal. Elev. approx. 1500 ft. V. 7. 1954. (R.)

In wild out. grass, & nothing but electrica (juv.) and traces that very local.

Unk. $9 + 936 = 945$.

Other ins. $14 + 804 = 818$.

1954.126 Bear Valley at junction with road to Pinnacles National Monument, E. foot of Gabilan Range, San Benito Co., Cal. Elev. approx. 1200 feet. V. 7. 1954. (R.)

In tall out. grass, poppies and many other wild flowers, and some nearly bare spots. Nearly everything swept.

Aedalimum imm. juv. - about 3 instars. A short-winged Melanoplus.

1 ad. ♂ 1 juv. Chiropterus juv. in about 2 instars. Unk. $28 + 945 = 973$.

Other ins. $16 + 818 = 834$

✓ 1954. 127 Pinnacles National Monument,
Gabilan Range, San Benito Co., Cal.
Elev. (an.) 1200 ft. V. 7. 1954. (R.)
In charric - beating. 1 juv. Moraca -
All O. run. Other mat. all empty

Colts. 1 + 973 = 974.

Other vis. 11 + 834 = 845.

1954. 128 ^{Nat. Monument} ~~Pinnacles~~ ^{near} and
Bear Valley, San Benito Co., Cal. Elev. (an.) 1250 ft.
V. 7. 1954. (R.)

In Fall out grass and various shrubs then
were among oaks.

Everything empty.

1 juv. Melanoplus - same species as taken at 1954. 126.
1 juv. Chinopluma.

Colts. 2 + 974 = 976.

Other vis. 2 + 845 = 847.

✓ 1954. 129 Along San Benito River, 1 mi. NW. of
Willow Creek, San Benito Co., Cal. Elev. (ch.)
970 feet. V. 7. 1954. (R.)

Roadside. All empty.

Juv. Electrita (last juv. inst.), juv. Melanoplus (last
juv. inst.) - 2 species?

Colts. 13 + 976 = 989.

Other vis. 0 + 847 = 847.

√ 1954. 130 2 ms. NW. of San Juan Bautista,
San Benito Co., Cal. Elev. (ch.) 150 feet
V. 7. 1954. (R.)

Roadside. No O. *Urtica* swept

Orth. 0 + 989 = 989.

Other ins. 10 + 847 = 857.

√ 1954. 131 Low bluff on W. side of Salinas
River, 3 ms. W. of Gonzales, Monterey Co., Cal.
Elev. (ch.) 125 feet. V. 8, 1954. (R.)

Roadside. Disturbed conditions, with many
weeds + plant intrusives. No O.

Orth. 0 + 989 = 989.

Other ins. 17 + 857 = 874.

√ 1954. 132 2 ms. W. of Soledad, Mission
Ruins, Salinas Valley, Monterey Co., Cal.
Elev. 175 feet. V. 8. 1954 (R.)

Small wash bed with heavy bordering
shrubbery, some native, some intrusive
weeds. No O. except 1 juv. *Urtica*

swept. Orth. 1 + 989 = 990.

Other ins. 17 + 874 = 891.

✓ 1954. 133 Long Valley 12 ms. E. of San Lucas,
Monterey Co., Cal. Elev. (an.) 1480 feet.
V.P. 1904. (R.)

In roadside weeds and grasses. Few
juv. Heterista. On bare ground Trinotopis
pullidipennis. Juv. Cedalonotus kept.

Both. 7 + 990 = 997.

Utter in. 2 + 891 = 893

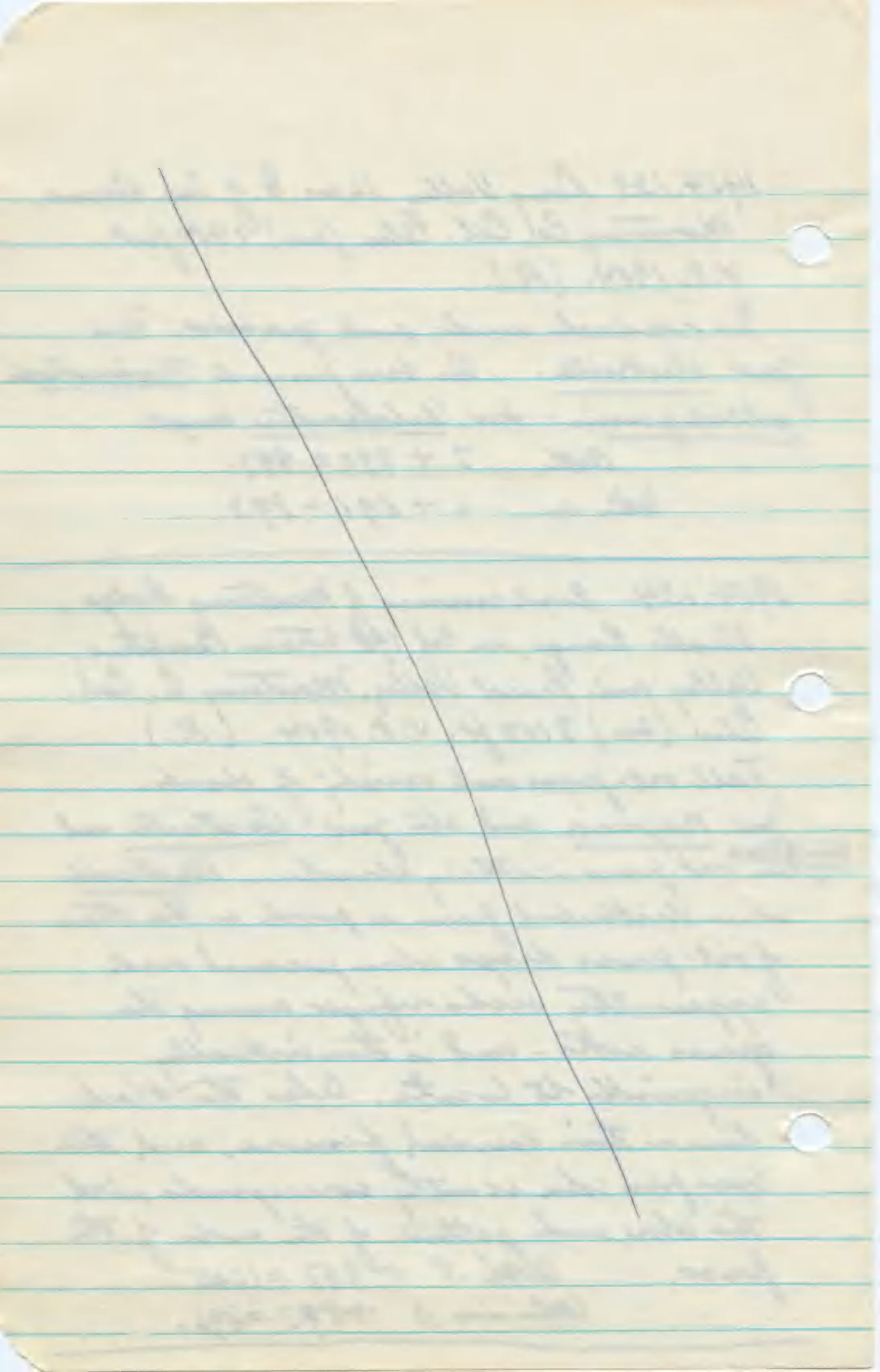
✓ 1954. 134 Road crossing of Mustang Ridge,
Black Range, on Cal 1st between Peachtree
Valley and Priest Valley, Monterey Co., Cal.
Elev. (an.) 3150 ft. V.P. 1904. (R.)

Tall out-pass and variety of shrubs.

Juv. Napaia and all juv. Heterista and
Clinopis in out-pass - nothing elsewhere. Heterista
when disturbed from a perch on the stems
of out-pass drops when pursued and
apparently seeks refuge among the
grass roots - and is then virtually
impossible to locate. Also the black
line on their caudal femora, and the
base from color exactly corresponds with
the color and pattern of the walls of the
pass.

Both. 8 + 997 = 1005

Utter in. 3 + 893 = 896.



~~Handwritten notes on lined paper, including a large diagonal line and faint text.~~

1954.135 Along Upper Waltham Creek, 2 ms.
N. of Priest Valley, Fresno Co., Cal.
Elev. (ch.) 2050 feet. V. S. 1954. (R.)

Saw some small corn in canyon, mixed
standing under scattered oaks and a few
pine. Chances are of corn components.
All C. taken inst.

Juv. ? Platylypa ? sev.

Juv. m. w. Melanoplus 1 inst. pres. mat.

Juv. melanoplid gen. ? a number

Juv. dentisid - gen. ? several.

Utter. 8 + 1005 = 1013.

Utter ins. 13 + 896 = 909.

1954.136 Along Waltham Creek 13 ms. SE.
of Priest Valley, Fresno Co., Cal. Elev. (ch.)
1300 ft. V. S. 1954. (R.)

In tall oat-pass and lower native ground

corn. Juv. Electricista ^(few) more partial to

former and Chinopluma, ad (2) = juvs.

to latter. + 1 juv. dentisid gen. ?

Utter. 11 + 1013 = 1024.

Utter ins. 2 + 909 = 911.

1954. 137. Alvalde Canyon, 5 ms. ~~W. of~~
WSW. of Coalinga, Fresno Co., Cal. Elev.
(am.) 750 feet. V. 8. 1954. (R.).

Tall oat-grass and numerous gray-green
shrubs, which latter suggest Sarcobatus.

Only C. 1 juv. Chinopluma in oat-grass.

Orth. 1 + 1024 = 1025

Other ins. 0 + 911 = 911

1954. 138 ~~to~~ Southern slopes of Anticline
Ridge, 5 ms. NE. of Coalinga, Fresno
Co., Cal. Elev. (ch.) approx. 1000 feet.

V. 9. 1954. (R.). [In oil area with wells
about.]

Rolling slopes with very short ground
cover, chiefly succeeded very short bunch
grass. Also areas of bare gray silt.

All C. seen taken loc. 1 spec. of the blue-
winged Trimerotropis.

Aedaloceros eripua juv. general and in 3
instars. Adults few and very active - all
long-winged. Trim. pallidip. a few

adults + sev. juv. Xanthippus general but

few - no juv. seen.

Not very close and

was not as busy as

the usual Xanth.

Trimerotropis blue-wing. sp
only on the bare silt - very wild -
12 seen, 1 captured

Orth. 27 + 1025 = 1052.

Other ins. 0 + 911 = 911.

✓ 1954.139 Northern slope of Anticline
Ridge, about 4 ms. NE. of Gilfields,
Fresno Co., Cal. Elev. (ch.) 700 feet.

V. 9. 1954. (R.)

Rolling slopes with short out-pass and
even shorter brush pass.

All species of *C.* seen taken.

Cedalonotus eripua imm. juv. & 1 ad. (l. w.)

Melanoplus sp.? 1 juv. Impt.

• Eupingodes 1 juv. Impt.

Trim. pallidip. 1 juv.

Uth 13 + 1052 = 1065.

Uth vis. 4 + 911 = 915.

✓ 1954.140 5 ms. NE. of Mendota, Fresno
Co., Cal. Elev. ^{circa} 175 feet.
~~2 (brush pass) 12 feet~~

V. 9. 1954. V. 9. 1954 (R.)

Roadside. Salt grass - tall out-pass.

Only *C.* juv. Eupingodes - 1 juv. Trim. Tugio

Eupingodes appar. Uth 19 + 1065 = 1084. ^{sp.?}

has color phases
much like

Uth vis. 2 + 915 = 917.

Psolocosa.

1954. 141 7ms. NW. of Firebaugh, Fresno Co.,
Cal. Elev. ^{circa 150 feet} ~~7000~~. V. 9, 1954. (R.)

Roadside. Bare dry ground with dry
^{corn} grass, composed of short oat-pass and various
taller weeds. All species of *U. tex* were
taken, there only an adult Trimerotropis
pallidipennis - a juv. Melanoplus -

Uths. 2 + 1084 = 1086.

Other ins. 1 + 917 = 918

1954. 142 Bottom land (subject to flooding)
along course of San Joaquin River, 8ms. SW. of
El Nido, Merced Co., Cal. Elev. ~~7000~~. V. 9, 1954. (R.)
On one side of road nearly dry sloughs, all
species of *U. tex* were here. all juvs. - all taken.
On the other side dry overflow lands with tall
grasses and much low weeds. Ad. Trimeroti.
pallidip. in latter cond. Juv. redipolids (juv.?)
num. in same area. Juv. Melanoplus in
first mentioned situation.

Uths. 36 + 1086 = 1122.

Other ins. 6 + 918 = 924.

1954.143 About 4 ms. E. of Stevenson
(32 ms. W. of Merced), Merced Co., Cal.
Elev. about 150 feet. V. 10, 1954. (R.)

Tall weeds and grasses near large
irrigation ditch. Sole C. very juv. melanophilid.

leth. 10 + 1122 = 1132.

Uther vis. 24 + 924 = 948.

1954.144 Bottom lands of San Joaquin River,
6 ms. NW. of Gustine, Merced Co., Cal. Elev.
near V. 10, 1954. (R.)

Nearly bare area of dry cracked silt. Trin
pallidip. on almost bare silt, other
except from weeds, ^{no found} juv. melanophilid, Oreanthus

leth. 12 + 1132 = 1144. odipodid.

Uther vis. 3 + 948 = 951.

1954.145 4.5 ms. S. of Gustine, Merced
Co., Cal. Elev. approx. 125 feet. V. 10, 1954. (R.)

Roadside. Disturbed conditions - tall
weeds and grass. Trin. pallid. on

bare spot. Uther except. - juv. Melanophilus.

leth. 7 + 1144 = 1151.

Uther vis. 3 + 951 = 954.

1954.146 Near San Luis Ranch, 6 ms. E. of
Pacheco Pass, Merced Co., Cal. Elev. (ch.) ~~2500~~²⁵⁰⁰ feet.
V. 10. 1954. (R.)

Sun-dried tall oat-pass and a few tall weeds.
All O. seen taken - only juv. Melanoplus
& juv. Acronotus, both mpt.

Cloth. 5 + 1151 = 1156.

Uther vis. 0 + 954 = 954

↓ 1954.147 West side of summit of Pacheco
Pass, Santa Clara Co., Cal. Elev. (ch.) 1300 ft.
V. 10. 1954. (R.)

Roadside area, in part natural cover of
oat-pass and low close ground cover.

All O. seen taken. Juv. Clinoplerma in the
very low cover. Juv. Melanoplus mpt. 1 juv.
advised. ??.

Cloth. 9 + 1156 = 1165.

Uther vis. 17 + 954 = 971

1954.148 2 ms. SW. of Bell Station, Pacheco
Creek, Santa Clara Co., Cal. Elev. approx.
300 feet. V. 10. 1954. (R.)

In tall oat-pass and weeds. No O. but
Trifurcula juv. mpt

Cloth. - bloom. 1 + 1165 = 1166

Uther vis. 1 + 971 = 972

Valley W. of Table Mountain,
1954. 149, 3 ms. W. of Saratoga, Santa Clara
Co., Cal. Elev. 1250 feet (ann.). V. 11, 1954. (R.)

Steep wooded glen with heavy conifers and
dividuous corn, all in full leaf now. Beating
was done on tree trunks, cut banks, small
roadside tracts, etc.

Sole *O. juv.*? Platytyra? trupt. Numerous -
Cnth. 13 ♀ 1166 = 1179 ^{2 instances.}
Cnth ins. 38 + 972 = 1010,

1954. 150 5 ms. W. of Saratoga, ^{Santa Cruz Mts.,} Santa
Clara Co., Cal. Elev. (ann.) 2075 feet.
V. 11, 1954. (R.)

