

Todos Santos to Viloca

[ ]

Todos Santos, Sept. 7.

Bright clear day, but at midday. Bert & I went across the river, but found little of interest. The 2 Gnatcatcher I shot last night with local light, the Sporophila + Psomoclaes the morning on red flowering tree in front of house. White bird in by lagoon. Shot 2 Spotted Sandpiper, 3 TIPSURUS.

15639 ✓ *Oreopelia montana* in ♂ 226  
brown | purple | black | brown | purple | black

15640 ✓ *Ramphastos monticola inca* ♂ 642  
brown | black, | and | mid | side | plumage; base | tail | yellow, on  
mand. blue, black | oil | small | ear; reddish | black on  
side of | culmen | base of | | red | black | blue

15641 ✓ *Hydropsalis tigrata fuscata* No! ♂ 270  
brown | black | dark | brown

15642 ✓ *Myadestes albicollis* ♂ 302  
brown | black | dark | brown

15643 ✓ *Myiozetetes similis* ♂ 100  
brown | black | head | blue | below | l. b.

15644 ✓ " *axillaris* ♀ 116  
brown | black | head | below | l. b.

15645 ✓ *Myiarchus cinerascens callis* ♂ 126  
brown | black | black | head | below | olive yellow

15646 ✓ *Tyranniscus g. gracilipes* ♂ 118  
straw | black, | head | below | leaden

15647<sup>v</sup> *Symphoricarpos cabanisi fulviventris* ♀ 122

15648<sup>v</sup> *Myiarchus cinerascens* ♂ 137  
brown | black | blue

15649<sup>v</sup> *Thammodon schistaceus* ♀ 152  
pale brown | black, leaden blue below | d. b.

15650<sup>v</sup> *Thammodon caesus schistogynus* ♀ 151  
brown | black, blue below | d. b.

15651<sup>v</sup> *Alypharhynchus spirurus albicollis* ♂ 157  
brown | black, pale brown below | leaden brown

15652<sup>v</sup> *Picumnus* *lanceolatus* ♀ 127  
brown | black | olive

15653<sup>v</sup> " " " ♂ 119

15654<sup>v</sup> *Sporophila c. castaneiventris* (T.E.) ♂ 114  
brown | black | dusky below | leaden

15655<sup>v</sup> *Autonotus rufipileatus consobrinus* (T.E.) ♂ 210  
orange | blackish brown, dusky brown below | olive leaden

15656<sup>v</sup> *Myiarchus cinerascens* ♀ 145  
brown | black, yellowish black below | d.

15657<sup>v</sup> *Phlegopsis nigromaculata* ♂ 188  
brown | black | black.

15658<sup>v</sup> *Thryothorus genibarbis bolivi.* (T.E.) ♂ 163  
red-brown | black, leaden blue below | leaden

- 15659 ✓ *Tangara schranki* ♀ 130  
brown | b, fluff at base below | b.
- 15660 ✓ *Pachyrhamphus polychr. spixi* ♀ 165  
brown | b, fluff below | leaden
- 15661 ✓ *Trogon aeneus* (T.E.) ♂ 206  
green | b | above leaden
- \* 15662 ✓ Spotted Sandpiper ♀ 225  
brown | black | blue below
- \* 15663 ✓ *Psomocolax ostryzovor* ♀ —  
pale basal | b | b.

Todos Santos, Sept. 8.

Slightly cloudy in morning, afterward clear & not very hot. Last night quite cool.  
All Hummers except *Alaemon* shot from tree with large red flowers (see above).

- 15664 ✓ *Entotriccus striaticeps* (?) ♀ 159  
brown | b, leaden below locally | b
- 15665 ✓ *Eupsittula weddellii* ♀ 253  
pale brown | b | b.
- 15666 ✓ " " ♂ 264
- \* 15667 ✓ *Legatus l. leucophaeus* ♂ 155  
brown | b | b

- 15668<sup>v</sup> *Agrytrina fimbriata nigricauda* ♀ 103  
 b, flesh below basal  $\frac{2}{3}$  | b.
- 15669<sup>v</sup> " " " ♀ 104
- \* 15670<sup>v</sup> *Florisoga m. mellivora* ♂ 125  
 b | b.
- 15671<sup>v</sup> " " " ♂ 124
- 15672<sup>v</sup> " " " ♀ 120
- \* 15673<sup>v</sup> *Anthrocethorax v. violicauda* ♂ 127  
 b | b.
- \* 15674<sup>v</sup> *Glaucis hirsuta* ♂ 132  
 b, yellow below, tip black | flesh
- 15675<sup>v</sup> " " " ♂ 131
- 15676<sup>v</sup> *Myrmotherola axillaris* Lafren. ♂ 108  
 brown | b | leaden blue
- 15677<sup>v</sup> *Thamnomanus caesius* schisto. — ♂ 155  
 brown | b, flesh at base below | dark "leaden"
- 15678<sup>v</sup> *Myrmochanes hemileucus* ♂ 194  
 brown | b | l. b.
- 15679<sup>v</sup> *Myrmociza atrethorax melanura* ♂ 157  
 brown | b, lentic leaden blue | l. b.
- 15680<sup>v</sup> *Thamnophilus delicatus* — ♂ 174  
 straw | b, leaden blue below | l. b.
- 15681<sup>v</sup> *Picumnus albosquamatus* ♀ 104  
 brown | b, hazy blue below basally | leaden

6-0

[3]

15682 ✓ *Craspedopion* ————— ♀ 165  
brown b, dull below b. b.

15683 ✓ *Coereba ochlorpyga* (T.E.) ♂ 113  
brown b | leaden

15684 ✓ " " " ♀ 111

15685 ✓ *Megarhynchus pipitanga* (T.E.) ♂ 245  
brown b | leaden black

\* 15686 ✓ *Icterus cayennensis* (T.E.) ♂ 218  
brown b | leaden

15687 ✓ " " " ♀ 208

15688 ✓ *Cissops l. leveriana* ♂ uncus  
yellow | b | b

15689 ✓ *Cryptocellus atricapillus* (T.E.) ♂ 320  
brown b, plumbeous | pink

Todos Santos, Sept 9.

Clear hot day, without breeze. Last night quite cool  
I worked on Isla + on some scrublands to a  
big marshy tract, with tall grass + scattered  
swallows + imitation swallows. Bent + Mike worked  
back inside. Mike got the *Tinamus*, Bent: the *Manacus*.

[42]

15690 ✓ *Nocturnal* *Manacus* 715-395-102-36 ♀

[43]

15691 ✓ " " " 687-365-98-29 - ♂

7-0

7-0

\*

15692<sup>v</sup> *Tinamus s. serratus* (M) ♀ 468

brown black, flesh below, tip plumbeous | l. b.

15693<sup>v</sup> *Fluvicola pica albiventer* ♀ 144

brown | l. b.

15694<sup>v</sup> *Agelaius fimbriata nigricauda* ♀ 106

l. b., pink flesh below, tip black | l. b.

15695<sup>v</sup> *Synallaxis albescens australis* ♀ 160

gray | l. b., brown blue below | pale olive brown

\*

15696 *Certhiaxis cinnamomea ruficeps* ♂ 164

gray | l. b., leaden blue at base below | l. b.

15697<sup>v</sup> *Myiarchus atrorufus melanura* ♀ 149

brown | l. b., leaden blue below | l. b.

15698<sup>v</sup> *Cnemidopus fuscatus* ♀ 137

brown | l. b., yellow flesh below | leaden

15699<sup>v</sup> *Myiarchus cinerascens* ♀ 145

brown | l. b., pale brown below | l. b.

15700<sup>v</sup> *Pipilo abesquestratus* ♀ 100

brown | l. b., brown blue below, tip black | leaden blue

15701<sup>v</sup> *Parus galus cervicalis* ♀ 173

pale rufous | l. b., flesh below | brown black

15702<sup>v</sup> *Veniliornis agilis* ♂ 128

brown | l. b., brown blue below | leaden

9-0

- 15703 ✓ *Myiozetetes similis caninus* ♀ 185  
brown | b | b.
- 15704 ✓ *Throopis palmarum* ♀ 195  
brown | b, bill | ventral | l. b.
- 15705 ✓ *Lapsittula middendorfi* ♂ 265  
white | b | b.
- 15706 ✓ " " ♀ 252

	Skim.	Species	Newtr. Collection	Mammals
Baca Chapare =	1934	423	104	62
Toda Santos (return) =	28	9	2	0
	2002	432	106	62

Total number of species taken in T. & B. = 151. (146 in T. & B.)

Sept. 10 - T. & B.

Packing up specimens & getting ready to go to Palmar.

Toda Santos - Sept 11

Rained most all day, so could not start today.

Sept 12 - 13 - 14

On road from Toda Santos to Palmar, with pack mules, 6 packs, - 3 saddle mules.

Palmar. - Sept 15

Truck did not arrive last night, so are staying up here today, with practically everything to do.

Palmar, Sept 16 to 19.

Being up here waiting for travel  
but did a lot of research & collecting.

Sept 20

Palmar to Cochabamba.

Sept 21-24

Cochabamba, packing up camp. waiting  
for a train to be sent to Tarija. To  
Buenos Aires, typical suits etc.

Sept - 25

Cochabamba

Sept 26

Bus Route from Cochabamba to Tarija.



Tirague, Dept. Cochabamba - alt. 10,200 ft

Sept. 27, 1937

I worked up valley on south side of village, running east back up to top of range. Birds went to another parallel on north side, & strike below village in valley.

\* 15707 ✓ *Vupercerthia ruficauda* ♀ 185  
brown | blackish, fluff below (arably) | fluff brown

15708 ✓ " " " ♂ 197

\* 15709 ✓ *Phacelodermis rufifrons sincipitalis* ♀ 174  
gray | blackish, bluish fluff (brown) | leaden blue.

15710 ✓ *Spizitornis f. flavirostris* ♀ 118  
brown | black, orange below, tip black | b.

15711 ✓ " " " (?) 120

15712 ✓ *Spizitornis parulus aequatorialis* ♂ 119  
yellow | black | b.

15713 ✓ *Lesbia phaeon* ♂ 187

15714 ✓ " " " ♂ 186

15715 ✓ " " " ♂ 184

15716 ✓ " " " juv. ♂ 142

\* 15717 ✓ *Ochthoeca o. oenanthoides* ♀ 150  
brown | b | b

15718 ✓ " " " ♀ 153

3-0

X

- 15719 ✓ *Muscisaxicola m. maculirostris* ♂ 153  
brown | yellow at base below | dr
- \* 15720 ✓ *Heptasternura f. fuliginiceps* ♀ 160  
brown | dr, plub at base below | olive
- 15721 ✓ " " " ♀ 166
- 15722 ✓ *Asthenes d. d'arbignyi* ♂ 170  
brown | dr, plub below | leaden brown
- 15723 ✓ " " " ♀ 166
- \*\* 15724 ✓ *Asthenes punensis cucuacanchae* ♂ 194  
brown | dr, plub below | dull brown
- 15725 ✓ *Patagona gigas peruviana* ♂ 220  
b | b
- 15726 ✓ *Ochthoeca o. oenanoides* ♂ 160  
brown | b | dr
- 15727 ✓ *Saltator aurantirostris boliv,* ♀ 218  
brown | blackish brown, yellow below | leaden brown
- 15728 ✓ *Saltator rufiventris* ♂ 235  
red | black, plub at base below | dark brown
- 15729 ✓ " " " ♀ 250
- \*\* 15730 ✓ *Compso spiza galleppi* ♀ 187  
brown | dr, leaden blue below | dark brown
- 15731 ✓ *Phytotoma <sup>nitida</sup> angustirostris* ♂ 204  
yellow | dark brown, bluish at base below | dark brown

6-2

6-2

X

[6]

15732 ✓ *Zonotrichia capensis* — ♀ 169  
brown | brown below, pale below | brown brown

15733 ✓ *Phrygilus gayi atriceps* ♂ 180  
brown | blackish, blue; flesh brown | brownish black.