Roadside cut banks and small flat
under trees. No. *O.* at all.

Cnth. 0 + 1179 = 1179.

Cnth ins. 5 + 1010 = 1015.

1954. 151 Saratoga Summit, Santa
Cruz Mts., Santa Clara Co., Cal. 1/2 ms. N
of junction of Cal. 9 - Cal. 5.
Elev. (ch.) 2600 feet. V. 11, 1954. (R.)

Roadside edge of mixed forest.

Bectroita juv. in woods, low ground
corn and grass on a very small flat-

tract. Chiropleura juv. There also

1954. 151 (cont.)

Juv. ? Platygyra? abrupt.

Orth. 8 + 1179 = 1187.

Utter ins. 22 + 1015 = 1037.

√ 1954. 152 Santa Cruz Mts., 7 miles N. of junction
of Cal. 9 and Cal. 5, Santa Clara Co., Cal.

Elev. 2275 feet (ann.) v. 11, 1954. (R.)

Rolling grassy hill slopes. Sole O.

Juv. hlecticita - abrupt.

Orth. 2 + 1187 = 1189.

Utter ins. 32 + 1037 = 1069.

√ 1954. 153 Along Cal. 5, (see Santa Cruz sheet
Type)

[~~Cabill Point~~ ^{Sierra Morena}] above Emerald Lake,
about 5 ms. (air-line) N. of Menlo

Park, San Mateo Co., Cal. Elev. approx.

1200 feet. v. 11, 1954. (R.)

Roadside work in lower cove and passes,
except Trinema. All of latter beaten

from fir and very local. The firs
were scattered and not continuous

and had to be examined singly. However,

a single set of beatings sometimes

netted as many as three. These individuals
did not curl up, as did those taken

in So. Cal., but immediately became very

The other insects, consisted of just
? Platylyra?, juv. bleuthila,
+ 1 juv. Medusa.

active and scrambled quickly. All were
pen-uncolored.
leth. 38 + 1189 = 1227

leth. vis 32 + 1069 = 1101,

1954. 154 Cahill Ridge, E. of Half Moon
Bay, above Crystal Springs Lake, San
Mateo Co., Cal. Elev. approx. 900 feet

V. 11, 1954. (R.) low wind-swept
chaparral, ^{of low components} but no manzanita or
chamise. Wind cold and high.

Anything swept. No C.

leth. 0 + 1227 = 1227.

leth. vis. 18 + 1101 = 1119.

1954. 155 5 ms. S.E. of Stinson Beach,
Marin Co., Cal. Elev. (an.) 500 ft. V. 13, 1954. (R.)

low fog-drenched scrub on rolling
hills. No. C.

leth. 0 + 1227 = 1227

leth. vis. 13 + 1119 = 1132.

✓ 1954.156 1.5 ms. E. of Ukema, Marin Co.,
Cal. Elev. (ch.) 400ft. V. 13. 1954. (R.)
Roadside vegetation. No. 10.

Uloth. 0 + 1227 = 1227.

Uthor vis. 17 + 1132 = 1149.

✓ 1954.157. 2 ms. NE. of Cloverdale, Sonoma Co.,
Cal. Elev. (an.) 625ft. V. 13. 1954. (R.)
Roadside full out-pass - then scattered
shrubby. Some *G. juv.* Scudderiana - juv.
unlaupid. - crypt.

Uloth. 3 + 1227 = 1230.

Uthor vis. 11 + 1149 = 1160.

✓ 1954.158 Along Russian River, 7 ms. S. of
Hopland, Mendocino Co., Cal. Elev. (an.)
700 feet. V. 13. 1954. (R.)

Roadside from W. 101 down to river. Everything
except from assortment of vegetation
bordering road, except Gammardottia,
all of which were beaten from a single
group of low trees of one species. Uthor
groups of the same gilded none.
The bicolor pattern of the dorsum
and the canary yellow of the venter
of the abdomen very marked in fresh

material. Almost no effort was made
to jump when in the net. The ^{juv. adults} ~~then~~ ~~to~~ were
taken from surface of good material - juv. ^{adults} ~~adults~~ ~~data~~.
leth. 9 + 1230 = 1239.
Other ins. 7 + 1160 = 1167.

1954.157 Three miles S. of Ridgewood Summit,
N. of Colpella, Mendocino Co., Cal. Elev. (am)
1850 ft. V. 14, 1954. (R.)

Roadside with scattered overhanging rocks.
No *O.* except juv. Melanophus on road edge.

leth. 3 + 1239 = 1242.

Other ins. 37 + 1167 = 1204.

1954.160 Ridgewood Summit, 4 ms. S. of
Willits, Mendocino Co., Cal. Elev. (ch.) 1953 ft.
V. 14, 1954. (R.)

Roadside - cuts too steep to rob. No *O.*

leth. 0 + 1242 = 1242.

Other ins. 18 + 1204 = 1222.

1954.161 Long Valley, 4 ms. N. of Longvale,
Mendocino Co., Cal. Elev. 1775 ft. (am.)
V. 14, 1954. (R.)

Beating roadside vegetation and
overhanging mangroves. No *O.* at all.

leth. 0 + 1242 = 1242

Other ins. 16 + 1222 = 1238.

of Wiregrass Ridge.

1954. 162 High slopes to west of Redwood
Creek, U.S. 299 (Check for notes.), Humboldt
Co., Cal. Elev. (an.) 2350 ft. V. 15, 1954. (R.).
Roadside dumping in heavy fir and
deciduous forest. No. 0.

Urb. 0 + 1242 = 1242.

Urb. no. 5 + 1238 = 1243.

1954. 163 High slopes on east side of Redwood
Creek, U.S. 299 (check for notes.), Humboldt
Co., Cal. Elev. (an.) 2850 ft. V. 15, 1954. (R.).

Short grass slopes in opening in forest,
with many species of low annuals.

Sole O. juv. Melanoplus.

Urb. 2 + 1242 = 1244.

Urb. no. 12 + 1243 = 1255.

1954. 164 2 mi. N. of Burnt Ranch, Trinity
River, Trinity Co., Cal. Elev. 1500 ft. (an.).
V. 15, 1954. (R.).

In ground cover under open tall fir
and oak, with low story chiefly
marguerite.

Gammarotettix + juv. Uedotia swept
from ground cover.

Urb. 5 + 1244 = 1249.

Urb. no. 10 + 1255 = 1265.

1954.165 Along Trinity River, 3 ms. E.
of Helena, Trinity Co., Cal. Elev. (an.)
1860 feet. V. N. 1954. (R.)

Soil and finely broken stone ^{mixture} with
short open oat-grass ^{corn} along under
magnolia and pine. Arphia seen + lost!

leth. ~~9~~ + 1249 = ~~1258~~
1255
Uther vis. 13 + 1265 = 1278.

1954.166 Buckhorn
Summit, Trinity
Mts., Trinity-Hasta
Cos., Cal. Elev. (to m.)

3215 feet. V. N. 1954. (R.)

Slips of decomposed granite, in large part
under pine, fir and oak timber, with
much manzanita as an understory.

Arphia on bare spots with low scant
grass ^{corn}. Sat close, but flew relatively
far. Single Chimarrocephala in leaves
and winter ground ^{corn} in
shade - all seen.

Uther C. swept in grassy spots.
Juv. Idionotus?, Juv. Neotoma, Juv. acidoid species.
at least 3 genera!
leth. 18 + 1255 = 1273
Uther vis. 6 + 1278 = 1284.

Juv. Blissotia on ground.
Juv. Trum. caucalypis leth.
Juv. Neoperistictis
swept from low ^{corn}.

1954.167 3 ms. S. of Project City, N. of Redding
Shasta Co., Cal. Elev. (am.) 700 feet. V. 16. 1954.
(R.)

Close stand of semi-cured short grass on
gently rolling hills. Corn scattered pine
and manzanita.

Juw. denticid ~~rupt from manzanita.~~ ^{Cypr. Duddonia}
Juw. melanoplid, Trin. cyanipes, Alphid &
Hemiteles sp.? (rupt from manzanita).
Trin. pallidipennis on tree sp. ^{Juw. Hesperistalis}

Orth. 19 + 1273 = 1292.

Orth. 21 + 1284 = 1305.

1954.168 About east side of Shasta Lake, near
Salt Creek Recreation Area, Shasta Co., Cal.
Elev. (am.) 1725 feet. V. 16. 1954. (R.)

Rolling low mts, with surface of finely broken
shaly reddish rock, & bare in places,
with manzanita spread corn in places, under
pine and oak.

Xanthippus 1, all seen, on bare ground surface.

Alphid 1 ♂ on ground with low plant corn.

Juw. Uredolobus on bare gr. Juw. Trin. cyanipes
Juw. melanoplid rupt. ^{on gr.}

Orth. 6 + 1292 = 1298.

Orth. 9 + 1305 = 1314.

↓ 1954.169 Invertebr. m. N. of Pollard
Gulch, S. of Hazel Creek, Shasta Co.,
Cal. Elev. (ch. - an.) 1700 ft. V. 16. 1954. (R.)
Aphid, two taken and three seen, on
pine needles under oaks and pine.

Juv. dictyoid on pine needles.

~~Collet.~~ mat. Prater ^{incl. juv melanoplid.}

Urch. 5 + 1298 = 1303.

Urch. no 4 + 1314 = 1317.

↓ 1954.170 Castle Crags State Park, 4 m. S.
of Glennsville, Shasta Co., Cal. Elev.
(an. - ch.) 2025 feet. V. 16. 1954. (R.)
Open rich grass slopes, with meadow-
like tussocks.

Aphid sp. pairing, sometimes hiding at
grass roots and generally flying
but moderate distances.

Very juv. Melanoplus Hopt.

Urch. 6 + 1303 = 1309.

Urch. no 31 + 1317 = 1348.

↓
1954.171 5 ms. S. of Town of Mt. Shasta,
Siskiyou Co., Cal. Elev. (ch.) 3000 ft. V. 16. 1954. (R.)
Area with bare stony silt and with grass
under and among manzanita chaparral.
Arphia in small numbers, in both
retinues on ground. Juv. melanoplid on
ground. Trin. pallidip. on road edge.
Orth. 12 + 1309 = 1321.
Other ins. 4 + 1348 = 1352.

↓
1954.172 West foot of Sugar Loaf Peak, 5 ms. N. of
Mt. Shasta (Town), Siskiyou Co., Cal. Elev.
(an. - ch.) 3900 feet. V. 17. 1954. (R.)
In patches of dry short grass under cut-out
pine and among manzanitas. All O. seen
Fehren. Juv. melanoplids swept. 1 juv.
Dryobla swept.
Orth. 11 + 1321 = 1332.
Other ins. 4 + 1352 = 1356.

↓
1954.173 4.5 ms. N.E. of Weed, Siskiyou Co.,
Cal. & Elev. (an.) 3500 ft. V. 17. 1954. (R.)
Bare silt and small stones with cover
of manzanita, sage and other bushes of
similar height. Juv. desertid swept from
manzanita. Others generally swept.

Urch. 3 + 1332 = 1335.

Urch. vis. 6 + 1356 = 1362.

1954. 174 Grass Valley, 19 m. NE. of Weed,
Siskiyou Co., Cal. Elev. (t.m.) 5000 ft.

V. 17, 1954. (R.)

Chiefly sage with interspersed grassy
areas. Platybothrus juv. in grass. Prolonged
search failed to disclose more than the
single individual taken.

Urch. 2 + 1335 = 1337.

Urch. vis. 34 + 1362 = 1396.

1954. 175 Penoyar, Siskiyou Co., Cal.

Elev. (am.) 5100 feet. V. 17, 1954 (R.)

Grassy patches under open and partly
cut-over ^{tall, well} pine stands. No U.

Urch. 0 + 1337 = 1337.

Urch. vis. 17 + 1396 = 1413.

✓ 1954. 176 2 ms. N. of Macdoel, Siskiyou
Co., Cal. Elev. 4700 ft. (an.) V. 17. 1954. (R.)
Brush pass and short grass among
sage on volcanic silt. Juv. Cordillarius
on ground. Juv. detritid msp.
Juv. undipodid + juv. melanophilid msp.
Cnth. 8 + 1387 = 1345
Cnth. no. 12 + 1413 = 1425.

✓ 1954. 177 California-Oregon State line,
3 ms. N. of Morris, Siskiyou Co., Cal.
(work done in Cal.) Elev. (an.) 4200 ft.
V. 17. 1954. (R.)
Sage, brush pass and very low short
grass on volcanic silt, with in spots
bare finely broken granite, at others
with variously sized lava fragments.
Cedalonotus? juv. msp. from eye.
Also ^{the} juv. melanophilid msp. generally.
Cnth. 19 + 1345 = 1364.
Cnth. no. 7 + 1425 = 1432.

✓ 1954.178 3 ms. SE. of Merrill, Clatsop Co., Oregon. Elev. (an.) 3930 feet. V. 18, 1954. (R.)

Roadside - natural cover. All swept.

Adult ♀ Pyrausta - small juvs. of a number of species of anidids.

Utah. 18 + 1364 = 1382.

Utah vis. 18 + 1432 = 1450.

✓ 1954.179 NW. edge of # Modoc Lava beds 5 ms. SE. of Stronghold, Modoc Co., Cal. Elev. (an.-ch.)

4000 ft. V. 18, 1954. (R.)

Open sage, soft sage, and rabbit weed and bunch grass with ^{the} low dry oat-grass ground cover on lava hillock.

Juv. Ceduleonotus? common, all swept from sage. Juv. Amphitrius swept.

Juv. Cubillabris swept. Juv. clitoid swept from sage.

Utah. 25 + 1382 = 1407.

Utah vis. 24 + 1450 = 1474.

1954.180 4 ms. S.E. of Perry, Modoc Lake Basin
beds, Modoc Co., Cal. Elev. (am.) 4450 ft.
V. 18. 1954. (R.)

Deep reddish brown loam soil with many
loam boulders, and with an open stand of
tall pine and a few junipers. Large areas
bottoms literally covered with a rank low
plant, the leaves of which somewhat suggest
those of cow cabbage - thin mullen-like
when young - but with a wealth of golden
yellow large daisy-like flowers.

One ^{newly} ad. Bradytrichus taken from one of
these blossoms - feeding? Many more of
them examined but no more such cases
seen. Juv. Arphia swept from ground. Juv.
Platylabus (2 instars) ditto. Juv. Melanoplus
swept generally.

Orth. 11 + 1407 = 1418.

Orth. 15 + 1474 = 1489.

1954.181 13 ms. NW. of Canby, Modoc Co.,
Cal. Elev. (am.) 4950 ft. V. 18. 1954. (R.)

Open low sage on reddish loam soil
with many scattered loam fragments.

All mat. swept. Juv. ? Redalcontus, juv.
Platylabus and two other species (?).

With. 7 + 1418 = 1425.

Other no. 5 + 1489 = 1494.

1954.182 Warm Spring Valley,
4 ms. ENE. of Canby, Modoc
Co., Cal. Elev. (an.) 4380 ft. V. 18, 1954. (R.)
Sage with brush pass.

Juv. deutoid mopt from sage.

Cedalonotus? juv. permal. juv.

Neurostella juv. With. 21 + 1425 = 1446.

Other no. 8 + 1494 = 1502.

1954.183 Warm Spring Valley, 10 ms. W. of
Alturas, Modoc Co., Cal. Elev. (an.-ch.)
4450 ft. V. 18, 1954. (R.)

Sage, soft sage and a little white sage.

Anything mopt. Vuv. deutoid. juv. Cedalonotus
juv. Cedalonotus? juv. Neurostella.
With. 13 + 1446 = 1459.

Other no. 5 + 1504 = 1509.