15734 ✓ " *alaudinus excelsus* ♂ 164  
brown | yellow | flesh

15735 ✓ " " " " (♀) 165  
— | dark brown, flesh below | —

15736 ✓ " " " " juv ♂ 167

15737 ✓ *Diglossa carbonaria* (T.E.) ♂ 152  
brown | b, leaden blue at base below | blackish brown

15738 ✓ *Turdus chiguanco anthracinus* ♀ 282  
brown | orange yellow | dirty, yellowish

15739 ✓ *Ammodramopsitta aymarica* ♂ 213  
brown | flesh, bluish at base above | bluish flesh

15740 ✓ *Psilopsiagon orbigny* ♀ 185  
brown | orange | leaden

15741 ✓ " " " " ♂ 184

15742 ✓ " " " " ♀ 187  
— | bluish basally, yellowish apically | black

15743 ✓ *Falco sparverius eidos* ♂ 284  
brown | leaden blue basally, black tip | orange

15744 ✓ " " " " ♂ 270

6-2

6-2

X

- 15745 ✓ *Buteo poeilocheirus* (M) ♂ 540  
yellowish gray | b, leaden blue basally | cere olive |  
pale greenish yellow
- \* 15746 ✓ *Bubo magellanicus macrotus* ♂ 495  
yellow | b | dark leaden

Tiragua, Sept 28

Fine clear day. We all went to more or less the same shooting grounds as yesterday.

Skull 122

- 15747 ✓ Wild Guinea Pig 205-0-37-2 1/2 ♂
- 15748 ✓ *Lesbia phaeon* (laying) ♀ 124  
b | b
- 15749 ✓ *Oreotrochilus estellae* ♀ 138  
b | b
- 15750 ✓ *Ochthoeca o. oenanthoides* (T.E.) ♂ 158  
brown | b | b
- 15751 ✓ *Ochthoeca l. leucophrys* ♂ 157  
b | b
- 15752 " " " ♂ 155
- \*\* 15753 ✓ *Leptasthenura yanacensis* ♂ 173  
brown | bl, plum at base below | dark olive
- 15754 ✓ *Saltator aurantirostris boliv.* ♂ 218  
brown | red orange | dark brown
- 15755 ✓ " " " ♂ 215
- 15756 ✓ *Asthenes d. d'orbigny* ♂ 172  
brown | black, bluish plum below | leaden brown

8-3

8-3

X

[7]

15757 ✓ *Compsospiza garleppi* ♀ 190  
brown | blackish, leaden blue below | leaden brown

15758 ✓ " " ♂ 193

15759 ✓ " " imm ♂ 180  
— | — | pale brown

15760 ✓ *Phacellodomus rufifrons cincipitalis* ♂ 169  
gray | br, bluish | blue below | leaden blue

15761 ✓ " " ♀ 170

15762 ✓ *Idiospiza i. inornata* ♂ 154  
brown | clear brown, pale below | dark brown

15763 ✓ " " ♂ 147

15764 ✓ *Agriornis microptera andecola* ♀ 255  
brown | black, blue below

15765 ✓ *Poospiza hypochondriaca* ♂ 174  
brown | black, blue at base below | br

15766 ✓ " " ♂ 170

15767 ✓ " " ♀ 162

15768 ✓ " " ♂ 161

\* 15769 ✓ *Spinus magellanicus bolivianus* ♂ 128  
brown | dark brown, black tips | br

15770 ✓ " " ♂ 128

9-3 } 15771 ✓ " " imm ♂ 132

9-3

X

- \* 15772 ✓ *Sicalis u. uropygialis* ♂ 138  
brown | b, leaden blue below | brown hum
- 15773 ✓ " " ♀ 133
- 15774 ✓ *Diglossa carbonaria* ♀ 146  
brown | b, leaden below locally | brownish black
- 15775 ✓ *Phrygilus alaudinus excelsus* ♂ 168  
brown | yellow, rump brown apically | brown flesh
- 15776 ✓ " " " ♀ 165  
— | flesh, brownish above, tip black | flesh
- 15777 ✓ *Mimus dorsalis* ♀ 254  
yellow | b | b,
- 15778 ✓ " " ♂ 272
- 15779 ✓ " " ♂ 270
- 15780 ✓ *Phrygilus gagi atriceps* ♂ 183  
brown | bl, pale leaden blue below | dark hum
- 15781 ✓ " " " ♀ 176
- 15782 ✓ *Turdus chiguanco anthracina* ♀ 282  
brown | reddish orange | pale yellowish brown
- 15783 ✓ *Gymnopolia ceciliae gymnops* ♂ 197  
blue | b | flesh
- \* 15784 ✓ *Nothoprocta pentlandi* (M) ♀ 272  
brown | brown hum | yellow

11-3

Turague, Sept. 29

We all three worked in same places as yesterday.  
Day clear, strong wind from 10 AM on till evening.

15785<sup>✓</sup> *Ochthoeca l. leucophrys* ♂ 155  
brown | b | b.

15786<sup>✓</sup> " " " " ♂ 153

15787<sup>✓</sup> *Asthenes punensis cuculicarpa* ♂ 194  
brown blackish, flesh below | bluish brown

15788<sup>✓</sup> " " " " ♀ 169

15789<sup>✓</sup> *Asthenes d. d'orbigny* ♀ 169  
brown | b, bluish flesh below | leaden blue.

15790<sup>✓</sup> " " " " ♀ 169

15791<sup>✓</sup> *Phacellodames rufifrons sinuipitalis* ♀ 175  
gray | blackish, bluish flesh below | leaden blue

15792<sup>✓</sup> *Geositta rufifrons fasciata* ♀ 180  
brown | b, flesh below, tip black | blackish brown

15793<sup>✓</sup> *Furnarius rufus commersoni* ♀ 201  
brown | b, flesh below basally | blackish brown.

15794<sup>✓</sup> " " " " (T.E.) ♂ 203

15795<sup>✓</sup> *Saltator aurantirostris boliv.* ♂ 210  
brown | red orange | blackish brown

15796<sup>✓</sup> *Phytotoma rutilis angustirostris* (T.E.) ♂ 213  
yellow | black, bluish flesh below

15797 ✓ *Compso spiza garleppi* ♀ 190  
brown | b, leaden blue below | dark tan

15798 ✓ " " " " imm ♀ 193

\* 15799 ✓ *Gallinago paraguaiiae andina* ♂ 235  
brown | black, ridge & mand. brownish basally | yellowish above

15800 ✓ *Saltator rufiventris* ♂ 243  
red | bl, flesh below basally | dark tan

\* 15801 ✓ *Nothura maculosa boliviana* (?) (M) ♂ 245  
brown | b, flesh below | flesh

15802 ✓ *Spizitornis f. flavirostris* (?) 122  
brown | b, red orange below & brown above | b

15803 ✓ *Lesbia phaeon* ♀ 127  
b | b

15804 ✓ *Oreotrochilus estellae* ♂ 140  
b | b

\* 15805 ✓ *Oreotrochilus adalae* ♂ 146  
b | b

15806 ✓ " " " ♀ 140

15807 ✓ *Troglodytes musculus rey* ♂ 130  
brown | b, flesh below basally | dusky flesh

15808 ✓ *Leptasthenura yanacensis* ♀ 171  
brown | b, flesh below basally | dusky olive



14-3

X

[9]

15809 ✓ *Leptosthenura f. fuliginiceps* ♂ 165  
brown b, yellowish brown below | leaden brown

15810 ✓ *Zenotrichia capensis* ♂ 165  
brown b, dark brown below | pale brown brown

Tirague, Sept 30

Mike went down valley & got the fox & Barn Owl. Bert & I both searched up the big valley to north of town.

15811 ✓ *Asthenes d. d'orbignyi* ♂ 163  
brown b, <sup>very</sup> fresh below | leaden blue

15812 ✓ *Lesbia phaeon* ♂ 187  
b. | b.

15813 ✓ " " ♀ 130

15814 ✓ *Oreotrochilus estellae* ♂ 141  
b. | b.

15815 ✓ " " ♀ 132

15816 ✓ *Leptosthenura f. fuliginiceps* ♀ 167  
brown b, pink at base below | olive yellow

15817 ✓ " *yanacensis* ♂ 177  
brown b, pink at base below | olive brown

15818 ✓ *Ochthoeca oceananthoides* ♀ 159  
brown b. | b.

15819 ✓ *Poospiza hypochondriaca* ♀ 156

14-3

14-3

X

15820 ✓ *Ochthoeca leucophrys* ♂ 157

15821 ✓ " " " ♂ 155

15822 ✓ " " " ♂ 155

15823 ✓ *Compsospiza garleppii* ♀ 190  
brown b, leaden blue below / leaden brown

15824 ✓ *Phacellodomus rufifrons sincip.* ♂ 177  
gray b, bluish flush below / leaden blue

15825 ✓ " " " ♀ 170

15826 ✓ " " " ♂ 173

15827 ✓ " " " ♀ 180

15828 ✓ " " " ♀ 170

\* 15829 ✓ *Sicalis aureiventris* ♂ 154  
brown / blackish, brown blue below / brown brown

15830 ✓ " " " ♀ 157

15831 ✓ " " " ♂ 157

15832 ✓ " " " ♂ 155

15833 ✓ " " " ♂ 150

15834 ✓ *Geositta rufifrons fasciata* ♀ 182  
brown b, bluish flush below broadly / l. b.

15835 ✓ " " " ♂ 175

15-3

15-3

X

[10]

15836 ✓ *Cinclodes a. atacamensis* ♀ 216  
 brown | blackish brown

15837 ✓ " " " ♀ 218

15838 ✓ *Phytotoma rutilis angusti* — ♀ 208  
 yellow | dark brown, plumbeous below | blackish brown

15839 ✓ *Phyrgilus<sup>f.</sup> fruticeti* ♀ 195  
 brown | brown brown at base below | brown

15840 ✓ *Nothoprocta pentlandi* (M) ♀ 272  
 brown | brown brown, brownish plumbeous below | dull yellow

\*\* 15841 *Asio f. flammeus* ♂ 345  
 bluish white | pluck | pluck

15842 ✓ *Falco sparverius aedon* ♀ 283  
 brown | brown blue, tip black | orange

[S-44] 15843 Fox 1050-385-100 ♂

### Tirague, Oct. 1

I stayed in to fix Bert's gun, write labels & other jobs. Mike went below & Bert up north creek.