1954.184 8 ms S. of Alturas, Modoc Co.,
Cal. Elev. (an.) 4450 feet. V. 19, 1954. (R.)

Areas of thirt out. pass, stems of tall
brush pass and true sage. All
mopt. mopt. juv. Cedalonotus

mopt from ground. With. 3 + 1459 = 1462.

Other no. 27 + 1509 = 1536

1954. 185 6 ms. S. of Lickly, Lassen Co.,
Cal. Elev. (an. ch.) 5450 feet. V. 19, 1954. (R.)

Road crossing of lava brush. Surface
jumbled mass of lava fragments with
heavy stand of low sage. True conifer
juniper + piñon.

Cedrel. jun. swept from sage.

Orth. 5 + 1462 = 1467.

Ortho vis. 2 + 1533 = 1535

1954. 186 11.5 ms. S. of Madeline, Lassen
Co., Cal. Elev. (an.) 5350 feet. V. 19, 1954. (R.)

Sage and rabbit weed on silt.

Almost no C. All swept.

Orth. 1 + 1467 = 1468.

Ortho vis. 6 + 1535 = 1541.

↓ 1954. 187 Slopes of canyon of the Susan River,
above and 3 ms. W. of Susanville, Lassen Co.,
Cal. Elev. 4900ft. (an.) V. 19, 1954. (R.)

Soft sage, rabbit weed, large yellow
flowered annual and short grass on
lava soil, with scattered lava boulders,
under open and partly cut-out pine (not
tall pine). All C. swept.

Juv. of 3 distinct melanophids. 4 juv.
detritoid.

Ueth. 9 + 1468 = 1477,

Ueth. ins. 43 + 1541 = 1584.

↓ 1954. 188 Fredouyer Summit, Sierra Nevada,
14 ms. WSW of Susanville, Lassen Co., Cal.

Elw. (ch.) 5748 feet. V. 19. 1954. (R.)

Heavy pine (not bull pine), fir, spruce
and incense cedar forest, with open
glade-like meadowy spots.

Xanthippus in ground duff in
many openings. No more could be located.

All other insect. except. Juv. ? Bradytripes.

Ueth. 3 + 1477 = 1480.

Ueth. ins. 19 + 1584 = 1603.

↓ 1954. 189 Mt. Lassen Road (Cal. 89) about
1.5 ms. N. of junction with Cal. 36. ^{about collecting site}
of Mineral J. Tehama Co., Cal. Elw. (an)
6200 feet. V. 20. 1954. (R.)

Roadside is and on forest floor of in open
spots in otherwise ^{dry} dense fir forest. Slopes steep
snow in banks in forest on all sides. Road
crossed somewhat higher by heavy snow and
ice. All missing.

Edge of snow banks examined for Grylloblatta
Grylloblatta - no success!
1954. 189 (cont.).

1 juv. ovoides all O. sum.

$$\text{Coth. } 1 + 1480 = 1481.$$

$$\text{Cotton ins. } 10 + 1603 = 1613.$$

1954. 190 Morgan Summit, So. of Mt. Lassen Vol.
Nat. Park, Tehama Co., Cal. Elev. (a.m.) 5700 ft.
v. 20, 1954. (R.).

In heavy alpine fir and pine forest.
No O. Why few insects at all. Much snow in
patches in the forest.

$$\text{Coth. } 0 + 1481 = 1481.$$

$$\text{Cotton ins. } 4 + 1613 = 1617.$$

1954. 191 Childs Meadows, NW. of Clear Creek Pass,
(Cal. 36), Tehama Co., Cal. Elev. (a.m.) 4650 ft.
v. 20, 1954. (R.).

Mountain meadow area. Roadside section
with short grass and silt. Tetrix all
taken near, but not in or immediately at,
the latter. One juv. melanoptera in same
area. Juv. oedipodids (? Crematops ???) abun-
dant in one small area in short grass.

$$\text{Coth. } 40 + 1481 = 1521.$$

$$\text{Cotton ins. } 30 + 1617 = 1647.$$

↓
1954. 192 3 2 ms. E. of Childs Meadow
(see 1954. 191), Tehama Co., Cal. Elev. (an.)
4150 ft. V. 20, 1954. (R.)

Mountain meadow covered with thick
stand of buttercup-like yellow flowered plant,
with hills running through the meadow.
All material swept. Sole O. the gaudily
striped oedipoid (?) nymphs.

Orth. 5 + ~~1521~~¹⁵²¹ = 1526.

Other no. 33 + 1647 = 1680.

↓
1954. 193 Betw. Chester and Blue Creek
Pass (7 ms. W. of former), Plumas Co., Cal.
Elev. (an.) 4630 feet. V. 20, 1954. (R.)

Meadow next along border of pine and fir
forest

2 ad. Xanthippus taken separately at border
of dry needles and duff bordering meadow.
Juv. Bradyrota? swept. Other juvs. ditto.

Orth. 6 + 1526 = 1532.

Other no. 22 + 1680 = 1702.

1954.194 2.5 ms. W. of Chester, Plumas Co., Cal.

Elev. (am.) 4225 ft. V. 20. 1954. (R.).

Flat with very open spaced pine (not bull pine - has bluish bark), ground stony silt with some small boulders, the whole much covered with needles and cones.

Xanthippus - 1 ad. all seen. Not as wary as usual for members of this group, flying a shorter distance, and allowing a closer approach.

Platylabus juvs. numerous, and rather general. No adults noticed.

Juv. dentipalpus (group) 18 + N32 = 1550,

Other ins. 5 + 1702 = 1707..

1954.195 West end of Big Meadows Dam, 5 ms.

SE. of New Praterville, Plumas Co., Cal.

Elev. circa (ch.) 4400 ft. V. 21. 1954. (R.).

Mangrovia and other shrubs, largely covering a slope of volcanic gravel. All of group.

Asphondylia juvs. note 6. - juvs Xanthippus

Both. 2 + 1550 = 1552.

Other ins. 10 + 1707 = 1717.

↓ 1954.196 1 m. SW. of Greenville, Plumas
Co., Cal. Elev. (an. chart) approx. 3500 ft.
v. 21, 1954. (R.)

Grassy opening in black bark pine forest.
All mat. except. Orth. all quite juv.
Xanthippus, Cedalonotus, Melanoplus
- black femurred juv.

Orth. 6 + 1552 = 1558.

Atten vis. 10 + 1717 = 1727.

↓ 1954.197 Near Spring garden, Spring garden
Creek, 9 ms. ESE of Quincy, Plumas Co.,
Cal. Elev. 4000 ft. (ch.) v. 21, 1954. (R.)

Pine (black bark) forest with sunny spots
with short grass and wild flowers.

All except except Auphina, latter from
broken shale on old road.

Only other 1 black femurred juv.

Orth. 2 + 1558 = 1560.

Atten vis. 42 + 1727 = 1769.

✓ 1954.198 1 m. N. of Mohawk, Plumas Co.,
Cal. Elev. (ch. - an.) 4525 ft. V. 21. 1954. (R.)
Open pine (black bark) and fir forest. found
some low brush and flowering annuals.
All imp. No C.

$$\text{Cush. } 0 + 1560 = 1560.$$

$$\text{Water vis. } 15 + 1769 = 1784.$$

✓ 1954.199 Sierra Valley, 1.5 m. E. of
Beckworth, Plumas Co., Cal. Elev.
(an. - ch.) 4950 ft. V. 21. 1954. (R.)

Roadside native com - patches of
tall & soft sages with much short grass
between and a number of low annuals.
Juv. Fittig. () with vividly
contrasted coloration, beaten from the
lowest ground com. Juv. Cedalonites?
• juv. Melanoplus imp.

$$\text{Cush. } 12 + 1460 = 1572.$$

$$\text{Water vis. } 24 + 1784 = 1808.$$

1954. 200 Beckwouth Pass, Sierra Nevada,
Plumas - Lassen Cos., Cal. Elev. (b.m.)

5210 feet. V. 21, 1954. (R.)

Sage brush - soft sage. Everything swept,
very windy!

1♂ juv. Cedaleonetes + juv.

Androcard swept.

Arth. 6 + 1572 = 1578.

Other ins. 10 + 1808 = 1818.

1954. 201 W. side of Spanish Spring
Valley, 6 ms. N. of Sparks, Washoe Co., Nev.
Elev. (ch.) 4450 - 4500 feet. V. 22, 1954. (R.)

Sage brush on hill slope, with small
clumps of scattered grass.

Trimerotropis pallid. on ground surface.

Other mat. swept. - juv. Cordillaris, juv.

blue-legged Trimerotropis, others?

Arth. 5 + 1578 = 1583

Other ins. 0 + 1818 = 1818.

1954. 202 Low ^{draw} pass N. of Spanish
Spring Valley, 19 ms. N. of Sparks,
Washoe Co., Nev. Elev. (ch.) 4450 ft.
V. 22, 1954. (R.)

1954. 202 (cont.)

Sage and rabbit weed with many areas
of sun-cured short grass. Empty traps
empt. juv. Heliconia, juv. Cordillaria
and juv. Hesperotettix.

Utah. 3 + 1583 = 1586

Utter vis. 4 + 1818 = 1822.

1954. 203 Eastern lower slopes of Virginia

Range above ^{west shore of} Pyramid Lake, Washoe

Co., Nevada. Elev. (an. ch.) 4130 - 4500

ft. V. 22, 1954. (R.)

Pebbly silt with sand in places, and a
few scattered rock fragments. Cover
open relatively low sage, ephedra and other
shrubs, but chiefly the two mentioned.

Xanthippus the ♀ taken, on the ground,
all sun. Not as wild as members of
the crallipis group.

Perdix ♀ ~~on~~ driven out of low dead
sage. ♂ on ground.

All else empty. juv. Cordillaria, juv.

Hesperotettix and juv. ?

Utah. 6 + 1586 = 1592.

Utter vis. 0 + 1822 = 1822.

✓ 1954.204 Near shore of Pyramid Lake 5 ms.
S. of Sutcliffe, Washoe Co., Nevada. Elev.
(ch.) 3900 - 4000 ft. V. 22, 1954. (R.)

Sand and gravel of old lake strand.
Cov. soft sage and rabbit weed, and
with scattered short grass - much bare
tilty soil.

Trimerotropis pallidip. on ground, few.
Juv. scydipodids (3 sp.?) swept from ground.

Urch. 11 + 1592 = 1603.

Urch. ins. 0 + 1822 = 1822.

1954.205 2 ms. WNW. of Wadsworth,
Washoe Co., Nevada. Elev. (ch.) circa
4200 ft. V. 22, 1954. (R.)

Shad oak, rabbit weed and sun-cured
low brush grass, with quite a little
dead tumbleweed. Ground surface
gray tilty sand, very soft.

Juv. Cordilleris on ground.

Others swept. - juv. blue-legged

Trimerotropis + ^{juv.} Melanoplus.

Urch. 6 + 1603 = 1609.

Urch. ins. 1 + 1822 = 1823.

↓ 1954. 206 4 ms. ESE. of Fernley,
Lyon Co., Nevada. Elev. (an.-ch.) 4150 ft.
V. 22. 1954. (R.) (Area of old Carson sink)
Alkali impregnated soil with tall and
short grass and salt licks.

Juv. Amphitornus locally common in short grass.
1 juv. Aulacana nupt. Juv. Melanoplus
nupt.

Utter. 22 + 1609 = 1631.

Utter via 6 + 1823 = 1829.

↓ 1954. 207 Carson flat, 13 ms. S. of Fallon,
Churchill Co., Nevada. Elev. 3916 ft. (ch)
V. 23. 1954. (R.)

Roadside dry ditch. All nupt.
Mosquitoes terrible. Sole U. juv.
Melanoplus.

Utter. 2 + 1631 = 1633.

Utter via. 28 + 1829 = 1857.

1954. 208 Road ^{via juv} (US. 95) of Heart
Mountains, Lyon Co., Nevada. Elev. (ch.-an.),
4700 feet. V. 23. 1954. (R.)

Grassia & Atriplex predominating. Sole U.
juv. Aedopides nupt from former. Almost
no insect life.

Utch. 1 + 1633 = 1634.
Utter vis. 1 + 1857 = 1858.

1954. 209 1 m. W. of Schurz, Mineral Co.,
Nevada. Elev. (ch. - an.) 4200 ft. V. 23, 1954.
(R.)

Gravelly and stony lower slopes of east side
of north end of Macaulay Range, below
Black Mtn. peak.

Fraxia - Atriplex predominating. Cibolacris
the only C. seen. ♀ flushed and killed in
a dead Atriplex; ♂ taken on ground.

Utch. 2 + 1634 = 1636.

Utter vis. 1 + 1854 = 1855.

1954 210 Mason Valley, 9.5 ms. N. of
Yerington, Lyon Co., Nevada. Elev. (ch. - an.)
4380 feet. V. 23, 1954. (R.)

Short sun-cured salt grass on alkaline soil,
with sparse Atriplex.

Soil C. gen. Amphitornus and
Auburn.

Utch. 17 + 1636 = 1653

Utter vis. 11 + 1855 = 1866.

✓ 1954.211 2 mi. S. of Glenbrook, above Lake Tahoe, Douglas Co., Nevada. Elev. (ch.) 6600 feet. V. 24. 1954. (R.)

Areas of manzanita and other scrubby of similar height, with a scattering of sage, in pine forest.

Everything swept. No C. juv. Auphis-

leth. 2 + 1653 = 1655.

leth. vis. 16 + 1866 = 1882.

✓ 1954.212 1 mi. N. of California state line, Lake Tahoe, Douglas Co., Nevada. Elev. (ch.) 6500 feet. V. 24. 1954. (R.)

Grass and sage along and in edge of pine forest, with some aspen. No C.

Everything swept.

leth. 0 + 1655 = 1655.

leth. vis. 40 + 1882 = 1922.

1954.213 Spooner Summit, above Glenbrook, Douglas Co., Nevada. Elev. (ch.) 7050 ft. V. 24. 1954. (R.)

Sage area in open surrounded by heavy fir and pine forest. Everything swept. No C.

leth. 0 + 1655.

leth. vis. 3 + 1922 = 1925.

1954.214 Clear Creek grade to Spomer
Summit, above Carson City, Ormsby
Co., Nevada. Elev. (an.) 6175 feet. V. 24, 1954.
(R.)

Mangarita and other plants in opening
in pine & cedar forest. Everything
empt. No l.

Urb. 0 + 1655 = 1655.

Urb. no. 5 + 1925 = 1930.

↓

1954.215 Clear Creek grade to Spomer
Summit, above Carson City, Ormsby Co.,
Nevada. Elev. (an.) 5325 feet. V. 24, 1954

Grassy mountain meadow surrounded
by sage and bordered by ^{heavy} pine
forest.

Camule + Aphia ? 3
Juv. Acetivid and juv. redipodids on grassy
floor of meadow. All others kept.

Urb. 11 + 1655 = 1666.

Urb. no. 17 + 1930 = 1947.

✓ 1954. 216 Chinaman Flat, Canyon of
West Walker River, 6.5 ms. S. of Colville,
Mono Co., Cal. Elev. (ch. an.) 5900 ft.

V. 25, 1954. (R.)

Small flat in canyon with sage and low
sun-cured oat-grass - many scattered
granite boulders from slope above.
Trace coniferous-like piney.

Xanthippus on ground - all seen of species.
Everything else swept. - 1 Acroplitis juv.

Ueth. 2 + 1666 = 1668.

Ueth. no. 6 + 1941 = 1947.

↓ 1954. 217 Devil's Gate, 5 ms. E. of Sonora
Junction, Mono Co., Cal. Elev. (c. m.)
7548 feet. V. 25, 1954. (R.)