\*\* 15844 ✓ *Nycticorax nycticorax* — juv ♂ 585  
 orange | black, greenish yellow below | greenish yellow

15845 ✓ *Catamania a. analis* ♂ 135  
 brown | yellow, tip culmen dusky | black

[17-5] 15846 ✓ " " " ♀ 134  
 — | black, yellow plumbeous below | —

17-5

X

- 15847 ✓ *Aythya d. d. arbiguyi* ♂ 170  
brown | b, bluish | plub below | b. b.
- 15848 ✓ " " " ♂ 167
- 15849 ✓ *Poospiza hypochondriaca* ♀ 166  
brown | b, hair blue below | b
- 15850 ✓ *Sicalis luteocephala* ♂ 154  
brown | b, leaden at base below | leaden brown
- 15851 ✓ " " " ♀ 148
- 15852 ✓ *Muscisaxicola rufivertex occipitalis* ♀ 177  
brown | b | b.
- 15853 ✓ " " " " (T.E) ♂ 186
- 15854 ✓ *Cinclodes a. atacamensis* (T.E) ♂ 213  
brown | b, dusky | plub at base below | b.
- 15855 ✓ *Embernagra olivescens* ♀ 223  
brown | red, ridge black | pale brown brown
- 15856 ✓ *Falco sparverius eidos* ♀ 276  
brown | leaden blue, tip black, pale yellowish | plub
- 15857 ✓ *Nothura maculosa* — (M) ♂ 255  
hozel | blackish brown, plub below | plub
- 15858 ✓ " " " " (M) ♂ 253
- 15859 ✓ " " " " (M) ♀ 250
- 15860 ✓ " " " " (M) ♀ 263

(M) all 4 in one trial

17-5

Cerro de Junco, Oct. 2 (12500 to 14600 ft)

These peaks are on the crest of the range, about at head of Rio San Mateo, + about 12 miles N.E. of Tinague, a trail leading up to them from that place, following a small stream. Berto + I started on foot from village at 3:30 Am., did all our shooting above 12500 ft, to crest of range, + returned (on foot) at 4:30 P.M. Day mostly clear, although we had about 3 hours of clouds + fine rain or mist while working at highest portions.

Only other species seen (not secured) were Larus serranus<sup>2</sup>, Thriocornis arbigianus (1); Buteo poecilochrous (1); Spinus atratus (1). Stenboeck's collection from here contains several species which we did not get or see. Probably they were taken on the east side of the range, where conditions are very much more humid.

15861 ✓ Oreotrochilus estellae ♀ 130  
b. | b.

15862 ✓ Scytalopus [acutirostris]? ♀ 127  
brown | black | brownish flesh.

These birds are very brownish on upper parts, + have a prominent white post-ocular stripe.

15863 ✓ " " (T.E.) ♂ 124

\*\*  
15864 ✓ Asthenes modesta rostrata ♀ 163  
brown | b. flesh at base below | dark below

15865 ✓ " " " ♀ 160

15866 ✓ " " " (T.E.) ♂ 168

15867 ✓ " " " (T.E.) ♂ 170

18-6

X

- 15868 ✓ *Asthenes modesta rostrata* (T.E) ♂ 164
- 15869 ✓ " " " " ♀ 163
- 15870 ✓ " " " " ♂ 166
- 15871 ✓ " " " " ♂ 171
- 15872 ✓ " " " " (T.E) ♂ 166
- 15873 ✓ " " " " (T.E) ♂ 169
- 15874 ✓ " " " " (T.E) ♂ 165
- 15875 ✓ " " " " ♂ 166
- 15876 ✓ " " " " ♂ 171
- \* 15877 ✓ *Upucethia validirostris pallida* ♀ 202  
brown | black | leaden black.
- 15878 ✓ *Asthenes punensis cuchacanchae* ♂ 195  
brown | b. | flesh below | brownish flesh, tan darker
- 15879 ✓ " " " " ♀ 190
- 15880 ✓ " " " " ♂ 200
- 15881 ✓ *Cinclodes fuscus albiventris* ♂ 180  
brown | black | b
- \* 15882 ✓ *Anthus forcatos brevirostris* (T.E) ♂ 169  
brown | b. | flesh below basally | flesh

20-6

20-6

X

[2]

15883 ✓ *Muscisaxicola alpina grisea* (P) 180  
brown | b | b

15884 ✓ " " " ♀ 177

\*\* 15885 ✓ " *cinerea* (?) (laying) ♀ 193  
larger & darker above & below, with larger & wider white supercilious

15886 ✓ " " " ♀ 187

15887 ✓ " " " (T.E.) ♂ 190

15888 ✓ " " " (T.E.) ♂ 191

\* 15889 ✓ *Petrochelidon a. andecola* (T.E.) ♂ 144  
brown | b | flesh, toes dusky

\*\* 15890 ✓ *Phrygilus unicolor tucumanus* ♂ 157  
brown | b, flesh below dorsally | dark brown, toes black,

15891 ✓ " " " ♂ 150

15892 ✓ " " " ♂ 152

15893 ✓ " " " im ♀ 153

15894 ✓ " " " im ? 153

15895 ✓ *Phrygilus alaudinus excelsus* ♂ 161  
brown | yellow | yellow flesh

15896 ✓ " " " ♂ 170

\* 15897 ✓ *Diuca specularifera* ♀ 198  
brown | b | b

\* 15898 ✓ *Attagis gayi simonsi* ♀ 302  
brown | brown horn tip blackish | pale dial

25-8

Tirague, Oct. 4.

Heavy rain during night + continued intermittent drizzle till about 10<sup>30</sup> today. All went shooting. Mike below, Bertie up big creek + I went across south creek, up over hills, around head + valley + down into upper part of big creek, then down big creek to auto road to Cuchacaucha.

15899<sup>✓</sup> *Compsospiza garleppii* ♂ 195  
brown \ black, leaden blue below \ pale brown

15900<sup>✓</sup> " " ♂ 190

15901<sup>✓</sup> " " ♂ 195

15902<sup>✓</sup> " " ♀ 191

15903<sup>✓</sup> " " ♂ 190

15904<sup>✓</sup> " " ♂ 198

15905<sup>✓</sup> " " ♂ 190

15906<sup>✓</sup> " " ♀ 198

15907<sup>✓</sup> " " ♂ 190

15908<sup>✓</sup> " " ♀ 193

15909<sup>✓</sup> *Soroptex r. rupicola* ♂ 334  
yellow \ blackish \ dirty olive

15910<sup>✓</sup> " " " ♀ 310

15911<sup>✓</sup> " " " ♀ 325



15912 ✓ *Oreotrochilus estellae* ♀ 134  
b | b.

15913 ✓ *Leptasthenura f. fuliginiceps* ♀ 164  
brown | b, flush at base below | dark olive

15914 ✓ *Anthus furcatus brevirostris* ♂ 159  
brown | b, flush below, tip black | flush.

15915 ✓ *Asthenes punensis cochacanchoae* ♂ 202  
brown | black, flush below, tip black | dark brown, tail blackish

15916 ✓ *Geositta tenuirostris* (T.E.) ♂ 199  
brown | b, flush at base below | blackish brown

15917 ✓ *Upucerthia validirostris pallida* ♂ 205  
brown | black | b.

Whole tail uniform  
dull uniform below + above, except middle part  
brown above.

15918 ✓ *Phyrqilus alaudinus excolens* ♂ 170  
brown | yellowish | brownish flush

15919 ✓ " " " " ♀ 163  
— | black, flush below | flush.

15920 ✓ *Sicalis v. vropygialis* ♂ 144  
brown | blackish brown, brown blue below | brown

15921 ✓ *Phyrqilus f. fruticeti* ♂ 198  
brown | clear brown above, yellowish below | fresh brown

25-8

2216  
706  
215

	<u>Total skins</u>	<u>species</u>	<u>New Species</u>	<u>Mammals</u>
Toda Santa	2002	469	104	64
Tirague	<u>215</u>	<u>25</u>	<u>8</u>	<u>2</u>
	2217	494	112	66

65 species taken between Tirague & Cerro del Inca.  
 10 other species observed  
 75

16172  
 15921  
 251

Ele-ele, D. Cochabamba, Oct. 8 (5000ft)

This is a tiny hamlet on the Rio Mizque, 85 K.M. S.E. of Totorá. The Rio Challuani, where d'Orbigny worked lies about half way between this place & Totorá. We crossed it in coming here. The two rivers unite about 15 miles below here & finally empty into the Rio Grande. This whole region is very dry, broken & sterile, being cut off from the northeast winds & rain which continually bathe the Yungas, by a high range of mountains extending east from Tiragua, nearly to Sta. Cruz. This explains the abrupt change in fauna & flora between northeast & south east Dept. of Cochabamba.

The vegetation here is very peculiar, all thorny & Xerophytic. Giant & other cacti abound, as well as algosoba in the valleys.

- \* 15922 ✓ Chlorostilbon aureiventris ♂ 100  
red flub locally, black apically black
- \* 15923 ✓ Leucippus chionogaster hypoleucus ♀ 108  
b, flub below, top black | b
- \* 15924 ✓ Serpophaga rufunda ♂ 119  
brown | b | b
- 15925 ✓ " " ♀ 115
- \*\* 15926 ✓ Stigmatura b. budytes ♂ 148  
brown | b | b
- 15927 ✓ " " " ♂ 154
- \* 15928 ✓ Sviriri sviriri ♀ 157  
brown | b | b

5-1

4

\*\*

15929 ✓ *Tanagra minota mellea* (?)

♂ 115

brown | b, leaden blue below | dark leaden

The bird has large white patch on outer rectrices only; the whole basal half of wing lining & under wing coverts white.

\*

15930 ✓ *Synallaxis frontalis fuscipennis*

♂ 165

hazel | b, leaden blue below | dull olive

\*\*

15931 ✓ *Saltator aurantirostris*

(?) 222

brown | dusky orange, edge blackish | leaden brown

The bird has white under head, front & malar region black, leaving only a narrow stripe of buff down middle of throat; postoral collar white; white on outer rectrix (apical 1/3) & very slight white tip on next.

\*

15932 ✓ *Totanus pyropterus* (?)

♂ 202

red-brown | bl. | blackish brown

15933 ✓ *Turdus amaurochalinus*

♂ 250

brown | pale yellow, tip dusky | pale brown blue

\*\*

15934 ✓ *Trichopicus caeterum*

♀ 193

brown | b | dirty leaden olive

15935 ✓

" "

♀ 190

15936 ✓ *Cyanocompsa cyanea* argentina

♀ 175

brown | blackish, leaden below | blackish, brown

\*\*

15937 ✓ *Lepidocolaptes angustirostris certhidus*

♂ 212

brown | pale brown, dusky at base | leaden brown

15938 ✓ *Schistospiza griseocristata*

♀ 150

11-5

brown | black, pink below | dark brown

11-5/

X

[5]

\* 15939 ✓ *Cyanocompsa cyanea* [Argentina?] ♂ 182  
brown | b, leaden blue at ear below | b

\* 15940 ✓ *Colomba albipennis* ♂ 372  
pale gray | b | purplish blood

15941 ✓ *Amazona aestiva xanthropteryx* ♂ 410  
orange | blackish | dirty black.  
(Bertr)

15942 ✓ *Chlorostilbon aureoventris* ♂ 102  
pink flesh, tip black | b

\* 15943 ✓ *Helionaster forsteri* ♂ 140  
b | b

\* 15944 ✓ *Polioptila d. domicola* ♂ 136  
brown | b, leaden below | leaden

15945 ✓ " " " ♀ 130

15946 ✓ *Stigmatura b. bodytes* ♀ 145  
brown | b | leaden

15947 ✓ " " " ♂ 157

15948 ✓ *Myiophobus fasciatus flammulatus* ♂ 140  
brown | b, flesh below | b

\* 15949 ✓ *Schistospiza griseocristata* ♀ 158  
brown | b, flesh below | dark brown

15950 ✓ *Cyanocompsa cyanea argentina* ♂ 180

(see 939)

15-5/

15-5

X

\* 15951 ✓ Empidonomus a. aurantio — ♀ 188  
see 936

✓ 15952 " " " " ♂ 185

15953 ✓ Myiarchus tyrannulus chlori — ♀ 215  
brown | black | black

15954 ✓ Lepidocolaptes angustirostris — (T.E.) ♂ 225  
see No 937

15955 ✓ Trichopicus cactorum ♀ 199  
see N. 934

✓ 15956 " " " " ♂ 198

\* 15957 ✓ Chrysomitris melanochloros nigroviridis ♀ 288  
brown | black | dirty olive | black

\*\* 15958 ✓ Piaya cayana ♂ 500  
(tail very pale rufous brown below, & pale above  
red | olive | black | black)

\*\* 15959 ✓ Thectocercus acuticaudatus ♀ 360  
brick red | black, black below, & black above | dull salmon  
(24 species today)

19-7

19-7

X

[6]

Ele-ele, Oct 9

We both went up valley towards Totora & then worked back to west up to base of mountain in small side valleys. Mike still under weather but better.