Sage and dry mountain meadow. No
timber in immediate vicinity. juv.

Platybothrus in meadow. Adult Pedonia
delicatula among sage - no other seen.

Ueth. mat. swept. Ueth. O. juv. apparently
Camilla and Melanoplus.

Ueth. 13 + 1668 = 1681.

Ueth. no. 21 + 1947 = 1968.


1954.218 Conway Summit, N. of Mono
Lake (U.S. 395), Mono Co., Cal. Elev.
(t.m.) 8136 ft. V. 25, 1954. (R.)

Open sage covered slopes with meadow
below. No C. Everything swept. Wind
of gale proportions and work very difficult.

Uts. 0 + 1681 = 1681.

Uts. vis. 9 + 1968 = 1977.

1954.219 U.S. 395 1 m. N. of Headman
Creek, Mono Co., Cal. Elev. (ch.) 7800 ft. V. 20

Pumice surface with open tall pine
forest. Some corn low  shrub full
of yellow flowers, and almost no grass.

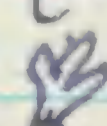
Only insects seen 1 juv. Xanthippus
on ground surface.

Uts. 1 + 1681 = 1682.

Uts. vis. 0 + 1977 = 1977

1954.220 So. end of Long Valley at
Mc Gee Creek Pack Station (above
Crowley Lake), Mono Co., Cal.

Elev. (t.m.) 6835 ft. V. 25, 1954. (R.)

In sage and yellow-flowered 
shrub (same as at 1954.219).

Everything swept.

1954. 220 (cont.)

1 very small juv. Scymnastid!

Utah, 3 + 1682 = 1685.

Utah vis, 5 + 1977 = 1982.

✓ 1954. 221 (off. Hll road)

Canyon leading up to Westgard
Pass (looking up on Protophytophysci
Mts.), Inyo Mts., 5 miles above Zurich.

Inyo Co., Cal. Elev. (an.) 5025 feet. V. 26. 1954
(R.)

Flow of canyon with washes and flats of
broken stone. Many flowers in bloom. Found
plant com Atriplex, water lily, and a
yellow-flowered composite.

Trimerotropis blue-legged species only on
rock surfaces, where its ^{prob} elevation was
most protective; not at all shy, but would
crouch on uneven surface, then fly after
the net passed. Saw 4, secured 2.

Juv. Acrolepis trator. Trim. pallid. more
general, 1 taken. Juv. Xanthippus on ground.

Utah 6 + 1685 = 1691.

Utah vis, 33 + 1982 = 2015

↓ 1954. 222 Westgard Pass, Inyo Mts.,
Inyo Co., Cal. (Elev. (b.m.) 7276-7325 feet
V. 26, 1954. (R.)

Low sage and a few other plant species dotted
with park-like juniper and piñon. A fair
sized flat, ^{in part} with hill slopes on north and
south sides.

Perodera mauricea delicatula - all seen
taken, on ground or flying into sage, juvs.
of ~~two species~~ ^{singletons} ^{or small groups}. Careful search made
for Tamias, without results.

Colth. 5 + 1691 = 1696

Other ins. 16 + 2015 = 2031.

↓ 1954. 223 Same ^(old hill road) canyon as 1954. 221 but at
6475 feet (a.m.). V. 26, 1954. (R.)

Sage, composites, various other flowering
annuals, with scattered juniper and
piñon. Very rough, boulder strewn surface
and very rocky wash. Immediately
below the gorge with one-way road.
No D.

Colth. 0 + 1696 = 1696,

Other ins. 29 + 2031 = 2060.

1954. 224 Lower section of same canyon as
1954. 221, at 4700 ft. (an.) ^(old toll road) V. 26. 1954. (R.)
Cover chiefly sunflower-like yellow-flowered
composites with a little Atriplex. Large
Stony washes. St. G. Trin. pallidipennis
on ground.

With. 2 + 1696 = 1698.

~~With~~ With vis. 5 + 2060 = 2065

✓ 1954. 225 4 ms. S. of Bishop, Owens
Valley, Inyo Co., Cal. Elev. (an.) 4700 ft.
V. 26. 1954. (R.)

Sage and composites chiefly, on decomposed
granite gravel with many large boulders
scattered about.

Cibolarius very local and few, on ground, see
flying into bushes when pursued.

Juv. Aedopides swept from sage.

Juv. Trimerotropis rebellii ^{seen} on ground, one
taken all over.

With. 4 + 1698 = 1702.

With vis. 12 + 2065 = 2077.

1954. 226 7 ms. S. of Big Pine, Owens Valley,
Inyo Co., Cal. Elev. (am.) 3900 ft. V. 27, 1954. (R.)

Gravelly silt, with rather heavy cover
of rabbit weed and Atriplex, between these
thin low grass and some Furcula-weed.

near low hills at ^{E.} base of Sierras.

Citellus very local, 1 pair taken in one
small area. Juv. Mesquitolis almost
entirely beaten from rabbit weed. Juv.

Melanoplus by low sweeping. Juv. Antennaria
on ground, few. Juv. Arctostaphylos 1 swept
from low ground cover. Trin. pallid.
on Strombosia spots. Juv. Trin. rubellus 1 Juv.
on ground. Juv. Aedopodites beaten.

$$\text{Uth. } 33 + 1702 = 1735.$$

$$\text{Other vis. } 29 + 2077 = 2106.$$

1954. 227 16 ms. N. of Independence, Owens
Valley, Inyo Co., Cal. Elev. (am. + ch.) 3900 feet
V. 27, 1954

Vicinity of lava outcrops - soil gravel and
near-silt of decomposed granite and
small lava fragments. Cover chiefly
rabbit weed with some Atriplex.

Citellus local, but numerous, ~~seen~~ on
ground surface usually, but when
pursued taking refuge in ^{low} bushes,

1954.227 (cont.)

preferably dead ones. Cordillacus
was more local and less numerous, more
many and active, when pursued also
took refuge in dead ^{tree} bushes. juv.

Acrolophus - juv. Melanopterus myst.
from Catocala ♀♀ had eyes fully developed.
Cuth. 46 + 1735 = 1781.

Other no. 0 + 2106 = 2106.

↓ 1954.228 Owens Valley, 4 ms. N. of Lone
Pine, Inyo Co., Cal. Elev. (ch.-an.) 3700 ft
V. 27. 1954. (R.)

Soil salt - with definitely alkaline spots
and crust. Corn chiefly Atriplex +
salt bush, with some tumble-weed.

Arconia locally numerous, ♀♀
flying farther than ♂♂, and both
usually taking refuge when pursued
in tops of Atriplex.

Cuth. 13 + 1781 = 1794.

Other no. 0 + 2106 = 2106.

↓ 1954.229 Walker Pass, Sierra Nevada,
Kern Co., Cal. Elev. (b.m.) 5200-5500 ft.
(latter highest coll. point). V. 28. 1954. (R.)

Slopes bordering pass with piñon on
the west side, ^{ponderosa} pine ^{groves} on the east.

Some cone sage, rabbit weed, mountain mahogany (latter on slopes - not in the pass itself) and other low shrubbery.

Cumulated juvs. Aspt from mtn. mahogany.

Cordillaris juvs. apparently hiding in a low shrub (Op?), taken out. Juv. destined

empt. Juv. Aetoloides dead. Neopenthetis

empt from rabbit weed. Everything else found empty. Trin. pallidip. on ground.

Utter. 12 + 1794 = 1806

Utter ins. 46 + 2106 = 2152.

1954. 230 East Slope of Sierra Nevada leading up to Walker Pass, Kern Co., Cal. Elev. (an.) 4500 ft. V. 24, 1954. (R.)

blurred strands of tree trunks. Aglaethorax taken from terminal portions of leaf crowns. Mat. removed represents the remains of several hundred crowns. None lost.

Two lashed & blind leg when captured. Juvs apparently early, as but 1 is a male, which objected

loudly to being pried loose. Juv. Neopenthetis empt. Trin. pallidip. on juv. + 1806 = 1814.

Utter ins. 5 + 2152 = 2157.

✓ 1954. 231 1.5 ms. N. of Little Creek, Inyo Co.,
Cal. Elev. (an.) 3000 feet. V. 28, 1954. (R.)

Surface decomposed granite gravel, but
close to a bedding lava dyke. Cover
chiefly Covillea and Palladia (latter?).
Juv. Mesochorus covilleae - Botettia nupt.
from Covillea. Cibolensis 1 nupt from
low cover, where it apparently had Fabian
refuge. Saw 1 Campoplex fuliginosus
flying (black wings), but could not
mark it down, altho' I tried hard to do so.
1 Aedoplectes adult nupt.
Uthman 13 + 1814 = 1827.
Uthman in . 7 + 2157 = 2164.

✓ 1954. 232 Floor of N. part of Panamint
Valley, 3.5 ms. E. of Panamint Springs,
Inyo Co., Cal. Elev. (ch.) 1650 feet.
V. 29, 1954. (R.)

Very open stand of Covillea on soft sandy
silt. Amptodora in Covillea, mostly
nupt, a few seen first perched in the
upper sprays. When frightened and
launched in flight they went a long
distance, like a Schistocerca. Usually
they were not very ^{few with well devel. eggs.} Amptodora seen but lost.
1 ad. Mesochorus covilleae nupt from Covillea.

Juv. hymenotettix swept from Covillea
leath. 1 ♀ + 1827 = 1838.
Utter ins. 0 + 2164 = 2164.

1954. 233 Death Valley, between Stovepipe
Wells and Salt Wells, Inyo Co., Cal.

Elev. (ch.) 100 feet. V. 29, 1954. (R.)

Open wash slopes with very sparse
vegetation, chiefly Covillea and

Atriplex hymenoclyta, No. 10. ^{Augustids in} Covillea

leath. 0 + 1837 = 1837.

Utter ins. 4 + 2164 = 2168.

↓ 1954. 234 Eastern slopes of Death Valley,
about 1 m. S. of Hell Gate, Inyo Co., Cal.

Elev. (ch.) 1800 feet. V. 29, 1954. (R.)

A maze of stony washes with open
stand of Covillea, Atriplex hymen-
oclyta and a few other species. Typhlostyle
numerous and very active - flying long
distances - when thoroughly frightened.

Mostly ♀♀, one pair in collection. Single

Trin. pallidip. seen - taken.

leath. 11 + 1837 = 1848

Utter ins. 1 + 2168 = 2169.

✓
 1954. 235 Haylight Pass, Amargosa Range,
 Inyo Co., Cal. Elev. (b.m.) 4347 feet.
 V. 29, 1954. (R.)

Hill slopes with Covillea, Atriplex and
 numerous other low desert shrubs. Everything
 except very little. Juv. Puccinotellus sanguineus
 except. Juv. Bortettia ditto. Juv. Insecta
Covilleae also.

Uoth. ⁶75 + 1848 = ~~1856~~ 1856.

Uoth. no. ¹⁵5 + 2169 = ~~2174~~ 2187.

✓
 1954. 236 Amargosa Desert, E. of
 Amargosa Range and 5 mi. S.W. of
 Beatty, Nye Co., Nevada. Elev. (ch. + an.)
 3200 feet. V. 29, 1954. (R.)

Gentle slopes with Covillea (the dominant
 shrub), Atriplex and other shrubs. A single
Anoplodusa taken from Covillea. Insecta
 all Covilleae ditto. Uoth. material
 taken, largely from Covillea. Juv.
Bortettia also from Cov.

Uoth. 8 + 1856 = 1864.

Uoth. no. + + 2187 = 2191,

1954. 237 Oasis Valley, 1 m. N. of Hicks
Hot Springs, Nye Co., Nevada. Elev. (ch.) approx.
3600 feet. v. 30. 1954. (R.).

Common Atriplex - similar plants, with some
Covillea, no grass, much bare stony silt.

Inula sp. juv. swept from Covillea.
Juv. Paratrifid general beating. juv.
Pocillostictis ovata. ditto. juv. Portulaca
from Covillea.

Orth. 11 + 1864 = 1875.

Other no. 17 + 2191 = 2208.

1954. 238 Sarcobata Sarcobatus Flat,
14 ms. N. of Springdale, Nye Co., Nevada.
& Elev. (ch.) 4000 ft. v. 30. 1954. (R.)

Flat with pavement of large pebbles
pebbles and small stones on silt with

Sarcobatus - Atriplex. Almost no O.

1 Artemisia canadensis on ground
surface, extensive branch located no
more.

Orth. 1 + 1875 = 1876.

Other no. 0 + 2208 = 2208.

1954. 239 Stonewall Pass btw. Sarcobatus
Flat and Stonewall Flat, Nye Co., Nevada.
Elev. (ch.) 4693-4753 ft. V. 30, 1954. (R.)

Slopes of lava debris, broken down from the
lava caps on each side of the low pass,
also much pumice, some pieces as large as
my hand. Com chiefly Sarcobatus. Only
Q. seen 1 Cibicides, taken on lava through.

Urb. 1 + 1876 = 1877.

Urb. vis. 1 + 2208 = 2209.

1954. 240 NW. of Stonewall Flat, 13 ms.
N. of Stonewall Pass, Esmeralda Co.,
Nevada. Elev. (ch. - an.) 5300 feet. V. 30, 1954. (R.)

~~Thin~~ Slopes with heavy washes, much
desert pavement, ~~with~~ low cover Atriplex
& other genus of similar type. A few
scattered tree yuccas (those examined
i.e. washable-yielded nothing).

Cibicides very local and not numerous
on desert pavement. 1 juv. Trinacropis
pallidipennis on same. Juv. Aedypatus

Urb. 5 + 1877 = 1882.

Urb. vis. 9 + 2209 = 2218.

1954.241. Petros. Springdale and Hicks
Hot Springs (head of Oasis Valley), Nye Co,
Nevada. Elev. (ch. - an.) 3700 ft. V. 30. 1954. (R.)

Boggy meadows, somewhat alkaline,
with tall grass and ridges.

Juv. Cnecophelus immisus.

Trin. pallidip. on adjacent low silt

coll. 12 + 1882 = 1894

Other inv. 28 + 2218 = 2246.

1954.242 Lower slopes of Bullfrog Hills,
2 ms. S. of Rhyolite, Nye Co., Nevada.
Elev. (ch. - an.) 3500 ft. V. 30. 1954. (R.)

Slopes with Atriplex, Covillea, etc. All
inst. except Juv. Bortettix - ad. - juv.
Dusona covilleae on Covillea.

Coll. 10 + 1894 = 1904.

Other inv. 12 + 2246 = 2258.

1954.243

Amargosa blent, 4 ms. S. of Carrara,
Nye Co., Nevada. Elev. (ch.) 3000 ft
V. 31, 1954. (R.)

Cover Covillea, Atriplex, etc. All braten,
almost entirely from Covillea.

Juv. Bortettix, higdoni - Dusona covilleae.

1954. 243 (cont.)

One three-winged Ammonia flushed, but could not be marked down on account of light conditions.

Utah. 17 + 1904 = 1921,

Utah via 4 + 2218 = 2262,

1954. 244 2 ms. NW. of Hathrop's Well, Amargosa Desert, Nye Co., Nevada. Elev. (a.m.-ch.) approx. 2650 feet. V. 31, 1954. (R.)

One almost ^{pink} ^{streak} white Ammonia on desert pavement on silt. 2 Amphispiza seen, 1 taken from Coriaria (on top terrestris traps), the other flushed, flew a long distance and could not be located. Juv. Idiastur Idiastur Atalapha swept from Coriaria. Juv. Boottia ^(13 insects) Boottia. Adult + juv. ^(18 insects) Boottia Boottia on same.

Utah 27 + 1921 = 1945.

Utah via. 7 + 2262 = 2269.

1954. 245 Point of Rocks, 20 ms. E & E.

of Hathrop's Well, Nye Co., Nevada.

Elev. (a.m.) 3034 feet. V. 31, 1954. (R.)

One relatively low Coriaria. Everything swept. Juv. Boottia (1 in brown phase) and juv. Ligustrum from Coriaria.

Utah. 4 + 1945 = 1949.
Other ins. 2 + 2269 = 2271.

1954.246 9ms. E. by S. of Indian Springs,
Clark Co., Nevada. Elev. (ch.) approx. 3050 ft.
V. 31, 1954. (R.)

Area of multiple washes and with desert
pavement on the lands between. Common
Yucca, tree yucca, Covillea, etc.

Everything taken except from Covillea
No evidence of Agrostis in tree
yuccas examined. Psittacus imm.
in 3 vials taken. 1 Psittacus
parvulus in vial preceding
maturity.

Utah. 12 + 1949 = 1961.
Other ins. 2 + 2271 = 2273.

1954.247 16ms. NW. of Las Vegas,
Clark Co., Nevada. Elev. (ch.: an.) approx.
2740 ft. V. 31, 1954. (R.)

Gentle slope from Charleston
Range with many shallow washes.
Low plant elements chiefly Covillea and
a low Atriplex. Landscape dotted with
tree Yucca and tree yuccas.

1954. 247 (part)

Nothing noted in latter. Pocillotettix
marginatus adult flushed from low
Atropis. juv. ~~det.~~ Ateloplus and
Botettix juv. ^{13 instars} - 1 adult swept from
Covillea.

Orth. 9 + 1961 = 1970.

Orth. no. 7 + 2273 = 2280.

✓ 1954. 248 Antelope Hopes of Charleston Range
leading up to Kyle Canyon, 2 ms. above
rock fork, Clark Co., Nevada. Elev. (an.)
3100 feet. V. 1. 1, 1954. (R.)

Scattered Tree yuccas and Tree yuccas,
with Covillea and similar bush.

Juv. Botettix brachyformis Covillea. Trin.
pallidipennis on ground.

Orth. 5 + 1970 = 1975.

Orth. no. 5 + 2280 = 2285.

✓ 1954. 249 Kyle Canyon, immediately
below Charleston Park, Charleston
Range, Clark Co., Nevada. Elev. (an.)
and an.) 7250 feet. V. 1. 1, 1954. (R.)

Sunny spots in tall pine forest, with
another species of pine and some aspen.

Rocky wash with very narrow borders
between the canyon walls. Lower down
a soft sage, thistle and various other
plants.

Xanthippus flushed from sage, taken on
ground - all seen. Psychomastax few,
taken from unidentified bushes.

Utah. 3 + 1975 = 1978.

Utah ins. 26 + 2285 = 2311.

√ 1954. 250 Kyle Canyon, Charleston Range,
Clark Co., Nevada. Elev. (an. + ch.) 6450 ft.

VI. 1. 1954. (R.)

Heavy stand of mixed shrubbery,
including Mormon "juniper" (rose in
white flower), soft sage, etc.

No C. except 1 Xanthippus, taken
on bare stony soil. All seen.

Utah. 2 + 1978 = ~~1979~~ 1980.

Utah ins. 24 + 2311 = 2335.

1954. 251 Kyle Canyon, Charleston Range,
Clark Co., Nevada. Elev. (Ch.) ^{approx.} 4500 feet.

VI. 1, 1954. (R.)

In relatively heavy stand of Tree yucca,
scattered among Atriplex, some
Mormon "juniper" and other shrubs,
with numerous spars. Examined many
Tree yucca but saw no sign of Aglaostomus.
The sole O. Fahn was a juv. Psittopsittacus
nupt.

Urb. 1 + 1980 = 1981.

Urb. vis. 6 + 2335 = 2341.

1954. 252 Between Garnet and Blue Lake,
Clark Co., Nevada. Elev. (^{circa 2250 feet.} ~~check on H.~~)
~~Thomson shut for close~~ VI. 2, 1954. (R.)

Typical Covillea flat. Juv. Psittopsittacus
nupt from Cov. Amphispiza flushed
from top sprays of Cov., finally landed
on ground - Fahn there. Wind very
high.

Urb. 3 + 1981 = 1984.

Urb. vis. 10 + 2341 = 2351

1954.253 Mormon Mesa, 4 ms. NE. of
Glendale, Clark Co., Nevada. Elev. ~~(^{ft.})~~
~~1150 ft. (check this on St. Thomas chart for~~ ^{circa 2500 ft.}
~~accuracy).~~ VI. 2, 1954. (R.)

Strong silt with open Covillea stand and
other low bush. Very little - no C. Wind
very high.

Orth. 0 + 1984 = 1984

Other ins. 5 + 2351 = ~~2351~~ 2356.

✓ 1954.254 Mormon Mesa, 12.5 ms. NE.
of Glendale, Clark Co., Nevada. Elev.
~~(^{ft.})~~ ~~1150 ft. (check this on St. Thomas chart~~ ^{circa 3000 ft.}
~~for accuracy.)~~ VI. 2, 1954. (R.)

Deep red sand and silt with Covillea
and other bushes, with some scattered
tree yuccas.

Trin. ~~pallida~~ cristata? On sand only,
active. Cordillacris ditto.

Pocillotettix sanj. taken from low
bushes. In Bortettix in Covillea.
Nothing seen in tree yuccas.

Orth. 14 + 1984 = 1998.

Other ins. 0 + 2356 = 2356.

✓ 1954. 255 2 ms. NE. of Arizona ^{west} state line (on U.S. 91)
(4 ms. from Mesquite, ^{Neopoda} ~~Arizona~~), Washington ^{Mohave}
Co., ~~Utah~~ ^{Arizona}. (~~W. of Beaver Blain Mts.~~) Elev.
(am.) 1475 feet. VI. 2. 1954. (R.)

Grutte slope with cover chiefly Covillea,
Atriplex and sparse short grass on sandy
silt.

Ducara cov. ad. & juv. Portetia swept
from Covillea. Blattella delicatula?
juv. swept from very low plant. Acrocha
adult in clearing of very thin low grass.

✓ Paropromala juv. stella. Trim. pallid. on ground.
Urb. 6 + 1998 = 2001.

Utah ins. 6 + 2356 = 2362

✓ 1954. 256 1/2 ms. N. of Arizona state line (on U.S. 91)
near W. base of Beaver Blain Mts., Washington
Co., Utah. Elev. (am.) 2650 ft. VI. 2. 1954. (R.)

Grutte slope with Covillea and many other
low desert shrubs, and short grass, on stony
silt, with moderate stand of tree yuccas.
Nothing seen in tree yuccas. juv. hypostellus
taken from Covillea. Ciblaris few, on
stony ground surface. Pocillotellus long.
locally present in short grass and mesquite

specimens of two shrubs, usually dry and
brittle ones. juv. Portulaca in Covillea.

Utah. 11 + 2001 = 2012.

Utah vis. 4 + 2362 = 2366.

1954. 257 Road pass (Ut. 91) across Beaman
blain Mts., Washington Co., Utah. Elev. (ch.)
4750 feet. VI. 2. 1954. (R.)

Sage and mormon "juniper" under park-
like junipers.

juv. Psychoglossa + juv. Pseudosermyla
supt from mormon "juniper."

Utah. 7 + 2012 = 2019.

Utah vis. 4 + 2366 = 2370.

1954. 258 1.25 ms. E. of Washington,
Washington Co., Utah. Elev. (ch. + an.) 2800 ft.
VI. 3. 1954. (R.)

Red silt with open cover of a few Covillea,
true sage, soft sage, verbas. Cholla and prickly
pear and some Atriplex.

Insara covilleae juv. supt from Covillea.

Cordillaria on silt - 1 all seen, taken.

Therapsotellus juv. supt from soft sage.

Utah. 3 + 2019 = 2022

Utah vis. 17 + 2370 = 2387.

1954. 259 2 ms. SW. of Leeds, Washington Co.,
Utah. Elev. (ch.-an.) 3500 ft. VI. 3. 1954. (R.)
Red sandstone ledges with various low
ground, but no Covillea. Trin. pallidip. on
rock surface. Juv. Herposiphys swept out of low
composites

Arth. 5 + 2022 = 2027.

Arth. ins. 8 + 2387 = 2395.

1954. 260 1.5 ms. NE. of Anderson,
Washington Co., Utah. Elev. (an.) 3800 ft. VI. 3. 1954. (R.)
Hill slopes with juniper, some sage, thin oak,
and also low composites. Almost no
grass. Trin. pallidip. on ground. Herposiphys
juv. swept from composites. Cibolarius 1 on
rock surface, all seen, taken. Juv. Melanophus
swept.

Arth. 5 + 2027 = 2032.

Arth. ins. 10 + 2395 = 2305.

1954. 261 5 ms. NNE. of Pintura, Washington
Co., Utah. Elev. (an.) 5000 ft. VI. 3. 1954. (R.)
Rosa bush with surface largely covered
from large fragments and boulders. Ficus
com. ^{almost} entirely juniper and sage.

Juv. Neopenthetis scripta. Juv.
Acrotophides scripta. Trin. pallidif. numerous
on ground and rock surfaces. Juv. Agonotroche
scripta.
Cents. 4 + 2032 = 2036,
Other inv. 36 + 2305 = 2341

1954.262 3.5 ms. N. of Kanarrville,
Iron Co., Utah. Elev. (an. ch.) 5500 ft.

VI. 3. 1954. (R.)

Almost pure stand of sage, under juniper
with a few piñon, a little soft sage and
prickly pear (some of latter in bloom).

Juv. Neopenthetis and juv. Melanoplus
scripta. No. C.

Cents. 2 + 2036 = 2038.

Other inv. 16 + 2341 = 2357.

1954.263 3 ms. S. of Cedar City, Iron Co.,
Utah. Elev. (ch. an.) 5900 ft. VI. 3. 1954 (R.)

Hill slopes of lava boulders and fragments
with some juniper & sage - little else.

Trin. pallidif. adults & juvs. on fr. surface.

Neopent. juv. & juv. Melanoplus scripta.

Juv. Acrotophides scripta.

Cents. 7 + 2038 = 2045.

Other inv. 1 + 2357 = 2358.

1954. 257 2 mo. SW. of Leeds, Washington Co., Utah. Elev. (ch. + an.) 3500 ft. VI. 3. 1954. (R.)
Red sandstone ledges with various low ground, but no Covillea. Trin. pallidip. on rock surface. Juv. Herposiphonia swept out of low compresses

Arth. 5 + 2022 = 2027.
Arth. ins. 8 + 2387 = 2395.

1954. 260 1.5 mo. NE. of Anderson, Washington Co., Utah. Elev. (an.) 3800 ft. VI. 3. 1954. (R.)
Hill slopes with juniper, some sage, thin oak, and also low compresses. Almost no grass. Trin. pallidip. on ground. Herposiphonia juv. swept from compresses. Cibicides 1 on rock surface, all sun, taken. Juv. Melanoplus swept.

Arth. 5 + 2027 = 2032.
Arth. ins. 10 + 2395 = 2305.

1954. 261 5 mo. NNE. of Pintura, Washington Co., Utah. Elev. (an.) 5000 ft. VI. 3. 1954. (R.)
Rosa bush with surface largely covered from large fragments and boulders. ^{almost} Covillea entirely juniper and sage.

Juv. Neopenthetis rupt. juv.
Acrotophides rupt. Trim pallid sp. numerous
on ground and rock surfaces. Juv. Agonotroche
rupt. Utah. 4 + 2032 = 2036,
Utah no. 86 + 2305 = 2341

1954.262 3.5 ms. N. of Kanarrville,
Iron Co., Utah. Elev. (an. ch.) 5500 ft.

VI. 3. 1954. (R.)

Almost pure stand of sage, under juniper
with a few piñon, a little soft sage and
prickly pear (some of latter in bloom).

Juv. Neopenthetis and juv. Melanoplus
rupt. no. O.

Utah. 2 + 2036 = 2038.

Utah no. 16 + 2341 = 2357.

1954.263 3 ms. S. of Cedar City, Iron Co.,
Utah. Elev. (ch. an.) 5900 ft. VI. 3. 1954 (R.)

Hill slopes of lava boulders and fragments,
with cover juniper + sage - little else.

Trim pallid adults + juvs. on fr. surface.

Neopent. juv. + juv. Melanoplus rupt.

Juv. Acrotophides rupt.

Utah. 7 + 2038 = 2045

Utah no. 1 + 2357 = 2358

✓ 1954.264 1.5 ms. S. of Parowan Summit,
7 ms. SW. of Parowan, Iron Co., Utah.
Elev. (an.) 6050 feet. VI. 4. 1954. (R.)

Stidly sage, with weeds roadside.

Xanthippus in sage area, on ground, also
juv. Agavelestis junceus. Juv. Melanoplus
^{2 spp., variegatus one}
in roadside weeds, stidly from one in
sage areas.

Utah. 18 + 2045 = 2063.

Utah ins. 6 + 2358 = 2364.

✓ 1954.265 Parowan Valley, 4.5 ms. N. of
Paragonah, Iron Co., Utah. Elev. (ch.-an.),
6850 feet. VI. 4. 1954. (R.)

Almost entirely Sarcobatus and Atriplex.

Xanthippus local on ground, but flying
into bushes. Juv. Plagiostira swept
from Sarcobatus. Juv. Acroplides
swept from Atriplex (a green - a brown
phase).

Utah. 11 + 2063 = 2074.

Utah ins. 9 + 2364 = 2373.

1954. 266 Fremont Pass, Beaver Co., Utah.

Elev. (b. m.) 6530 ft. VI. 4, 1954. (R.)

Sage under juniper, some short grass
and bare areas of whitish limestone.

All mat. either swept from sage or on
ground. Juv. Agamotettix on ground; juv.
Ordiopodid (genus?) swept generally.

Orth. 5 + 2074 = 2079

Other ins. 1 + 2373 = 2374

1954. 267 Summit of Cove Creek - Clear
Creek Road, Tushar Mts., Sevier Co., Utah.

Elev. (b. m.) 7230 feet. VI. 4, 1954. (R.)

Sage and rabbit

5.7 ms. E. of Cove Fort.

and, largely under
juniper and oak. No coll.

Orth. 0 + 2079 = 2079.

Other ins. 17 + 2374 = 2391.

✓ 1954.268 Canyon of Sevier River, 4 ms. S. of Sevier, Sevier Co., Utah Elev. (an.-ch.) 5750 feet. VI. 4, 1954. (R.)

Mind very high. Sage and rabbit wood with scattered juniper and piñon.

Xanthippus ¹⁴ local, on stony stone salt (grain)

Aulocara none generally in same, mostly juvs. and a few adults. Sh. winged

Melanoplus adults ⁽²⁸⁾ on piñon. Desmetellia

juv. nupt. sev. other Melanoplus

nupt

Cratypides ^{also 1 juv. lamb.} nupt. 2 ♀♀ in same area.

Utah. 20 + 2079 = 2099.

Utah vis. 2 + 2391 = 2393.

✓ 1954.269 Canyon of Sevier River, 7 ms. S. of Circleville, Garfield Co., Utah. Elev. (ch.) 6300 ft. VI. 4, 1954. (R.)

Sage and Baccharis. Only 0.2 juv.

Melanoplus. Mind very high.

Utah. 2 + 2099 = 2101.

Utah vis. 22 + 2393 = 2415.

1954. 270 Red Canyon Trust Camp,
Lower Red Canyon, Garfield Co., Utah.

Elev. (an.) 7560 ft. VI. 5, 1954. (R.)

Reddish gravel and broken stone under
reddish pink cliff walls, with open sage,
mormon "juniper" and rabbit weed, under
small species of pine - no tall pine.