15960 ✓ *Furnarius rufus commersoni* ♂ 212  
red-brown \ blackish tan, flesh below basally \ each tan

15961 ✓ " " " " ♀ 200

15962 ✓ " " " " ♀ 196

\* 15963 ✓ *Tanager chlorotica serrirostris* ♂ 119  
brown \ black, leaden blue below, top black \ leaden

15964 ✓ *Troglodytes musculus rex* ♂ 129  
brown \ b, flesh below basally \ dark brown tan

15965 ✓ *Schistospiza griseocristata* ♂ 151  
brown \ b, flesh below \ blackish

15966 ✓ " " " " ♂ 149

15967 ✓ " " " " ♀ 147

\* 15968 ✓ *Cranioleuca pyrrhopia striaticeps* ♂ 152  
brown \ blackish, bluish flesh below \ dirty olive

\* 15969 ✓ *Phacellodomus rufifrons sincipitalis* ♂ 166  
blue-gray \ b, bluish flesh below \ flesh

15970 ✓ " " " " ♀ 135

22-7

22-7

+

15971 ✓ *Saltator aurantirostris* ♂ 221  
brown | red orange | blackish brown

15972 ✓ *Molothrus badius bolivianus* ♂ 200  
brown | b | b

15973 ✓ *Otus c. choliba* (T.E) ♂ 222  
yellow | brown blue basally, tip flesh | pale brown

15974 ✓ " " " ♀ 225  
(Berto)

15975 ✓ *Chlorostilben aureiventris* ♂ 100  
red flesh, tip black b

15976 ✓ *Heliomaster furcator* ♂ 135  
b | b

15977 ✓ " " " ♀ 130

15978 ✓ *Poliopitita d. dumicola* ♂ 129  
brown | b, leaden below basally | leaden

15979 ✓ *Pooecetes t. torquata* ♂ 135  
brown | blackish, dark brown below | blackish

15980 ✓ *Phaeomyias minorina* (?) ♂ 134  
brown | b, flesh below, tip black | b.

15981 ✓ *Sublegatus m. modestus* ♂ 150  
brown | b | b

15982 ✓ *Stigmatora b. bodytas* ♀ 150  
brown | b | dark leaden

22-7



22-7

X

□ □

15983 ✓ *Suiriri suiriri*

brown | b | b

♂ 160

15984 ✓ *Phytotoma rutilis angustirostris*

yellow | dark brown | dark brown

♂ 208

15985 ✓ *Lepidocolaptes angustirostris*

brown | pale whitish brown, tan above dusky | leaden

♂ 225

15986 ✓ *Trichopicus caetorum*

brown | b | dirty olive leaden

♂ 203

15987 ✓

" "

♀ 200

\* 15988 ✓ *Quorimopsar chopi sulcirostris*

brown | b | b

♂ 232

15989 ✓ *Hydropsalis torquata forcifera* (T.E.)

brown | b | dark brown

♂ 413

Ele-Ele, Oct 10, (Sunday)

I went up road (to Totora) about 5 miles, starting at 5:30

Then worked up side valley to left to hills, where went

up the Mizque River (got the new Parrotto) & Bert to up into hills to west. All in about 12 o'clock. Day clear & hot.

15990 ✓ *Thectocercus acuticaudus*

iris orange (skin yellow) bill flesh, black below | pale scutum

♂ 364

15991 ✓

" "

♂ 355

15992 ✓

" "

♂ 373

15993 ✓

" "

♂ 375

23-7

23-7

+

15994 ✓ *Thectocercus acuticaudus* ♂ 367

15995 ✓ " " ♂ 364

15996 ✓ " " (M) ♀ 362

15997 ✓ *Hydropsalis torquata forcifera* (T.E.) ♂ 438  
brown | black | blackish tan

15998 ✓ *Polioptila d. sumicola* ♂ 133  
brown | b, leaden below | blackish

\* 15999 ✓ *Euscarthmornis m. margaritaceiventris* ♀ 114  
straw | blackish tan, brownish below | brown

16000 ✓ *Troglodytes musculus rex* ♂ 127  
brown | b, black below | pale brown

16001 ✓ *Cranioleuca pyrrhopygia striaticeps* ♀ 145  
brown | b, black below, tip black | dark olive

16002 ✓ " " " " ♂ 166

16003 ✓ *Tanagra chlorotica semirostris* ♂ 116  
brown | b, leaden below | leaden black

16004 ✓ " " " " ♀ 110

16005 ✓ *Pooecetes + torquata* ♂ 133  
brown | b, leaden below | blackish

16006 ✓ " " " " ♂ 133

\* 16007 ✓ *Hirundinea bellicosa pallidior* ♀ 178  
brown | b | b

25-7

25-7

X

[18]

\* 16008 ✓ *Cyclarhis gujanensis viridis* (?) ♀ 192  
orange/brown horn, base blue below | leaden blue

16009 ✓ " " " (M) ♂ 188

16010 ✓ *Phacellodomus rufifrons sincipitalis* ♀ 166  
gray/bk., bluish fluff below | dusky, flesh

16011 ✓ *Lepidocolaptes angustirostris* ♂ 220  
brown | whitish horn, base above blackish | leaden horn

16012 ✓ *Knipolegus a. aterrimus* ♂ 172  
brown | leaden blue basally, tip black

\* 16013 ✓ *Nystalus maculatus striatigectus* ♀ 215  
straw | salmon red, ridge blackish | dirty horn

16014 ✓ " " " " ♂ 206

\* 16015 ✓ *Myiodynastes luteiventris* ♂ 240  
brown | fluff at base horn | leaden black.

\* 16016 ✓ *Glauucidium b. brasilianum* ♀ 176  
yellow | pale yellowish line, tip pale | pale greenish yellow

16017 ✓ *Anoripsettaca aymara* subsp. nov. ♀ 203  
brown | pale leaden blue, fluff below | dirty, flesh

16018 ✓ " " " " ♂ 211

16019 ✓ " " " " ♀ 200

16020 ✓ *Anoripopsar chopi sulcirostris* ♂ 237

29-7/16021 ✓ brown | " | " ♂ 228

29-7

X

16022 ✓ *Falco sparverius aedon* ♀ 285  
brown | leaden blue basally, black tip | orange

\*\* 16023 ✓ *Myiopsitta luchi* ♀ 282  
brown | dirty plum | dirty leaden

16024 ✓ " " ♂ 300

Ele-ele, Oct 11

I made a short circuit down along river & returned at 8.30 with 10 birds, in order to do a lot of odd jobs which had piled up, & to rest a bit from yesterday's long tramp in hot sun. Mike & Bert went up the two branching rivers, came in late

16025 ✓ *Euscarthmornis m. margaritaceiventris* (T.E.) ♂ 124  
straw | blackish, brown below | reddish brown

16026 ✓ *Serpophaga munda* ♂ 121  
brown | b | b

16027 ✓ *Stigmatura b. bodytes* (T.E.) ♂ 149  
brown | b | leaden black

16028 ✓ *Schistospora griseocristata* ♂ 148  
brown | b, fluff below, tip leaden | blackish

16029 ✓ *Cranioleuca pyrhopia striaticeps* ♀ 149  
hazel | b, fluff below basally | dull olive

16030 ✓ *Synallaxis frontalis fuscipennis* ♂ 165  
hazel | b, leaden below | dull brown

30-8

30-8

+

[9]

16031 ✓ *Hydropsalis torquata fusciter* (T.E.) ♂ 376  
brown | b | dirty brown

[123] ✓  
16032 *Wald Gnuva Pig* 220-0-38-19- ♀

16033 ✓ *Leptoptila verreauxi decipiens* (T.E.) ♂ 317  
straw | b | purplish blood

16034 ✓ *Euscarthmus m. margaritaceiventris* (T.E.) ♂ 121  
straw - (nr 25)

16035 ✓ *Stigmatura b. budytes* ♂ 151  
brown | b | leaden

16036 ✓ *Suiriri suiriri* ♀ 158  
brown | b | b

16037 ✓ *Cranioleuca pyrrhopia striaticeps* ♀ 156  
brown | b, flesh below | olive

16038 ✓ *Hirundinea bellicosa pallidior* ♂ 187  
brown | b | b.

16039 ✓ " " " " ♀ 178

16040 ✓ *Empidonemus a. aurantio-atro-* ♀ 190  
brown | b | b

16041 ✓ *Lepidocolaptes angustirostris* ♀ 222  
brown | whitish brown, base above blackish | dark brown.

16042 ✓ *Schistospiza griseocristata* ♂ 149  
brown | b, flesh below | dusky flesh

30-8) 16043 ✓ *Falco sparverius aedon* ♀ 282  
brown | leaden blue basally, tip black | yellow

30-8

+

- \*  
 16044 ✓ Scapanus leucopogon. ♀ 330  
 yellow \ ivory \ dirty leaden
- 16045 ✓ Nothoprocta pentlandi [No. Mall.] ♀ 280
- 16046 ✓ Myopsitta lochsi [No. Mall. many] ♀ 283  
 brown \ dirty flesh \ dull leaden
- 16047 ✓ " " ♀ 282
- 16048 ✓ " " ♂ 302
- 16049 ✓ " " ♀ 275
- 16050 ✓ " " ♂ 295
- 16051 ✓ " " ♀ 291

Ele-Ele, Oct. 12.

Mike set a line of traps last evening, but caught  
 no mammals, one bird only. Best went up river  
 + got the Piaya, the " + a Spotted Sandpiper.  
 I went down river about 2 K.M., then up a long  
 valley to left side hills, where I got 3 new  
 species of Woodpecker + the Thaumatophilus.

16052 ✓ Chrysoptilus m. melanolaemus ♀ 303  
 brown \ b., dusky brown below \ pale olive brown

16053 ✓ " " " " ♂ 297

16054 ✓ " " " " ♂ —

31-8

31-8

X

[20]

\* 16055 ✓ *Thamnophilus caerulescens dinellii* ♀ 158

brown | b, leaden blue | l. b.