Cordillaria local, not common, 1 ad. - juv.
taken. Very active.

Aphid. 1 taken, all juv. Neoperotettix
misp. Work most difficult, wind very
high.

Utah. 8 + 2101 = 2109.

Other inv. 4 + 2415 = 2419.

1954. 271 Paríangant Plateau, 1/2 m. N.
of entrance to Bryce Canyon National
Park, Garfield Co., Utah. Elev. (an.) 7825 ft.
VI. 5, 1954. (R.)

Low manzanita, mormon "juniper",
and bunch grass, under open pines with
a few piñons.

Xanthippus locally numerous, on
ground, not very active.

Aphid. less numerous in same situation,

1954. 271 (cont)

but more active. Bradynotes in mesquite
area, in general on broken stone or whitish
silt, sometimes making pupae in low
ground corn.

Juv. Amphitornus rupt. Wind high.

Length. 27 + 2109 = 2136

Other vis. 9 + 2419 = 2428.

1954. 272 Pannocant Plateau, 8 miles
E. of the ^{W.} entrance to Red Canyon,
Garfield Co., Utah. Elev. (an.) 7550 feet.
V. 5, 1954.

Open low sage (the old Pediocictetes
uncommon. + loc.). Wind tripic
so that little work could be done.

~~St. L. + juv. Melanoplus. [see over]~~

~~Length. 1 + 2136 = 2137.~~

~~Other vis. 11 + 2428 = 2439.~~

1954. 273. 1.25 mi. S. of Junction of Utah 136
with U.S. 89, Kane Co., Utah. Elev. (an.)
6925 feet. V. 5, 1954. (R.)

Edge of pine woods. Wind very high.

St. L. + juv. Melanoplus.

Ueth. 1 + 2136 = 2137
Ueth. ins. 11 + 2428 = 2439

1954. 272 [from preceding page]
Juv. Xanthippus on ground.
Melanoplus flabellifer 3 adults - imm. juv.
w/pt.
Juv. Cordillaris on ground.
Juv. Andrena detts.

Wind almost impossible, the wind making
the net almost unmanageable.

Ueth. 18 + 2137 = 2155.
Ueth. ins. 0 + 2439 = 2439

1954. 274 Along Kanab Creek, 5 ms. N. of
Kanab, Kane Co., Utah. Elev. (approx.) 4900 ft.
VI. 5, 1954. (R.)

Sage and flowering composite on
reddish sandy silt. 1000 O. juv.
Melanoplus & Agrestis - with w/pt.

Ueth. 4 + 2155 = 2159.
Ueth. ins. 11 + 2439 = 2450

1954.275 Near base of Echo Cliffs, 5 ms. S.E. of Navajo Bridge, Coconino Co., Arizona.

Elev. ^{approx. 5000 feet} ~~(with inter-concord with key in form)~~

~~monstrum~~ ~~pubb. approx. 4000 ft.~~ VI.6.1954.

(R.) Mid my high!

Red granully silt with scattered low ^(these numerous) yuccas, composites and similar cover. Sole Q. juv. Nesporotettix swept from composites.

Orth. 3 + 2159 = 2162.

Other ins. 9 + 2450 = 2459.

1954.276 Near base of Echo Cliffs, 25 ms. S. of Navajo Bridge, Coconino Co., Arizona.

Elev. ab. 5100 feet. VI.6.1954. (R.)

Ridge with junipers, low scattered cover a whitish sage-like plant, several species of composites and bunch grass. Mid my high!

Psolocesa texana subsp.? 1 ad. in ground.

Juv. Nesporotettix, juv. Melanoplus - juv.

Aedopides juv. swept. Juv. Orthopodid, ^(juv.?) in ground.

Orth. 10 + 2162 = 2172.

Other ins. 1 + 2459 = 2460

1954. 277 6.5 ms. S. of Gray Mountain (U.S.
sq) Coconino Co., Arizona. Elev. ~~(check no
cannot get elev.)~~
~~map - around the summit~~). VI. 6. 1954. (R.)

Shad. scale and tall grass. Mud my high!

Aeoloplides juv. beaten from shad scale.

Adult - juv. Psolossa texana intsp. ? on
ground.

Orth. 4 + 2172 = 2176,

Orth. ins. 0 + 2460 = 2460.

1954. 278 Headman Flat, 5 ms. NW. of
O'Leary Peak, Coconino Co., Arizona.

Elev. (ad. + ch) 6400ft. VI. 6. 1954. (R.)

Tall bunch grass and Atriplex in scattered

junipers

Juv. Melanoplus + juv. Aeoloplides rupt.

Juv. Amphitornis ditto. juv. ? rupt. (note

black markings and three-lobed pronotal crest!)

Orth. 4 + 2176 = 2180.

Orth. ins. 6 + 2460 = 2466.

✓ 1954.279 Summit highway (U.S. 89) pass due W. of
O'Leary Peak, Coconino Co., Arizona. Elev. (S.M.)
7282 feet. VI. 6. 1954. (R.)

Open ponderosa pine forest with brush grass and
other varied low ground cover. Wind pretty high.

Xanthippus rufus [♀] on ground, apparently keeping
to the ground on acct. of the wind, as they
hardly flew at all. Both full of well-developed
eggs

Asphondylia 1 ♂, on ground, flying freely and far.

Ceritettix variabilis 1 ♂, 3 ♀ ad. in low cover
on the ground. Quite active, but taking refuge
in surface plant cover. ^{1 ad. ♂} Aganostella on ground.

Certh. 1 ♀ + 2180 = ~~2187~~ 2190

Certh. ins. 4 + 2466 = 2470.

✓ 1954.280 2 ms E of N.E. point of Elden
Mountains, N.E. of Flagstaff, Coconino Co.,
Arizona. Elev. (Ch. - un.) 6900 ft. VI. 7. 1954. (R.)

Roadside stretches of ungrazed native
cover under open tall pine forest. Some rabbit
^{fall} nest, brush grass and short grass, as well
as areas of short curly grass.

Cordilleris jun. apparently partial to the
latter areas.

Agrestetella juvs. on ground. Critella
adults local - both sexes.

Desprietella 1 juv. only, swept.

Melanoplus juvs. numerous - apparently
representing 2 or more species.

Acroplides juvs. swept.

Orth. 50 + 2190 = 2240

Other inv. 5 + 2470 = 2475.

1954. 281 Flat at E. foot of Eldia Mts., 7 ms.
NE. of Flagstaff, Coconino Co., Ariz. Elev. (ch +
an.) 6880 feet. VI. 7, 1954. (R.)

Tall bunch grass and very low grayish
curly grass under open pine forest. Also the
bush on which I took Pedioscirtetes at the same
station in 1951, although it now is but 8-12
inches high. Pedioscirtetes juvs. (sev. instars)

swept from this latter. Parabacillus swept.

Critella locally numerous. Xanthippus all
seen taken⁽²⁾, not very active. juv. detritid

swept. Ptolossea maulip. 1 ♂, 1 ♀, taken

separately on ground, all seen. juv. Cordillaria
swept from ground. juv. Amphitorus ditto.

juv. Desprietella swept from low composites.

1954 281 (cont)

H-w. Agrestotettix 1 ad. ♂, and numerous
juvs. ^(at least 2 instars) app. of same species. Arphia pandora.
1 very small juv. 1 im. juv. Hadrotettix, empt
Melanoplus attenuatus mex. 2 ad. ♂♂, Mel. sp.?
numerous juvs. in var. instars - at least 3 species
represented. Acloplidae sp. very small juvs.
empt. Mestobregma sp. ? 1 very small juv. empt.
2 juvs. Helicopetala empt.

Orth. 116 + 2240 = 2356.

Orth. ins. 23 + 2475 = 2498.

1954. 282 Clark's Valley, 2 ms. SE. of Lake
Mary, Coconino Co., Arizona. Elev. (ch. - an.)
6900 feet. VI. 7, 1954. (R.)

Park-like, medium-height, partly cut-out
pine (not tall pine) on lava soil with many
surface lava fragments. General ground
cover is rather heavy low bunch grass with
many areas of grayish curly grass.

Eritettix not common and local.

Juv. Heperiella empt., local, appar. in composites.

Juv. Agrestotettix few, on ground surface.

Xanthippus very few, 1 taken.

Arphia more numerous, very active, with sexes taken.

Amphitaranus 1 ad + 1 juv. taken.

Trim. pallid. 1 ad taken, all seen.

" blue-legged, 3 juvs. taken, local.

Aedopliodes juv. a few swept.

Melanoplus th.-winged species, a number of adult ♂♂ - juvs. in a number of instars. Common in the latter end.

Melanoplus sp. 1 juv.

Orth. 73 + 2356 = 2429.

Other ins. 5 + 2498 = 2503.

1954. 283 1/2 m. NW. of NW. end of Lake Mary,
Cochise Co., Arizona. Elev. (ch. + an.)

6800 ft. VI. 7. 1954. (R.)

Area tilted in places largely covered by
reasonably large lawn fragments. Plant cover
under open bull pine, tall brush pass, low
gray curly grass and a low composite.

Sole C. seen - taken Xanthippus,

more numerous than usual. Aephus

a few. 1 juv. Campitornis. 1 juv. Aedopliodes.

Orth. 9 + 2429 = 2438.

Other ins 0 + 2503 = 2503.

1954. 284 3.5 ms. N. of Williams, Coconino
Co., Arizona. Elev. (an.) 6825 feet. VI. 8. 1954. (R.)

Bunch grass, soft sage and a tall mullein.
Wind very high. Almost nothing seen.

1 ad. Centistes - 1 juv. Amphitornus.

Orth. 2 + 2438 = 2440.

Other ins. 9 + 2503 = 2512.

√ 1954. 285 14 ms. N. of Red Lake, Coconino
Plateau, Coconino Co., Arizona. Elev. (an.)
approx. 6000 feet. VI. 8. 1954. (R.)

Atriplex & bunch grass. Everything swept.

Wind very high. Sev. Agrestistes, juv.

Aeolophides & juv. Melanoplus all taken.

Orth. 15 + 2440 = 2455.

Other ins. 3 + 2512 = 2515.

√ 1954. 286 3 ms. due W. of Red Butte, Coconino
Plateau, Coconino Co., Arizona. Elev. (an.)
6750 ft. VI. 8. 1954. (R.)

Short gray curly grass and sparse bunch
grass on stony soil in aisle between juniper
and piñon.

Xanthippus in fair numbers, mainly gravid
females, these not at all active. The lone ♂

seen and taken much more active. Species
local, and usually limited. Trachyrhachus
cornutus 1 ♀ taken in same areas as
Xanthippus. Continued search brought no more
to light. Psoocosa mac. locally numerous,
very active, particularly ♂♂. Psoocosa fixana
1 ♂, 1 juv. ♀ taken in same area. Pseudoceryle
1 juv. swept. Aganostetus juv., Hesperistetes
juv., Melanoplus juv. and Aedopides juv.
all swept. Cordillans juv., 1 swept.

$$\text{Arth. } 31 + 2455 = 2486.$$

$$\text{Other inv. } 5 + 2515 = 2520.$$

1954. 287 1 m. S of South Entrance to South
Rim section of Grand Canyon Nat.
Park, Coconino Co., Arizona. Elev. (an.)
6725 feet. VI. 8, 1954. (R.)

Sage, brush grass and low flowering
annuals under pine, with rocky soil.
Psoocosa mac. 1 ♂ on ground. juv. Paratrillus
(2) swept. juv. Aganostetus on pr. juv. Aedopides
1 juv. Melanoplus swept.

$$\text{Arth. } 15 + 2486 = 2501.$$

$$\text{Other inv. } 10 + 2520 = 2530.$$

✓ 1954. 288. 3 mi. W. of Parks, Coconino Plateau.
Coconino Co., Arizona. Elev. (an.), 7000 ft
VI. 8. 1954. (R.P.)

Roadside under pine, in thick grass. etc., on
Lura fragments. Wind high.

1 Centistes ♂ in p. juv. Agrestellix ditto.
juv. Melanoplus + juv. Acroplides swept.

Orth. 10 + 2501 = 2511.

Orth. ins. 5 + 2530 = 2535.

✓ 1954. 289 1 mi. E. of Riordan, Coconino Plateau.
Coconino Co., Arizona Elev. (an.) 7200 ft VI. 8. 1954
(R.)

Roadside, vegetation largely weeds, including
rue, induced by pine woods. Nothing seen
in woods. Wind high.

All O. juv. Melanoplus, at least 3 species.

Agrestellix 1 nearly adult. Orth. juv. ins.

Orth. 18 + 2511 = 2529.

Orth. ins 3 + 2535 = 2538.

1954. 290 1/2 m. E. of Winona, Coconino Co.,
Arizona. Elev. (an.) 6050 ft. VI. 9. 1954. (R.)
Rabbit weed, Fumelle weed, etc., under open
stand of juniper + piñon. Wind very high.
Psoralea delic. 1 ad. ♂. Amphitomus 1 juv. juv.
Agrotettis. Nothing else seen or swept.
Cnth. 4 + 2529 = 2533.
Cnth ins. 2 + 2538 = 2540.

1954. 291 6.5 ms. E. of Winslow, near
Cottonwood Wash, Navajo Co., Arizona.
Elev. (an.) 4275 feet. VI. 9. 1954. (R.)
Reddish, ^{deep} sandy silt, almost no plant cover.
1 juv. ? all C. seen.
Cnth. 1 + 2533 = 2534.
Cnth ins. 5 + 2540 = 2545.

1954. 292 4 ms. S. of Holbrook, Navajo Co.,
Arizona. Elev. (an.) 4800 ft. VI. 9. 1954. (R.)
Brush grass and Fumelle weed. Wind
frightfully high and with almost
improvised. juv. Pseudoceryle and
juv. Aetolopides swept.
Cnth. 2 + 2534 = 2536.
Cnth ins. 3 + 2545 = 2548

1954.293. Low sandstone ridge with juniper
15 ms. S. of Holbrook, Navajo Co., Arizona.
Elev. (an.) 5240 feet. VI. 9, 1954. (R)

Atriplex and bunch grass on sandy silt
at base of sandstone outcrop. Wind very
high. Almost nothing found.

1 juv. Paropomala rupt.

Uths. 1 + 2536 = 2537.

Other ins. 4 + 2548 = 2552.

1954.294. 25 ms. NW. of Springerville,
Apache Co., Arizona. Elev. (an.) 6680 feet.
VI. 9, 1954. (R.)

Tall grass and flowering annuals on
reddish loam soil between park-like
juniper and piñon.

Crittentis not numerous. Melan. flabellifer tw.
adults + tw. juv. Mel. sp. 1 juv. Ph.-w. Agnecottellus
1 ♂ + imm. juv. Protosoa delic. a few, 1 ♂ + 1 ♀
taken. Juv. Cordillacis found, on ground.
Juv. Wesputellus + juv. Proctos. Acroplitis.
Juv. Trachyphacis + cert. juv. not readily
referable to genus.

Uths. 54 + 2537 = 2591.

Other ins. 11 + 2552 = 2563.

✓ 1954. 295 7ms. E. of Springerville, Apache
Co., Arizona. Elev. (ch. - an) 6925 feet
VI. 10. 1954. (R.)

East face of lava bench bordering Coyote
Creek. Slopes juniper covered - ground
corn (heavily grazed) chiefly very short
grass - rabbit weed.

Psilocarpha delic. on ground surface, also juv.
Trachypachia ^{sp. nov. Coddillensis} juv. Asperotettix in rabbit weed.

Ueth. 10 + 2591 = 2601.

Ueth. in 9 + 2563 = 2572.

↓ 1954. 296 8ms. E. of N. M. state line, 2ms. W.
of Red Hill, Catron Co., N. M. Elev. (an) 7400
feet VI. 10. 1954. (R.)

Sparse short grass and some rabbit weed
(all heavily grazed) among juniper & piñon.
Saw but lost Psilocarpha delic. Mind very high
juv. Asperotettix juv. Circotettix (?) impt.

Ueth. 2 + 2601 = 2603.

Ueth. in 6 + 2572 = 2578.

↓ 1954.297 18 ms. E. of Red Hill, Catron Co.,
N.M. Elev. (an.) 7475 feet. VI 10. 1954. (R.)

Tufts of short curly grass on reddish silt
under piñon.

Psolocesa delic. ^{in ground,} both sexes, ♀♀ rip. in ground.

Juv. Cordillaris in ground.

Catch. # 9 + 2603 = 2612.

Other ins. 2 + 2578 = 2580.

↓ 1954.298 Continental divide 1.5 ms. E. of
Pictou, Catron Co., N.M. Elev. (3.m.) 8112 feet.
VI. 10. 1954. (R.)

Sandy silt with a Baccharis-like plant,
bunch grass and tufts of low curly grass.
Slopes with juniper and piñon. Wind
very high.

Psolocesa delic. adult very few, 1 taken. Cordill.

Juv. 1 rupt. Juv. of several species of Melanopis?

Catch. 6 + 2612 = 2618.

Other ins. 14 + 2580 = 2594.

✓

1954. 299 Natil Mountains, 16 m. E. of
Pictown, Catron Co., N. M. Elev. (an.) 8000 ft
VI. 10. 1954. (R.) [Probably very near where
we camped in 1937.]

Short curly grass and a Baccharis-like
plant. In open valley in tall pine woods.
Everything in Q. taken on ground.

Psilocarpha delii. rather numerous, quite
active. Juv. Cordillaris a few.

Juv. Aedopides? a few. Juv. Trachypachis?
Certs. 14 + 2618 = 2632.

Utterins. 12 + 2594 = 2606.

✓ 1954. 300 10 ms. N. of Magdalena, Socorro
Co., N. M. Elev (an.) 7650 feet. [~~that check~~
~~on topography !! may be too high.~~] VI. 10.
1954 (R.)

Short curly grass under park-like juniper
& piñon. Mind a trinus facta.

Psilocarpha delii. ♂ & ♀ on ground, very active.

" Fraxina 1 juv. ♀ ditto.

Juv. Cordillaris on ground

Juv. Trimerotropis sp. on ground.

Certs. 9 + 2632 = 2641.

Utterins. 1 + 2606 = 2607.

✓
1954.301 6 ms. E. of Magdalena, Socorro
Co., N. M. Elev. (an.) 5800 ft. VI. 10. 1954. (R.)
Tall sun-cured grass, short curly grass and
fumble-weed, with yucca and cholla (much
of latter in bloom).

Podisma delic. 1 ♂ in pr. Podisma Texana 1 ♂
ditto. Phyllostoma 1 juv. swept. Paropomata 2 juv.
swept. Centistes 1 ad. Amphitornis 1 juv. swept.
juv. Endellaria in pr. juv. Agonotettix in pr.
Melanoplus juv. of several species. Numerous juv.
of detritid - juv. ?

Orth 29 + 2641 = 2670.

Other ins. 13 + 2607 = 2620.

✓
1954.302 6 ms. SW. of Socorro, Socorro Co.,
N. M. Elev. (an.) 4850 feet. VI, 10. 1954. (R.)

Roadside mesquite and fumble weed
and dry tall brush grass.

Hesperomera in var. victoria numerous,
chiefly in mesquite, but a few in fumble
weed. 1 juv. Pseudoceryx swept from ?

Orth. 10 + 2670 = 2680.

Other ins. 5 + 2620 = 2625.

✓ 1954.303 1 m. S. of Remitar, Socorro
Co., N. M. Elev. (an.) 4440 feet. VI. 11. 1954. (R.)

Covillea and mesquite on bank, with
Atriplex in washes.

Juv. Boottia + juv. detritid in Covillea.
Juv. Aeoloplides in Atriplex. Nothing seen
on ground surface.

Uths. 11 + 2680 = 2691,

Uther ins. 13 + 2625 = 2638.

✓ 1954.304 Sand areas along Rio Salado
wash, 1 m. N. of San Acacia, Socorro
Co., N. M. Elev. (an.) 4525 feet. VI. 11. 1954. (R.)

Loose sand areas with low dunes. Sole
cover spaced out low shrubs and a
trumpet-flowered one which largely
formed the low dunes. Nothing on
sand surface. Sole C. a juv. Blapharocera
- a juv. Christiana, both swept from
the trumpet-flowered shrub.

Uths. 2 + 2691 = 2693.

Uther ins. 6 + 2638 = 2644.

✓ 1954. 305 6ms. S. of Bernardo, Socorro Co.,
N.M. Elev. (an.) 4775 feet. VI. 11. 1954. (R.)

High mesa with little on it but dried-up
bunches - and, a few scattered low junipers and
prunyon and an occasional mesquite. Com-
pletely grazed out - no rain for months and
little snow last winter. Everything taken was
empt from the few mesquite.

Site C. a juv. Insara & a juv. destruid.

With. 2 + 2693 = 2695.

With ins. 50 + 2644 = 2694.

✓ 1954. 306 1m. S. of Sabinal, Socorro Co., N.M.
Elev. (an.) 4725 feet. VI. 11. 1954. (R.)

Sandy silt with some clumps of tall
Ephedra, Atriplex and mesquite. Almost
all O. taken from Ephedra.

Juv. Melanoplus in Atriplex, also juv. Insara.

Nothing on ground. Graphonomera largely
immature, but 2♂ - 1♀ app. adult.

With. 25 + 2695 = 2720.

With ins. 9 + 2694 = 2703.

1954.307 12 ms. NW. of Algodones, Sandoval
Co., N.M. Elev. (an.) 5700 feet. VI. 11, 1954. (R.)
Adobe silt with short grass, ferns, etc.,
etc.

Cordillaris on p. juv. ^{Pseudogemula}
Diaphanomorpha rupt.
Mid high.

With. 2 + 2720 = 2722.

Other ins. 12 + 2703 = 2715.

1954.308 4 ms. NW. of Canoncito, Santa Fe Co.,
New Mexico. Elev. (an.) 7400 feet. VI. 12, 1954
(R.)

On bare silt or same with low cover
of various plants, including scattered white
sage, including one park-like juniper.
Ad. + juv. Trin. pallidus on bare ground, very
active. Psolossa delia locally numerous
on bare areas. juv. Cherotrumma, juv. Aeolophilus
& juv. Melanoplus rupt.

With. 18 + 2722 = 2740.

Other ins. 0 + 2715 = 2715.

✓ 1954.309 2ms. N.W. of Rowe, San Miguel
Co., New Mexico. Elev. (ch.) 6700ft. VI.12.1954. (R)
In early pass between rather heavy stands
of piñon.

Ad. ♂ Ceritellix, a few Pteronessa deliei, 1 juv.
(very small) Ceanothus, 1 juv. Melanoplus.
Utter. 6 + 2740 = 2746.
Utter. in. 3 + 2715 = 2718.

1954.310 1m. N. of Romeroville, San Miguel
Co., N. M. Elev. (ch.) 6500ft. VI.12.1954. (R)
Tall bunch grass, various weeds and areas
of bare silt. Material of some specimens
abundant. Wind very high.
Heliantha rufa num. ad. + juv. Not very active.
Cordillaris " " " chiefly on bare spots.
Pteronessa deliei. a few adults, both sexes.
Agonotettix juvs. only.
Philibotoma juvs. - no instars.
Herpanopterna 2 juvs. - instar preceding next.
Ceritellix a few adults - both sexes.
Herotoma juvs. - no instars - one bare area.
Trachyphachis a few juvs. on bare area.
Trimerotropis red-leg. - 1 juv.
Haemaphysalis - 1 very small juv. nymph.

Juv. of several species of Melanoplus.
Crotch. 62 + 2746 = 2808.

Other vis. 13 + 2718 = 2731.

↓
1954. 311 2 ms. SW. of Watrous, San Miguel
Co., N. M. Elev. (am) 6775 ft. VI. 12. 1954. (R.)

Tall brush grass, tumble-weed, other
weeds and areas of nearly bare silt. Very rich!

Psolocrossa delii. Both sexes adult - not very num.

Cordillaria - a few juvs.
Alrepanopterna - ^{1 ad -} juvs of both sexes, rather
numerous.

Agrotettix 1 ad. - num. juvs.

Hirtinoma - 1 juv. unsp.

Hypochlora - two juvs. unsp.

Melanoplus flabellifer 1 ad. 7 juvs. of several
species of Melanoplus.

Both Allothaca 1 very sm. juv. unsp.

Crotch. 34 + 2808 = 2842.

Other vis. 5 + 2731 = 2736.

↓
1954.312 1.5 mi. N. of Colmar, Colfax Co.,
N.M. Elev. (an.) 6100 ft. VI. 12, 1954. (R.)

Tall grass and various native weeds, plus
wild ~~flowers~~ ~~fruit~~ gourd on sandy silt.

Wind terrific!!! The material taken was
all the C. seen.

1 ad. Aeghina on lower opt
1 juv. Blattylotum - swept. 1 juv. Melanoplus
ompt
Orth. 3 + 2842 = 2845.
Other vis. 30 + 2736 = 2766.

↓
1954.313 Canadian River at Taylor Springs,
Colfax Co., N.M. Elev. (an.) 5800 ft. VI. 13, 1954.
(R.)

Roadside, scattered grass clumps and
weeds on very sandy silt. Unresect. Windy.
Only C. seen there taken.

Juv. Cordillaris + juv. Melanoplus.
Orth. 3 + 2845 = 2848.
Other vis. 17 + 2766 = 2783.

↓
1954.314 1 mi. E. of Abbott, Colfax Co., N.M.
Elev. (an.) 5900 ft. VI. 13, 1954. (R.)

Roadside grass & weeds. Frightfully dry
and eaten out. Thorns all about. Almost
no insect life. All C. seen taken.

Juv. Agonotettix + juv. Despautettix.

Colth. 4 + 2848 = 2852

Other ins. 10 + 2783 = 2793.

1954 315 2 ms W. of Gladstone, Colfax
Co., N.M. (~~Elev. check avoided in the hay~~
~~on east of strong surrounding~~). VI. 13, 1954. (R.)

Flowering annuals, some weeds, short grass,
~~the~~ Very dry. Almost nothing. All Q. seen
taken. Wind very high. Ad. Psoloma delvz. (1)
Juv. Cordillaria + juv. Melanoplus (two species)

Colth. 4 + 2852 = 2856.

Other ins. 9 + 2793 = 2802.

1954. 316 3 ms. W. of Pasamonte,
Union Co., N.M. Elev. (~~avoided~~ ~~not!~~)
VI. 13, 1954. (R.)

Short grass on salt with many limestone
fragments. Some tall grass in road ditch.
Threatening rain momentarily. All Q.
seen taken. Solely juv. Melanoplus.

Colth. 1 + 2856 = 2857.

Other ins. 2 + 2802 = 2804.

↓ 1954 317 11.5 ms. E. of Pasamonte, Union
Co., N.M. ~~Elev. (an.) 5050 feet. Clayton~~
VI. 13, 1954. (R)

Typical high plains plant comm. - tufts of
grass, low yucca, many flowering annuals,
areas of bare limestone broken rock and
gravel. Wind very high Storm areas all about.

All O. seen represented in mat. taken.

Prolocaea delic. 1 taken. Cordilleria a number,
no bare spots. Paropoma juv. swept from

grasses. Agrostis juv. num. juv.

Melanoplus appar. repr. sev. species. 1 juv.
detritid.

Orth. 21 + 2857 = 2878.

Orth. vis. 13 + 2804 = 2817.

↓ 1954. 318 7 ms. SW. of Clayton, Union Co., N.M.
Elev. (an.) 5050 feet. VI. 13, 1954. (R.).

Typical high plains vegetation, tall grass, etc.

Wind terrific - work almost impossible.

Critetix - 2 adults. Prolocaea delic. 1 ad.

Juv. Melanoplus, repr. 2 species. Juv.

Hactylotum - 1. Juv. Agrostis - 1.

Orth. 9 + 2878 = 2887.

Orth. vis. 1 + 2817 = 2818.

1954.319 5 ms. S.E. of Clayton, Union
Co., N.M. Elev. (an.) 4950 ft. VI.13, 1954, (R.)
Rather woody high plains plant cover,
with mats of low grass and bare ground
between.

Cordillaris immensus, actin. Adults &
juvs. but largely adult.

Melanoplus fallax 1 ad. ♂.

1 juv. Melanoplus diff. species

1 juv. Hesperotettix juv. kerotomus

2 juvs. Trachyphacis, in part.

Juv. Phloxotoma, a few. juv. Agrostotettix.

Orth. 33 + 2887 = 2920

Orth. in. 5 + 2818 = 2823,

1954.320 1/2 m. S.E. of Corlona, Dallam
Co., Texas. ~~Elev. about (?)~~ VI.13, 1954
(R.)

Typical high plains vegetation with soft
sage, sunflower, flowering annuals,
etc., also some tumble weed.

Blispharomera, 1 juv. impt. Centotettix

1 ad. Cingillaris, a small one, ^{mostly} ad.

adult. Paropmala juvs. in 2 instars.

Agrostotettix juvs. Brachyptera 1 juv.

1954. 320 (cont.)

Trinsecta pallidip. no. in tree spots, flying freely.

Juv. Hesperotettix opacatus small lot, nupt.

Juv. Schistocerca 1 nupt.

Juv. Melanoplus, nupt, appar. representing several species.

Utth. 36 + 2920 = 2956.

Utth. via 6 + 2823 = 2829.

↓ 1954. 321 1 m. SE. of Ware, Waller Co., Texas. Elev. (an.) 4025 feet. 2VI, 13, 1954. (R.)

Rather rank high plains plant com., with numerous yuccas, sunflowers, etc.

Aerolophites luteipes 4 ♂, flying freely, sometimes taking refuge in a yucca

No ♀♀.

Cordillaris abundant, almost all adults, rather general, but usually more numerous.

? Hypochlora no. juv. 1 juv. Paropromela.

Juv. Melanoplus, appar. 2 spp. nupt.

Utth. 35 + 2956 = 2991.

Utth. via. 3 + 2829 = 2832.

✓ 1954. 322 1/2 m. SE. of Twist, Hartley
Co., Texas. Elev. (an.) 3800 ft. VI. 14, 1954. (R.)

Roadside - woods, sunflowers, flowering
annuals + tall grass. Wind high. Vegetation
rather wet - insects holding close.

Cordillaria sticking to ground surface on
root areas of grass clumps. Ceritettix 1 ♂,
1 ♀. juv. Agonotettix few. juv. Hachylotum,
1 impt. juv. Melanoplus ruralis, repr.
diff. species. juv. Paropromala, 1 impt.

Orth. 14 + 2991 = 3005.

Other ins 29 + 2832 = 2861.

✓ 1954. 323 8 ms. S. of Hartley, Hartley Co.,
Texas. Elev. (an.) 3675 feet. VI. 14, 1954. (R.)

Tall grass and weeds near fields flooded
by rains of yesterday and last night.
Wind strong.

Ceritettix minus, both sexes.

Amphitornis, a single one seen + taken.

Melanoplus ruralis. 1 ad. ♂ + 1 ad. ♀ taken

" flabellifer 2 ♂ taken.

Juv. " appm. repr. 3 species.

Juv. Metatrichophanes - 1 impt.

Juv. Agonotettix, 1 all seen.