16056 ✓ " " " ♀ 168

16057 ✓ " " " (T.E.) ♂ 174

16058 ✓ " " " ♂ 168

16059 ✓ *Serpophaga m. munda* ♀ 116

brown | b | b

16060 ✓ *Chlorostilbon auriventris* ♀ 98

b, brownish flesh below | b

16061 ✓ *Compsothlypis pitiaimielegans* (?) ♂ 112

brown | b, yellow below | yellowish brown

16062 ✓ *Synallaxis frontalis fuscipennis* ♂ 162

hazel | b, leaden blue below | brownish flesh

\* 16063 ✓ *Arremon flavirostris d'orbignyi* ♀ 170

brown | yellow, ridge black | tan blue

16064 ✓ " " " (T.E.) ♂ 168

16065 ✓ *Sublegatus m. modestus* (T.E.) ♂ 157

brown | b | b

16066 ✓ " " " (T.E.) ♂ 146

16067 ✓ *Thamnophilus caerulescens dinellii* (T.E.) ♂ 166

brown | b, leaden below | l. b.

16068 ✓ " " " (T.E.) ♂ 174

16069 ✓ *Stigmatura b. budytes* (?) 149

brown | b | leaden

33-8

- \* 16070 ✓ *Picumnus* \_\_\_\_\_ (3) ♀ 108  
[ = No. 13678, of Rio Ayer ]  
brown b, leaden blue below l. b
- \* 16071 ✓ *Dyctiopicus lignarius puncticeps* ♀ 178  
brown b, dark brown below leaden blue
- 16072 ✓ *Trichopicus caetorum* ♂ 195  
brown b leaden blue
- 16073 ✓ " " " ♂ 192
- 16074 ✓ *Lepidocolaptes angustirostris* — (T.E.) ♂ 235  
brown whitish tan, large max blackish olive leaden
- 16075 ✓ *Faterus pyrropterus* (T.E.) ♂ 210  
brown b b
- 16076 ✓ " " " ♀ 206
- 16077 ✓ *Piaya cayana* \_\_\_\_\_ ♂ 530  
carmine yellowish green l. b
- \* 16078 ✓ *Chloroneryx rubiginosus toconanus* ♂ 248  
brown b leaden
- \*\* 16079 ✓ *Leucoceryx candidus* ♀ 280  
pale blue b olive (skin around eye rufous yellow)
- 16080 ✓ *Myopsitta luchsii* ♂ 291  
brown dirty flesh leaden



37-9

X

[21]

Ele-Ele, Oct 13

I stayed in to write labels & put up birds, & to give my wrist a chance to improve from bad thorn wound yesterday. Mike went to traps (caught nothing) then labelled & wrapped all birds except yesterday's. Bert went shooting up the river (towards Aiguile) & shot the following <sup>day</sup> clear & hot.

✓ 16081 *Thamnophilus caerulescens dimellii* (T.E.) ♂ 165  
brown \ bl., leaden below \ leaden blue

✓ 16082 " " " " ♂ 170

\* ✓ 16083 *Volatinia jacarani* juv ♂ 122  
brown \ blackish, bluish flesh below

✓ 16084 *Thectocercus acuticaudus* ♂ 370  
orange \ flesh, black below \ pale salmon

\* ✓ 16085 *Poospiza melanoleuca* ♀ 140  
brown \ b | blackish horn

✓ 16086 *Poospiza t. torquata* ♂ 137  
brown \ b, dark leaden below \ blackish horn

✓ 16087 " " " (?) 138

✓ 16088 *Schistospiza griseocristata* ♂ 158  
brown \ b, flesh below \ dark brown

✓ 16089 *Hirundinea bellicosa pallidior* ♀ 182  
brown \ b \ b.

✓ 16090 *Saltator aurantiifrons* ♂ 212  
brown \ red orange \ blackish

39-9

39-9

+

16091 ✓ *Pheucticus aureoventris* ♂ 224  
brown | b, leaden below | leaden horn

16092 ✓ *Trichopicus cactorum* (M) ♀ 195  
brown | b | leaden

16093 ✓ " " " ♂ 188

16094 ✓ *Icterus pyrrhopterus* (T.E.) ♂ 211  
brown | b | leaden

16095 ✓ " " " ♀ 215

16096 ✓ *Anorimopsar chopi solcirostris* ♀ 230  
brown | b. | b.

16097 ✓ *Leucocorpes candidus* ♀ 292  
pale blue (eye skin yellow) | b | olive

16098 ✓ *Chrysomitris melanochloros nigriviridis* ♀ 285  
brown | b | pale horn

16099 ✓ *Myiopsitta luchsii* ♂ 295  
brown | dirty pink | dull leaden

\*\* 16100 ✓ *Ara rubrigena* (M) ♂ 630  
orange | black | b | skin around eye pink

40-10

179

40-10

X

[22]

Ele-Ele, Oct 14

I went down river again & worked far up to head of another valley, looking for Turkeys, but no luck. Mike got nothing, neither in traps or with gun.

Berto went up river again & brought in the 3 Leucomerpes among other things. I saw 5 Pyrrhura, but they escaped.

[124]

16101 ✓ Wild Gunnepig 205-0-43-21-♀

16102 ✓ Columba albipennis ♂ 383  
blue-gray | b | purplish black

\*\* 16103 ✓ Russet Headed Swallow (!) [Alopochelidon fucata] (T.E.) ♂ 135  
brown | b | b.

16104 ✓ Polioptila d. dunicola ♂ 130  
brown | b | leaden

16105 ✓ Stigmatura b. budytes ♀ 152  
brown | b | leaden

16106 ✓ " " " ♂ 157

\* 16107 ✓ Compsothlypis p. pitiayumi ♂ 115  
brown | b, yellow below | dusky yellow

16108 ✓ Cnemotriccus fuscatus bimaoulatus ♂ 143  
brown | b, flesh below | b

16109 ✓ Sublegatus modestus ♂ 147  
brown | b | b

16110 ✓ Knipolegus a. aterrimus juv ♂ 175  
brown | b, leaden at base below | b

42-111

42-11

X

- \* 16111 ✓ *Satrapa icterophrys hellmayri* ♂ 174  
brown | b | b
- 16112 ✓ *Tanagra chlorotica serrirostris* ♂ 115  
brown | b, leaden blue below | l. b.
- 16113 ✓ *Arremon flavirostris d'orbigny* (T.E.) ♂ 174  
brown | yellow, ridge black | pale leaden blue
- 16114 ✓ *Catamenia a. analis* ♂ 135  
brown | yellow basally, tip yellow dusky | b
- 16115 ✓ *Schistospiza griseocristata* ♀ 148  
brown | b, purplish flush below | leaden brown
- \* 16116 ✓ *Zonotrichia capensis hypoleuca* ♂ 167  
brown | b, brown blue below | pale brown
- 16117 ✓ *Empidonax a. auro-atro-cristatus* ♀ 188  
brown | b | b
- 16118 ✓ " " " " ♂ 188
- 16119 ✓ *Tyrannus<sup>m</sup> melancholicus* ♂ 235  
brown | b | b
- 16120 ✓ *Leuconerpes candidus* ♂ 294  
pale blue | b | olive (eye ring rather yellow)
- 16121 ✓ " " " " ♂ 292
- 16122 ✓ " " " " ♀ 294
- 16123 ✓ *Chrysomitris melanchlorus trichiridius* ♂ 310  
brown | b | dull olivaceous
- 44-41 16124 ✓ *Thectocercus acuticaudus* ♂ 372  
orange | flush, black below | pale salmon | eye ring pale parts

Ele-Ele, Oct 15

Berto went on horseback far up the valley towards Totora, to try & get a Turkey. I also went up that way about 8 K.M. & then up a valley to right (east). We started at 5 AM. I got back at 12: with 2 new birds, & 10 in all as follows. Berto shot 2 birds. Berto returned at 6<sup>30</sup> P.M. after a very hard day far up at head of valley, but found no Penelope. Got the Xiphocolaptes & Piranga. Very little thorn scrub up there & taller trees, but no water.

16125 ✓ Tanagra chlorotica serripennis ♀ 112  
brown | b, leaden below (caudally) | leaden

16126 ✓ Sublegatus m. modestus (T.E.) ♂ 152  
brown | b | b

16127 ✓ Pooeciza t. toivata ♀ 129  
brown | b | blackish horn.

16128 ✓ Cranioleuca pyrrhopia striaticeps ♀ 152  
red-brown | b, pink below basal 1/2 | dark blue horn

16129 ✓ " " " " ♀ 155

\*\* 16130 ✓ Upucerthia harterti (T.E.) ♂ 182  
brown | b, pink below, top dark | blackish horn

16131 ✓ Lepidocolaptes angustirostris — (T.E.) ♂ 228  
brown | whitish horn, large max. dusky | leaden

\* 16132 ✓ Piranga f. flava ♀ 190  
brown | b, leaden blue below | dark horn

16133 ✓ Myiodynastes luteiventris ♂ 239  
brown | b, pink at base below | dark leaden

- 16134 ✓ *Chloroneryx rubiginosus tucumanus* ♂ 247  
brown | b | leaden
- \* 16135 ✓ *Tirica chiriri* ♂ 237  
brown | dirty brownish flesh | flesh
- 16136 ✓ " " ♂ 236
- 16137 ✓ *Arremon flavirostris d'orbigny* ♂ 174  
brown | yellow, ridge black | pale bluish flesh
- \* 16138 ✓ *Xiphocolaptes major castaneus* ♂ 340  
brown | dark brown, pale bluish brown below | olive.

Ele-Ele, Oct 16,

Berta & I went shooting, with little hope of getting much good stuff. I took camera to get photo of different kinds of trees etc. A light rain last night & yesterday evening very chilly & heavily overcast. Cloudy this A.M. till nearly 9<sup>30</sup>, then cleared up.

- 16139 ✓ *Poliophtila d. demicela* (T.E.) ♂ 134  
brown | b, leaden below | leaden blue
- 16140 ✓ " " " " ♀ 123
- 16141 ✓ *Compsothlypis p. pitiayonni* ♂ 119  
brown | b, yellow below | yellowish brown
- 16142 ✓ *Stigmatura b. budytes* ♀ 152  
brown | b | leaden
- 16143 ✓ *Troglodytes musculus vey* ♀ 127  
brown | b, flesh below | pale brown horn

48-12

X

[24]

16144 ✓ *Synallaxis frontalis fuscipennis* (T.E) ♂ 167  
brown | b, leaden blue | dull olive

16145 ✓ *Myiophobus fasciatus flammiceps* ♂ 141  
brown | b, brownish brown below | b

16146 ✓ " " " " ♂ 138

16147 ✓ *Tanager chlorotic serripennis* ♀ 112  
brown | b, leaden blue below | leaden

16148 ✓ *Schistospiza quiseocristata* ♂ 148  
brown | b, plus below | dark brown

16149 ✓ " " " " ♀ 154

16150 ✓ *Saltator aurantirostris bolivi.* ♂ 213  
brown | blackish, brownish yellow below | blackish brown

16151 ✓ *Cyanocompsa cyane argentina* ♂ 178  
brown | bl, blue at base below | b

16152 ✓ *Cyclarhis gujanensis viridis* ♂ 187  
orange | brown brown, leaden blue below basally | dark brown

16153 ✓ " " " " ♀ 182

16154 ✓ " " " " ♂ 181

16155 ✓ *Nystalus maculatus striatipectus* ♀ 217  
straw | brown, ridge + base below black | dull olive

16156 ✓ *Trichopicus caeterum* ♂ 210  
brown | b | dark leaden olive

16157 ✓ *Turdus chiguanco anthracina* ♀ 276  
brown | red orange | brownish yellow

48-12

16158 ✓ *Phytotoma rutila angustirostris* ♀ 206  
 carmine blackish brown, bluish plum below

16159 ✓ *Leucomeropos candidus* ♀ 280  
 pal blue black olive

16160 ✓ *Columba albigenus* ♂ 352  
 gray black purplish blood

16161 ✓ *Myiarchus tyrannulus chlori* ♂ 215  
 brown black

Ele-Ele, Oct. 17. (Sunday)

Berts & I got up at 4:30 to try & get a Turkey when they came down to river to drink at dawn, at the place I saw 3 yesterday morning, but no luck. We saw none. Then I went on down the river & up first valley to left, beyond ridge. I got all my birds up at head of this valley except the *Turdus fuscator* & *Elania*, which were taken down by river in piece of tall bush.

Berts worked back up in hills after I left, looking for Turkey, found none, but got a fine ♂ Caudan.

We stayed in to label & wrap birds & when Berts got in they both went swimming in river.

16162 ✓ *Phaiomyias m. murina* ♂ 133  
 brown black, black at base below

16163 ✓ " " " ♂ 136

16164 ✓ " " " ♂ 135



48-12

[25]

16165 ✓ *Elapnia parvirostris*

♂ 163

brown | bl, flesh below, tip dusky | b

16166 ✓ *Cranioleuca pyrrhops striaticeps*

♀ 156

brown | b, flesh below basally | Meric leaden

16167 ✓ " " " "

♀ 157

16168 ✓ *Upucethia harterti*

♂ 174

brown | dr, flesh below basally | blackish horn

16169 ✓ " " " "

♂ 181

16170 ✓ *Turdus fuscator*

♂ 290

brown | orange red | pale yellow

16171 ✓ *Otus choliba*

(immature) ♀ 220

yellow | leaden blue | dull drab

\*\* 16172 ✓ *Vultur gryphus*

♂ 1225

dusky yellow | flesh, blackish basally | leaden black

neck pale yellow, scapular dull sooty leaden

(Weight = 25 lb.) wing spread = 2 m. 67 cm.

49-13

75 species taken.

	Total Skins	Species	New Spes.	Manu
Tirague	2217	494	112	66
Ele-Ele	251	43	13	2
	<u>2468</u>	<u>537</u>	<u>125</u>	<u>68</u>

X

Samarpata, Oct. 26 (5500 ft.)

Arrived here late last night & all night long. This morning & evening we go to south & back down stream following path down. Birds are quiet about us. The car. A heavy rain here day before yesterday & another good shower last night. Today cloudy, with cold south wind & a little drizzle early this morning.

- \* 16173 ✓ *Capsiempis fl. flavicola* (T.E.) ♂ 134  
brown/black, flesh at base below
- 16174 ✓ *Euscotharusis margaritaceiventris* (T.E.) ♂ 132  
yellow/black, brownish down below purpled flesh
- 16175 ✓ *Mecocerculus l. leucopirys* ♀ 132  
brown/black, flesh at base below
- 16176 " " " ♀ 124
- 16177 ✓ *Troglodytes musculus rex* (T.E.) (M) ♂ 121  
brown/black, flesh below
- 16178 ✓ *Pooeciza melanoleuca* (T.E.) ♂ 148  
red/black
- 16179 ✓ *Elainea obscura* ♀ 182  
brown/black, flesh at base below
- \*\* 16180 ✓ *Syndactyla rufocapillatus olagincus* (T.E.) ♂ 190  
brown/black, flesh below usually dark olive
- \* 16181 ✓ *Phacelidomus striaticollis maculipennis* ♀ 172  
bluish-gray/black, bluish plain below, dusky blue
- 16182 ✓ " " " ♂ 184

3-1

X

[20]

16183 ✓ *Coryphospingus vociferans* ♀ 142  
brown | b, leaden below, flab at base | leaden black

16184 ✓ *Sicalis pelzelni* ♀ 132  
brown blackish, flab below | leaden brown

16185 ✓ *Turdus f. fuscator* (T.E.) ♂ 288  
brown | red orange | yellow

16186 ✓ *Basilopterus b. bivitatus* (T.E.) ♂ 162  
brown | b | yellowish brown

16187 ✓ *Troglodytes musculus* ♂ (T.E.) ♂ 134

16188 ✓ (see 16187) " " " ♀ 124

16189 ✓ *Thamnophis caeruleus dimidiatus* (T.E.) ♂ 168  
brown | b | lead. | blue

16190 ✓ *Myrophobus frontalis flammeiceps* ♀ 136  
brown | b, flab below

16191 ✓ *Cranioleuca pyrrhopia stricticeps* (T.E.) ♂ 155  
brown | b, flab below | blue

16192 ✓ *Vireo chivi* ♂ 150  
brown | b, lead blue below

16193 ✓ *Catamenia a. analis* ♀ 135  
brown | yellowish basally, dusky apically | b

16194 ✓ *Pipraeidea melanotata venezuelensis* ♂ 152  
brown | b, lead blue below | leaden

16195 " " " " ♂ 155

3-1

- 16196 ✓ *Arremon flavirostris orbignii* ♂ 171  
brown yellow, ridge black, pale beneath
- 16197 ✓ *Knipolegus a. sternivus* (T.E) ♂ 177  
brown leaden blue, black tip | b-
- 16198 ✓ *Elaenia parvirostris* ♂ 161  
brown |, flesh below tip black | b-
- 16199 ✓ *Elaenia o. obscura* ♀ 190  
brown | blackish, flesh below barely | b-
- 16200 ✓ *Phacellodanus striaticeps minoripectus* ♂ 184  
gray | b, bluish flesh below | pale beneath
- 16201 ✓ *Cyclathis gujanensis viridis* ♂ 173  
yellow | brownish beneath | leaden blue
- \* 16202 ✓ *Turdus r. rufiventris* ♂ 268  
brown yellow with blue, base above dusky | dusky beneath
- [45] 16203 ✓ Squirrel 360-191-48-22- ♀
- \*\* 16204 ✓ *Mecocerculus stictopterus taeniopterus* ♀ 127  
b, flesh below barely | b-
- 16205 ✓ *Myiophobus fasciatus flaviceps* ♀ 136  
brown | b, brownish flesh below | b-
- 16206 ✓ *Thamnophilos caeruleus dinellii* ♂ 163  
brown | b, leaden below | leaden blue
- 16207 ✓ *Syndactyla rufoscapulata oleaginosa* ♀ 188  
brown | b, flesh below scarcely | above

16208 ✓ Chloroneryx rubig. canipellus ♂ 250  
brown | b | leaden

16209 Piaya cayana obscura ♀ 515  
carmine | olive green | leaden

16210 ✓ Scapanus leucopogon ♀ 310  
yellow | iridescent | leaden

\* 16211 ✓ Penelope obscura bridgesi ♀ 792  
carmine | b | blackish brown

16212 ✓ " " " " ♂ 802

Samairapata, Oct. 27

Fine clear day, fairly cool. I went short distance up creek & returned at 9 with 12. Bertha covered over to nest & came in at 10, with 12 birds. 5 left over from yesterday to skin.

16213 ✓ Chlorostilbon aureoventris ♂ 98  
pink flesh, top black | b

16214 ✓ Campsathlypis p. pitiajunui ♀ 116  
brown | black, yellow below | yellowish brown

16215 ✓ Comptosium obsol. cinerascens (TE) ♂ 128  
brown | black, flesh below, top black | leaden black

\* 16216 ✓ Thamnophilus ruficapillus cochabombae ♂ 167  
red-brown | b | leaden blue

7-2 / 16217 ✓ " " " " ♀ 165

7-2

X

16218<sup>✓</sup> *Synallaxis frontalis fuscipennis* (T.E) ♂ 171  
 brown | b, dark leaden below | dull olive

16219<sup>✓</sup> " " " " (T.E) ♂ 161

16220<sup>✓</sup> " " " " ♀ 157

16221<sup>✓</sup> " " " " (T.E) ♂ 168

16222<sup>✓</sup> " " " " (T.E) ♂ 164

16223<sup>✓</sup> *Elaenia parvirostris* ♀ 160  
 brown | b, flesh below, tip black | b.

16224<sup>✓</sup> *Proospiza t. torquata* (T.E) ♂ 128  
 brown | b | b.

\*  
 16225<sup>✓</sup> *Proospiza whitii* ♀ 148  
 brown | b, flesh at base below | blackish brown

16226<sup>✓</sup> *Phacellodemos striatocollis maculipectus* ♀ 178  
 gray | b, leaden line below | leaden blue

16227<sup>✓</sup> " " " " (O.E) ♀ 175

16228<sup>✓</sup> " " " " ♂ 180

16229<sup>✓</sup> *Catamenia a. socialis* ♂ 134  
 brown | yellow, tip dusky | b.

16230<sup>✓</sup> *Sicalis p. helmi* ♂ 136  
 brown | b, flesh white, below

8-2

8-2

X

28

16231 ✓ Schistospiza griseocristata

♂ 150

brown | black | leaden

16232 ✓ " " "

♀ 148

16233 ✓ " " "

♂ 148

16234 ✓ Cyclarhis gujanensis viridis

♀ 179

yellow | brown above, leaden blue below | pale leaden blue

16235 ✓ Thraupis sayaca

♂ 184

brown | b, leaden blue below | l. b.

~~16235 Molothrus b. bonariensis~~

~~♂ 203~~

~~brown | b. duplicate no. See No. 16368.~~

16236 ✓ Compsothlypis p. pitiaiyomi

♂ 113

brown | b, yellow below | yellowish brown

16237 ✓ Chloestiaban aureoventris

♂ 93

pink flesh, top black | b

16238 ✓ Thraupis sayaca

♀ 177

brown | b, leaden blue below | l. b.

16239 ✓ Pitangus sulphuratus boliv. —

♂ 253

brown | b | b

16240 ✓ Eurypyga helias helias

♂ 462

brown | b, yellow below | yellowish brown

8-2

8.2

X

## Samacipata, Oct 28.

Fine clear day, last night cold, with light frost.  
 Mike stayed in to get shoes half-soled, & worked on 32 cars.  
 Bert & I went north, to crossing valleys at foot of mt  
 & I climbed to top. Found fine forest, but too late to  
 do much there, back at 12.36.

- 16241 ✓ *Arremon flavirostris ordignyii* (T.E) ♂ 160  
 brown yellow, ridge black | l. b.
- 16242 ✓ *Turdus rufiventris* ♂ 252  
 brown | olive, ridge black | leaden brown
- +16243 ✓ " " ♀ 255  
 [deformed bill]
- 16244 ✓ *Leucippus chionogaster* ♀ 109  
 b, fluff at base below | b
- 16245 ✓ *Capsiempis flaveola* ♀ 119  
 brown | b, fluff at base below | leaden
- 16246 ✓ " " (T.E) ♂ 131
- 16247 ✓ *Phaiomyias m. murina* ♀ 132  
 brown | b, fluff at base below | b
- 16248 ✓ " " " ♀ 132
- 16249 ✓ *Serpophaga nuda* ♂ 116  
 brown | b | b
- 16250 ✓ *Geothlypis aequinoctialis velata* ♂ 140  
 brown | b, fluff at base below | leaden brown
- \* 16251 ✓ *Elaenia chiriquensis albivertex* (?) 155  
 brown | b, fluff at base below | b.

9-2



9-2

X

[29]

16252 ✓ *Myiophobus fasciatus flaviceps* ♀ 137  
brown | b, dusky fluff below | l.