Orth 23 + 3005 = 3028.

Other ins 25 + 2861 = 2886.

↓
1954.324 5 ms. S. of Humas, Moore Co.,
Texas. Elev. ~~(low)~~ ^{circa} 3500 ft. _(Hippodamia) VI.14, 1954. (R.)

grass - short - tall - brush grass, flowering
annuals, thistle and numerous other
components of high plains flora, and a
few yuccas. 1 juv.

Cordillaris a few, Psolonus delic. a few, ~~both species~~.
all males. Amphitornus, several juvs. Agrostotellix,
num. juvs. juv. Hebranopterna, numerous
juv. Melanoplus, appar. repr. 2 species

Orth. 35 + 3028 = 3063 .

Other ins. 5 + 2886 = 2891 .

↓
1954.325 22 ms S of Humas, Potter Co., Tex.
Elev. (an) 3150 feet. VI.14, 1954. (R.)

Plains vegetation with dense masses of
brown-eyed susan sunflowers, purple thistles
and numerous other flowering plants, with a
very few yuccas. Very few C.

Juv. Agrostotellix, 1. Juv. Melanoplus, repr.
of two species.

Orth. 5 + 3063 = 3068

Other ins. 24 + 2891 = 2915.

1954 326 W. 67 Crossing of Canadian
River, 17 ms. N. of Amarillo, Potter Co., Tex.
Elev (an.) 2650 feet. VI. 14. 1954. (R.)

Level of river well cut below the general
level of the plains, apparently permitting
intrusions from lower levels. Down stream.

Wet areas with rank growth of grass,
tall weeds, many wild gourds, thistles, etc.
Juv. Mercuria, Tappan. two instars, one ^(4 instars) all from
Ceritettix a few. Amphitomus usual.

Podisma Tex. four males. Philibotoma
2 juvs. in instar preceding maturity.

Agrotettix, num. juvs. several instars.

Hesperopterna? " " " "

Boopidum, 1 juv. all seen

Aepia - large sizes - numerous, flying freely
and going long distances with the wind.

Usually alighting on bare areas, but sometimes
in vegetation. Spharagnum collar type,

1 ad (all seen) & juvs. in at least 2 instars.

Melanoplus - juvs. of at least two species.

Orth. 59 + 3068 = 3127

Other ins. 17 + 2915 = 2932

✓ 1954. ³²⁷~~326~~ 10 ms. N. of Amarillo, Potter
Co., Texas. Elev. (an.) 3100 ft. VI. 14, 1954. (R.)

Plains vegetation with much bare pebbly
ground. Cover largely brush grass, thistle
rabbit-wood, etc.

Jupliapheromera - juv. Neperotettix in
rabbit wood. juv. Hadrotettix usual on
ground. juv. Strepasopterna? usual.

Orth. 16 + 3127 = 3143.

Other ins. 4 + 2932 = 2936.

1954. 328 Palo Blanco Canyon, Palo Blanco State
Park, 13 ms. E. of Canyon, ^{Randall} Potter Co., Texas.

Elev. (check) ^{rest rim at top} about 3650 ~~at top~~ VI. 15, 1954 (R.)

Sparse grass, much yucca, soft sage,
some weeds (trunkle-weed - sand bars)
and scattered mesquite. All species of C.
seen were Fisher.

Trinorops pallidip. Few on bare surfaces.

Xanthippus crallipes 1♂, all seen, flying
strongly.

Melanophus mexicanus 1♂, 1♀ adults.

" sp. juv. ~~Part. rep. 2 species.~~

Neperotettix sp. juv.

Polocosa delvautula 1♂.

Trachyrhachus. Num. of juvs. in 2 instans.

Agrostellix. Juvs only

Cordillaria 1 ad. ♀ - all seen.

Pediodes 1 juv. ♀, all seen - kept.

Orth. 28 + 3143 = 3171.

Other ins. 17 + 2936 = 2953.

J
1954.329 Palo Verde Canyon, Palo Verde State
Park, E. of Canyon, ^{Randall} Potter Co., Texas.

~~Col. (check) assessed by me here. VI. 15, 1954. (R.)~~

Bottom of canyon near stream bed at
foot of road up escarpment.

Bottom - stream level. Growth of mesquite
and other trees, with juniper on the
flaps. Much trunks - wood and sand-
bars, rather thickly grassed. Many
annuals in bloom. Little Q.

Juv. Pediodes beaten from mesquite.

Juv. Melanoplus, nr. speciosus.

Juv. Phlebotomus, one only.

Juv. Agrostellix, 1 only.

Juv. Trachyrhachus, a num. very small.

Juv. Amphitomus 1 ♀.

Orth. 12 + 3171 = 3183.

Other ins. 20 + 2953 = 2973

✓ 1954.330 1.5 ms. ~~W.~~ W. of entrance to Palo Verde State
Park, ^{Randall} Potter Co., Texas. Elev. (am.) 4250 ft. (prob. 4K.).
VI.15, 1954. (R.).

Rudicoid grass, thistles, a few yucca and
a type of wheat grass. Very little at all
Melanoplus mex. w. adults.

" sp. juvs. 2 or so species.

Juv. Agaveotettix. Juv. Trachyphachus, 10.
Juv. Mermiria, 1.

Orth. 12 + 3183 = 3195.

Utherins. 8 + 2973 = 2981.

✓ 1954.331 Conway, Carson Co., Texas. Elev.
(am) 3875 feet. VI, 16, 1954. (R.)
^{High plains, open flat.}

Tall weeds and grass with a few ~~two~~ bare
spots, a few prickly pear and some wild
mustard + tumble-weed.

Ad. Autocara, a few. Blatta 1 Trachyphachus +
juvs. in 2 instars. Juv. Phlebotomus +
juv. Agaveotettix. Juv. Melanoplus - 2 spp.

Orth. 13 + 3195 = 3208.

Utherins 13 + 2981 = 2994.

1954.332 2.5 mo. E of Grooms, Carson
Co., Texas. Elev. (an.) 3075 feet. VI. 16. 1954.
(R.)
High plains, land. Tall grass - weeds,
roadside.

Aulocara 1 ad. + 1 juv. Amphitornus 1 juv.
juv. Hesperotettix. juv. Phibostoma
juv. Cyrenotettix - juv. Mermiria.

Orth. 8 + 3208 = 3216.

Other ins. 9 + 2981 = 2990.

1954.333 3 mo. W. of Alameda, Gray Co.,
Texas. Elev (an.) 2850 ft. VI. 16. 1954. (R.)
Rolling plains near top of "break of plains".
Tall grass, weeds, etc. roadside.

St. juv. Hiaphronera, impt. 1 ad Critettix
juv. Cyrenotettix. juv. Amphitornus +
juv. Trachyrhachis. juv. Mermiria
numerous, sev. instars. juv. Melanoplus.

Orth. 17 + 3216 = 3233.

Other ins. 8 + 2990 = 2998.

↓
1954. 334 4 ms. E. of Shamrock, Wheeler
Co., Texas. Elev. (an) 2450 feet. VI. 16, 1954. (R.)

Rather heavy corn natural corn of dense
brushes of various kinds, flowering annuals, &
tall grass, and a disturbed area with many
weeds

Onchocera varia, Hippiscus ad. + juv., Psylla
Amphitomus ad. ^{juv.} ad. Psylla texana.
1 ad Aulocara Aedopides 1 ad. ♀ unsp.

Juv. Acanthodes num. a number of instars.
Melanoplus mix. 1 ad. ♀. Juv. Melanoplus
sp. at least 3 species. Juv. Mermiria num.,
form - brown phase. Juv. Periphetes speciosus,
at least 2 instars. 1 juv. Cephus. 1 small juv.
Helicopetalus.

Orth. 53 + 3233 = 3286

Orth. ins. 9 + 2998 = 3007.

↓
1954. 335 4 ms. E. & E. of Erick, Beckham
Co., Oklahoma. Elev. (an.) 2000 ft. VI. 16, 1954.
(R.)

(1) Grain with heavy grass and (2) natural
dry corn on red silt (corn waist high)
with bare spots.

Hippiscus on short grass area.

Diapheromera unsp. in dry area.

Juv. Mermiria numerous, about 3 meters repr. - all
juv. Juv. Ageneotettix. Juv. Hesperotettix
sparsus. Amphitornus ad. juv. Pediobates
1 juv. in heavy vege. in drain. Juv. Melanoplus.

Orth. 16 + 3286 = 3302.

Orth. vis. 7 + 3007 = 3014.

1954.336 15 ms. E of Canute, Washita Co.,
Oklahoma. Elev. (am.) 1800ft. VI.16.1954. (R.)
Tall grass and weeds in ditch and general
roadside comm.

Melanoplus mix no. ♀ ad. Melanoplus
virgatus ad. of both sexes. Juv. Melanoplus
repr. at least 31 pieces. Juv. Mermiria, 2
insects - juv. - nymphs. 1 ad. Trachybaeus.
Juv. Ageneotettix num. 18 1♀ Phlebotomus
1 very sm. juv. Pelura, in ditch vegetation.

Orth. 25 + 3302 = 3327.

Orth. vis. 2 + 3014 = 3016.

✓
1954.337 5 ms. E. of Clinton, Custer Co.,
Oklahoma. Elev. (an.) 1575 feet. VI. 17, 1954
Roadside tall wheat grass, shorter (R.)
grass and some places with bare red
soil.

Agrostotettix very abundant as juvs., with
a very few adults. Mercuria juvs. numerous.
Thadypachis 1 ad., all seen. Amphitornus, a
few adults. Juv. Lepus several. Juv. Hadesotettix,
1, all seen. Phlebotomina, a few adults. Geops
Acolopides, 2 yg, all seen. Melanoplus mex.
abund. as adults. Melanoplus sp. 1 ♂.
Spharagmus, 1 juv. Trin. f. pallidip.
sw. on bare areas. Pediobates, 3 juvs. swept
in roadside drain tall vegetation.
Juv. Melanoplus, appar. sp. 3 juvs
Utah. $56 + 3327 = 3383$
Utah no. $1 + 3016 = 3017$

✓
1954.338 Bluffs above N. bank of
Canadian River, 3 ms. E. of Bridgeport,
Canadian Co., Oklahoma. Elev. (an.)
1450 ft. VI. 17, 1954. (R.)
Native vegetation with much rank grass
on top of bluff and on road run in same.

Melanoplus mex. num. as adults.

" flavipes? mod. numbers.

Aspustellia speciosa, a few adults & num.
juvs.

Juv. Melanoplus, nr. specios.

Hartigletum, 1 ad. of each sp & 2 juvs.

Juv. Merminia, numerous. Juv. Aspustellia.

Juv. Aspustellia, very few.

Spharagnum cellare, a few, some sp. to.

Trin. citraria, nr., ditto.

Uta leucanthus 1 ad. impt.

1 ad. Urostrina var. andrayi.

Juv. Rubria, 1 impt.

Utes, $47 + 3383 = 3430$.

Utter ins 1 + 3017 = 3018.

↓ 1954-339 3 mo. E. of Pond Creek Grant Co.,
Oklahoma. Elev. ^{approx. 1000 feet.} ~~Creek - near highway.~~

VI. 17. 1954. (R.T.)

Wet, water vegetation & tall grass
in roadside ditches and banks.

Overwhelming quantities of juvs.

Aphis 1 ad., all seen. Spharagnum, 1 ad.,
few seen.

Melanoplus flavipes? num.

Aspustellia speciosa, a few juvs. only.

1954.339 (cont)

Agrestotellix, 1 ad. - numer. juvs.

Juv. Mermiria, abundant, gray-green phase.

Juv Melanoplus, app. repr. 2 spp.

Anthomyza juvs. - numer.

Coth. 34 + 3430 = 3464.

Cethus. 1 + 3018 = 3019

1954.340. 13 ms. E. of Ponca City, Osage Co., Okla. Elev. (an.) 800 feet. VI, 18, 1954. (R.)

Roadside drain and tall coarse grass, in area of open and copse of oak timber.

Agrestotellix juvs. abundant, a few adults.

Boopis harmonium, 1 ad. - a number of juvs. - ⁱⁿ grass particularly.

Melanoplus brittatus abundant, adults -

juvs. M. confusus, a number, adult.

M. packardii type, a few adults.

Neperutellix speciosus, juvs. only.

Pseudopomata 1 juv. Critellus 1 ad. ♀.

Hippisus 1 batman ♀. Campoplex

juvs. only Duddenia a number of juvs. - 1 coll.

Coth. 65 + 3464 = 3529

Cethus 6 + 3019 = 3025.

1954.341 9 ms. W. of Burbank, Osage
Co., Okla. Elev. (an.) 775 ft. VI. 18. 1954. (R.)
Open rolling "plains" com, with milk-
weed, tall grass, brown-eyed susans, etc.

Diaperomera, 1 ad. ♂ - sev. juvs. mpt.

Agrostotellus, 1 ad. - num. juvs.

Cryptella small lot of juvs. mpt.

Urophis, small juvs.

Hadirotellus, 3 ad. ♂♂ - 3 juvs.

Arctia 1 in instar pupa, mat. mpt.

Sudderia 1 juv. mpt.

Oecanthus num. adults, mpt.

Catch. 47 + 3529 = 3576.

Other ins. 10 + 3025 = 3035.

1954.342 N. of Okesa, 11 ms. NE. of
Pawhuska, Osage Co., Okla. Elev. ~~approx.~~ ^{approx.} 700 ft.
VI. 18. 1954. (R.)

Roadside tall ~~pr~~ coarse grass & weeds
bordered by belts of oaks.

Pseudophala, only in coarse tall grass ^{mainly}

Boopis sarmanum juvs. only.

Juv. Mermiria numera.

1 juv. Hesperotellus perisus.

Juv. Agrostotellus -

1954 342 (cont.)

Melanoplus littatus abundant - mainly ♂♂.
many juvs.

Mel. cyaneus, sev. males.

" flavus type a few.

Conocéphalus, juvs. only.

Orth 46 + 3576 = 3622

Other ins. 5 + 3035 = 3040.

✓ 1954.343 Coody's Bluff, on E.^{side}
Verdegris River, 4.5 ms. E of Nowata,
Nowata Co, Okla. Elev. (alt) 200 feet.
VI. 18, 1954. (R.)

Tall grass and woods on roadside
exposure of limestone, tree in places

Protoparce trivittatus 1 juv. all seen.

Agonotettix, a few ads. & many juvs.

Neaprotettix opacicornis 1 ad. & num. juvs.

" pratensis 1 ad. all seen.

Melanoplus mex. numerous.

" littatus abund. ads. & juvs.

ad. ♂♂ num. num. than ♀♀.

Amelocerypha 1 juv.

Pediobates 2 ad. ♀♀ in heavy grass - all
seen. Decanthis ♂-♀ unsp.

Orth. 37 + 3622 = 3659

Other ins. 3 + 3040 = 3043.

1974-345 (cont.)

Melospiza cinerea (cont.)

1974-345 (cont.)

Chondestes

1974-345 (cont.)

Melospiza cinerea

1974-345 (cont.)

Melospiza cinerea

1974-345 (cont.)

Melospiza cinerea

1974-345 (cont.)

Melospiza cinerea

1974-345 (cont.)

Melospiza cinerea

1974-345 (cont.)

Melospiza cinerea

1974-345 (cont.)

Melospiza cinerea

Localities
marked.

Specimens
collected.

State	Localities marked	Specimens collected
West Virginia	13	191
Virginia	43	725
Kentucky	5	41
Tennessee	5	68
Alabama	12	161
Mississippi	5	86
Georgia	4	19
North Carolina	6	36
Maryland	1	9
Pennsylvania (Bedford Co)	3	19

97

55
40
9

1355