16253 ✓ *Pooecetes t. torquata* ♂ 135  
brown | b | b

16254 ✓ " " " ♀ 135

16255 ✓ *Thlypopsis s. sordida* ♀ 141  
brown | b, bluish fluff below | l. b.

16256 ✓ *Thamnophilus roticapillus cochabambae* ♂ 172  
brown | b, lateral long groups | l. b.

16257 ✓ " " " " ♀ 172

\*\* 16258 ✓ *Thamnophilus connectens* ♂ 169  
brown | b | l. b.

\* 16259 ✓ *Myiarchus tuberculifer atriceps* ♂ 196  
brown | b | b

16260 ✓ *Elaenia o. obscura* ♂ 192  
brown | b, purple fluff at base below | b

16261 ✓ *Cyclarhis gujanensis viridis* ♂ 180  
yellow | brown hairy, leaden below | l. b.

16262 ✓ *Casiornis rufa* ♂ 195  
brown | brown, black apically & fluff at base below | dark leaden

16263 ✓ *Platypsaris rufus audax* ♀ 206  
brown | b, leaden below | l. black

11-3

11-3

X

[Incubating]

\* 16264 ✓ *Turdus albicollis contemptus* ♀ 240  
brown, legs yellow | b, dusky yellow below | dark brown

\* 16265 ✓ *Trogonorus collaris* ♂ 272  
brown | yellow | dirty brown

16266 ✓ *Cyanocorax cyanomelas* ♂ 375  
brown | b | b

Sarawapata, Oct. 29.

Mike sick today, took physic & stayed in.  
Berto & I went north. I climbed to top of  
the "Meru" (7300 ft), then dropped down into  
valley beyond, running north, crossed this valley  
to west & returned over road to Arenal, a  
distance of at least 18 miles. Berto worked around  
high ridges, but did not go down into valley beyond "Meru"

\* 16267 ✓ *Colibri serrirostris* ♂ 135  
b | b

\* 16268 ✓ *Myioborus b. brunneiceps* ♂ 145  
brown | b | b

16269 ✓ *Phaiomyias m. murina* ♂ 132  
brown | b, plish at base below | b

16270 ✓ *Basileuterus bivittatus* (T.E.) ♂ 152  
brown | b | yellowish brown

16271 ✓ *Geothlypis squameata velata* ♂ 142  
brown | b, plish plish below | brown brown

15-3

15-3

[30]

X

16272<sup>✓</sup> *Thamnophilus connectens* (T.E.) ♂ 167  
brown | b, leaden below | l. b.

16273<sup>✓</sup> " " " ♂ 170

16274<sup>✓</sup> " *caerulescens dinellii* ♂ 162

16275<sup>✓</sup> *Turdus rofiventris* ♀ 246  
brown | olive, blackish at base above | warm blue

\* 16276<sup>✓</sup> *Synallaxis superciliosa* (T.E.) ♂ 173  
gray hazel | b, leaden below | olive leaden

\*\* 16277<sup>✓</sup> *Buarremon fimbriatus* ♀ 183  
brown | b | brown warm

\*\* 16278<sup>✓</sup> *Chlorospingus ophthalmicus fulvicularis* (T.E.) ♂ 145  
red-brown | b | warm blue

16279<sup>✓</sup> *Myiarchus tuberculiter atriceps* ♂ 190  
brown | b | b.

\* 16280<sup>✓</sup> *Hylocichla ustulata* ♂ 181  
brown | b, flush at base below | warm blue

16281<sup>✓</sup> *Chamaeza brevicauda beliviana* ♀ 225  
brown | b, flush at base below | dark warm

16282<sup>✓</sup> *Syndactyla rufosuperciliata* ♀ 180  
brown | b, flush below aurally | olive

16283<sup>✓</sup> " " " " ♂ 185

19-5

19-5

X

- \* ✓ 16284 *Veniliornis olivinus frontalis* ♂  
brown | b, | brown blue below | leaden
- 16285 ✓ *Piaya cayana obscura* ♂ 483  
carmine | blue | leaden blue
- 16286 ✓ *Phaenopygia m. merrilli* (T.E.) ♂ 131  
brown | b, | blue at base below
- 16287 ✓ *Antlius rufescens* (T.E.) ♂ 158  
brown | b, | glaucous basally | pink
- 16288 ✓ *Elaenia o. obscura* (T.E.) ♂ 182  
brown | b, | pale at base below | do
- 16289 ✓ " " " ♀ 180
- 16290 ✓ " " " (T.E.) ♂ 188
- 16291 ✓ *Myiarchus tuberculifer atriceps* ♀ 187  
brown | b | b
- 16292 ✓ *Compsocoema f. flavivucha* ♀ 191  
brown | b | b
- \* ✓ 16293 *Empidonax v. varius* ♀ 196  
brown | b | b.
- \* ✓ 16294 *Pluvialis dominicus* (M) ♂ 261  
brown | b | leaden black.
- 16295 ✓ " " " ♀ 255

22-5

22-5

X

[30]

- 16296 ✓ *Thectocercus acuticaudatus* ♀ 360  
orange red | flesh, black below | salmon
- 16297 ✓ " " ♂ 365
- 16298 ✓ *Trogonurus collaris* ♂ 275  
brown, eyelid red | brownish yellow | brownish blue
- 16299 ✓ " " ♀ 275  
brown | yellow, ridge black | —

Samarpata, Oct. 30

Nike sick with stomach & stayed in, did nothing in AM, but skinned 10 birds in PM. Bert & I went over north of the "Meson" in large rally there. Started 4<sup>30</sup> AM, back home. Day hazy & sunny & partly cloudy all day.

- (46) 16300 ✓ Squirrel. 382-190-22 ♂
- 16301 ✓ *Zonotrichia capensis hypoleuca* ♀ 154  
brown | dark brown, black flesh below | dusky flesh
- 16302 ✓ *Trogonurus collaris* ♀ 288  
brown | yellow, ridge black, leaden
- 16303 ✓ *Geothlypis aequinoctialis velata* ♀ 134  
brown | b, flesh below | pale leaden
- 16304 ✓ *Mecocerculus stictopterus taeniopterus* ♀ 133  
brown | b, flesh below basally | b
- 16305 ✓ *Spizitornis f. flavirostris* ♀ 113  
brown | bl, orange below | b
- 16306 ✓ *Picumnus* \_\_\_\_\_ (Rio Azen) ♂ 105  
brown | b, brown blue at base below | leaden above

22-5

22-5

X

- 16307 ✓ *Diglossa sittoides* ♀ 127  
brown | b, blackish plub below | brownish tan
- 16308 *Pyrrhomyias c. cinnamomea* ♀ 133  
brown | b | b
- 16309 ✓ " " " ♂ 139
- 16310 ✓ *Synallaxis superciliosa* ♂ 175  
hazel | b, leaden blue below | bluish tan
- 16311 ✓ " " " (M) ♂ 171
- 16312 ✓ " " " ♂ 172
- 16313 ✓ " " " ♀ 168
- 16314 ✓ *Thamnophilus connectens* (T.E) ♂ 165  
brown | b | l. b.
- 16315 ✓ " " " ♀ 157
- 16316 ✓ — | b, leaden blue below | — ♀ 162
- 16317 ✓ " " " ♀ 164
- 16318 ✓ " " " ♂ 165
- 16319 ✓ " " " ♀ 160
- 16320 ✓ " " (T.E) ♂ 162
- 16321 ✓ — | black | — *Thamnophilus caerulescens dimellii* ♂ 172  
brown | b, leaden blue below, top black | l. b.

22-5

22-5)

[32]

16322 ✓ *Thlypopsis sordida* ♀ 142  
brown | b, leaden blue below | l. b.

16323 ✓ *Sittasomus gr. griseicapillus* <sup>laying</sup> ♀ 161  
Pair brown | b, leaden blue below | leaden

16324 ✓ " " " (T.E.) ♂ 165

\* 16325 ✓ *Spinus sanctaerucis* ♂ 118  
brown | black apical, dusky, brown basally | b

16326 ✓ *Chlorospingus ophthalmicus fulvifularis* (T.E.) ♂ 150  
red | b | l. b.

16327 ✓ *Pooecetes whitii* ♂ 142  
brown | b, bluish plum below | blackish brown

16328 ✓ *Syndactyla rofosopercularis* ♂ 187  
brown | b, plum below anteriorly | dark blue

16329 ✓ *Myiarchus tuberculifer atriceps* ♀ 192  
brown | b | b

16330 ✓ " " " ♀ 190

16331 ✓ " " " ♀ 192

16332 ✓ *Phacellodomus striaticollis maculipectus* ♂ 181  
gray | black, plum below | pale brown

16333 ✓ " " " ♂ 180

16334 ✓ " " " ♂ 180

23-5)

23-5

X

16335 ✓ Veniliornis <sup>f.</sup> fumigatus ♀ 182  
brown | b, pale horn below at base | olive leaden

16336 ✓ Veniliornis olivinus frontalis ♂ 178  
brown | b, bluish black below | l. b.

\*\*

16337 ✓ Platypsaris \_\_\_\_\_ ?! ♂ 200  
similar to minor, but lacking entirely the rosy  
cervical band. (brown | b, leaden below | leaden

16338 ✓ " " " " ♂ 190

\*\*

16339 ✓ Batara cinerea subsp. nov. ♀ 317  
brown | leaden blue ridge black | l. b.

16340 ✓ Knipolegus a. aterrima (T.E) ♂ 177  
brown | bluish white, tip black | b

16341 ✓ " " " " ♀ 172  
\_\_\_\_\_ | b, leaden blue at base below | b

Samaipata, Oct 31. (Sunday)

I went up the valley to south of Berta down the  
valley, clear bright day, smoke on haze of past 2 days,  
nearly all blowing away. Quite cool today.  
Quite still had with stomach. No work in P.M.

16342 ✓ Ptiloptila d. dominicola ♂ 132  
brown | b, leaden below | leaden black

16343 ✓ Camptostoma obsolatum cinerascens ♂ 121  
brown | b, pink at base below | leaden black

25-7



25-7

X

[33]

16344 ✓ *Synallaxis frontalis fuscipennis* ♂ 171  
hozel | b, leaden at base below | leaden olive

16345 ✓ " " " " ♂ 159

16346 ✓ *Thamnophilus connectens* ♂ 167  
brown | b | l. b.

16347 ✓ " " " " ♀ 168

16348 ✓ " " " " ♀ 164  
— | — leaden blue below | —

16349 ✓ *Thamnophilus ruficapillus cochabambae* ♂ 176  
red-hazel | b, leaden below occasionally | l. b.

16350 ✓ *Syndactyla rufoseperrillatus* ♂ 185  
brown | b, fluff below occasionally | dark olive

16351 ✓ *Cyanocampus cyaneus argentina* ♂ 175  
brown | b, brown at base below | b

16352 ✓ *Phacellodemos striaticeps maculipectus* ♀ 184  
gray | b, fluff below | pale tan

16353 ✓ *Elaenia f. flavogaster* ♂ 161  
brown | b, fluff below basally | b

16354 ✓ *Thamnophilus ruficapillus cochabambae* ♂ 179  
red hazel | b | leaden

16355 ✓ " " " " ♀ 175  
— | b. leaden below basally | l. b.

25-7

25-7

X

16356 ✓ *Geothlypis equinoctialis velata* ♂ 143  
brown | b, flesh below | brown hair

16357 ✓ *Synallaxis frontalis fuscipennis* ♀ 167  
gray head | b, leaden blue below | dusky hair

16358 ✓ *Cyclarhis gujanensis viridis* ♂ 180  
yellow | brown hair, d. b. below mainly | leaden blue

16359 ✓ " " " ♀ 178

16360 ✓ *Coryphospingus cucullatus* ♂ 148  
brown | b, bluish flesh below | blackish

16361 ✓ *Vireo olivaceus* ♂ 142  
brown | b, bluish flesh below | leaden blue

16362 ✓ *Sicalis pelzelni* ♂ 142  
brown | blackish, yellow flesh below | dark hair

16363 ✓ *Thraupis sayaca* ♀ 188  
brown | b, pale leaden blue below | l. b.

16364 ✓ *Tyrannus melancholicus* ♂ 229  
brown | b | b

16365 ✓ *Veniliornis olivinus frontalis* ♀ 178  
brown | b, pale below mainly | leaden

16366 ✓ *Colibri serripetris* ♂ 133  
b | d

16367 ✓ *Chlorostilbon aureoventris* ♀ 94  
b, flesh below, tip black | b

25-7

25-7

X

[34]

\* 16368 ✓ *Molothrus b. bonariensis*  
brown b | b.

♂ 203

~~80 spec.~~

Samaiyata, Nov 1 (All Saints Day)  
No shooting today. Labelled & packed all specimens  
& loaded at 32 cartridges.

Samaiyata, Nov. 2

Bert & I started out at 4 hrs. & went to "Meson", there  
we separated & I went down into upper part  
of Piedra Blanca valley. Ground forest there, green  
& thick, with small springs scattered about.  
A splendid place to collect. Got back at 1 P.M. with  
2 Turkeys, *Crypturellus* & 14 other birds, including  
2 marsh Wrens & 2 Chamaeas.

16369 ✓ *Pipile cumanensis* gray. (?) (M) ♂ 730  
brown | bill basally & naked skin bluish white, top of bill  
black | feet pink blood. | throat bluish white

16370 ✓ " " " " (laying) ♀ 700  
— | black, lichen blue around nostril & base below | —  
throat milky blue, darker than ♂.

\* 16371 ✓ *Cistothorus platensis* ——— ♀ 125  
brown | b, flesh below | dusky flesh

16372 ✓ " " " " (T.E.) ♂ 126

16373 ✓ *Basileuterus tristriatus punctipectus* ♀ 135

27-7

brown | b, brownish flesh below | yellowish brown

27-7

X

16374<sup>✓</sup> *Geothlypis aequinoctialis velata* ♂ 142  
brown | b, dusky, fluff below | dusky brown

16375<sup>✓</sup> *Chlorospingus ophthalmicus fulvirostris* (T.E.) ♂ 145  
brown | b | dull leaden-brown

16376<sup>✓</sup> " " " " ♀ 142

16377<sup>✓</sup> " " " " ♀ 139

16378<sup>✓</sup> " " " (T.E.) ♂ 142

16379<sup>✓</sup> *Cnemotriccus fuscatus bimaculatus* ♀ 147  
brown | b, fluff below | b

16380<sup>✓</sup> " " " " ♀ 144

16381<sup>✓</sup> *Sittasomus g. griseicapillus* (T.E.) ♂ 175  
brown | b, leaden below | brown

16382<sup>✓</sup> *Catharus dryas maculatus* (T.E.) ♂ 195  
brown (eyelid red) | bright crimson | orange scarlet

16383<sup>✓</sup> " " " (T.E.) ♂ 198

16384<sup>✓</sup> " " " (T.E.) ♂ 197

16385<sup>✓</sup> *Compsoeca f. flavinucha* ♂ 190  
brown | b, pale at base below | b

16386<sup>✓</sup> *Chamaeza brevicauda* ♂ 230  
brown | b, fluff at base below | blackish brown

16387<sup>✓</sup> " " " " ♂ 225

27-7

X

[35]

- 16388 ✓ *Pyrrhomyias c. cinnamomea* ♂ 137  
brown | b | b
- \* 16389 ✓ *Knipolegus cabanisi* ♀ 167  
brown | blackish; leaden blue at base & below | b
- 16390 ✓ " " ♀ 167
- \* 16391 ✓ " *Elaenia strepera* (T.E) ♂ 169  
brown | b, flesh below, tip black | b.
- 16392 ✓ *Thamnophilus connectens* ♂ 160  
brown | b, leaden below (anally) | b, b
- 16393 ✓ " " ♀ 165  
— | b, leaden blue below | b, b.
- \*\* 16394 ✓ *Tangara argyrophenges* ♀ 138  
brown | b | leaden
- 16395 ✓ *Pipraeidea melanota venez.* ♂ 154  
red | b, leaden blue below | b
- 16396 ✓ " " " " ♂ 153
- 16397 ✓ " " " " ♀ 152
- 16398 ✓ *Myiarchus tuberculifer atriceps* ♀ 195  
brown | b | b
- \* 16399 ✓ *Myiospiza h. homeralis* (T.E) ♂ 133  
brown | b, black flesh below | dusky flesh

31-8

31-8

+

16400 ✓ Xiphocolaptes promeropirhynchus lineatocephalus (T.E.) ♂ 320  
brown (shin round eye skin yellow) leathery blue, top dusky | olive

16401 ✓ Antrostomus rufus (T.E.) ♂ 297  
brown | brown brown, top black | brown horn

16402 ✓ Troganotus collaris (?) ♂ 278  
brown (eyelid red) | <sup>orange</sup> yellow | brownish yellow

16403 ✓ " " ♀ 275  
— (eyelid white) | yellow | —

16404 ✓ Halocerythornis e. caeruleicinctus (T.E.) ♂ 415  
brown | leathery blue, dusky locally | olive

16405 ✓ Cryptorellus obsolatus (T.E.) (T) (M) ♂ 300  
brown | b, dusky bluish, black below | olive drab

16406 ✓ Zonotrichia capensis hypoleuca ♀ —  
brown | blackish, pale horn below | dusky horn

Samaiyata, Nov 3.

Berto not well this morning & stayed in. He skinned birds left from yesterday & stuffed the 2 Turkeys, Mike & I went to Piedras Blancas. Got a late start (5:30) but arrived at upper town at 7 AM. Bird season & no luck. Day clear & hot. Got back at 12:45.

16407 ✓ Basileuterus tristriatus punctipennis (T.E.) ♂ 138  
brown | b, brown horn below | yellowish brown

32-8

16408 ✓ Turdus albicollis ♂ 282  
brown | b, dusky yellow below

32-8

[36]

16409 ✓ *Cnemotriccus fuscatus* ♂ 142  
brown | b, | flab. below | b.

16410 ✓ *Mecocerculus stictopterus taeniopterus* (T.E.) ♂ 142  
brown | b, | flab. below | dusky | b.

16411 ✓ *Pyrrhomyias c. cinnamomeus* ♂ 145  
brown | b | b

16412 ✓ *Hemicorbina leucophrys boliviana* (T.E.) ♂ 121  
brown | b | blackish beam

16413 ✓ *Troglodytes musculus rex* ♀ 130  
brown | b, | flab. below | dusky | flab.

16414 ✓ " " " " (T.E.) ♂ 130

\* 16415 ✓ *Sporophila* ♂ 123  
brown | blackish; yellow at line below | b.

16416 ✓ " " " " ♂ 119

16417 ✓ *Chiroxiphia pareola boliviana* ♂ 150  
brown | b | purplish brown

16418 ✓ " " " " ♂ 150

16419 ✓ *Elaenia o. obscura* ♂ 186  
brown | b, | dusky | flab. below | dusky

16420 ✓ " " " " ♂ 188

33-8 / 16421 ✓ *Chamaeza brevicauda* ♂ 222  
brown | b | dusky beam

33-8

X

Samaiyata, Nov. 4

Clear hot day, with considerable wind from N.E.  
Mike went down valley some distance & got *Pyrrhuloxia*  
& *Dendrocopos* (Linnaeus). Bert & I went over mountain  
to south into valley where I got the Batana.  
Back at 12:00 P.M. Started at 4 AM

16422 ✓ *Sittosomus g. griseicapillus* (T.E.) ♂ 170  
brown | b, leaden blue below | leaden

\*\*  
16423 ✓ *Cacicus* \_\_\_\_\_ (T.E.) ♂ 232  
white | pale leaden blue | b. (all black, wing coverts & rump yellow)

16424 ✓ " " (T.E.) ♂ 226

16425 ✓ " " ♀ 218

\*  
16426 ✓ *Cryptorellus tataupa* (M) ♂ 252  
red-brown | pink red, tip dusky | dull. purplish

16427 ✓ *Leucippus chionogaster hypoleucus* ♂ 118  
black, pink flesh below, tip black | b.

16428 ✓ *Colibri iolatus* ♂ 158  
b | b

16429 ✓ *Mecocerculus stictopterus taeniop.* ♀ 128  
brown | b, flesh at base below | leaden

16430 ✓ " " " " ♂ 138

\*\*  
16431 ✓ "Flycatcher" ♀ 126  
brown | b, flesh at base below | b.

36-10

Olive brown above, double wing bar of buffy white; front, supercil.



+ eye ring white, throat white, chest olive yellow, rest below  
pale sulphur, also under wing coverts.

36-10

X

[37]

16432 ✓ *Catamonia a. analis* ♂ 135  
brown | yellow | dark brown

16433 ✓ " " " " ♂ 130  
— | washed, yellow at face above & below | —

16434 ✓ *Elaenia parvirostris* ♂ 160  
brown | b, flush below basally | —

16435 ✓ *Thamnophilus caerulescens dinellii* (?) ♂ 167  
brown | b, leaden at base below | l. b.

16436 ✓ " " " " ♀ 167  
— | b, leaden below | —

16437 ✓ *Thamnophilus ruficapillus cochabamb.* ♂ 172  
red | b | l. b.

16438 ✓ *Upucerthia hartorti* ♀ 185  
brownish gray | b, flush below basally, bluish apically, | <sup>leaden</sup>

\* 16439 ✓ *Tanagra musica aureata* (T.E) ♂ 123  
brown | b, leaden below | l. b.

16440 ✓ " " " " (T.E) ♂ 127

16441 ✓ *Chlorospingus ophthalmicus fulv.* — ♀ 145  
brown | b | l. b.

16442 ✓ *Knipolegus cabanisi* ♀ 164  
brown | b, leaden below | b.

16443 ✓ *Syndactyla rufosuperciliata* — (T.E) ♂ 195  
37-10 | brown | b, flush below basally, rest from blue | —

97-10

X

16444 ✓ *Platypsaris*

♀ 196

♀ t. black loored species  
brown | b, leaden blue below | leaden

16445 ✓ *Turdus rufiventris*

♂ 257

brown | eyelet yellow | with much olive, low above blackish

\* 16446 ✓ *Dendrocolaptes pallescens*

♀ 291

brown | brown blue, low above blackish | olive

16447 ✓ *Pyrrhura m. molinae*

♀ 284

brown | b | b.

16448 ✓ *Cranioleuca pyrrhopygia striaticeps* (T.E.) ♂ 158

red-brown | b, flesh below | leaden olive

16449 ✓ *Synallaxis superciliosa*

(T.E.) ♂ — ?

beige | b, d. b. below | dark brown

16450 ✓ *Troglodytes musculus* rex

(T.E.) ♂ 132

brown | b, flesh below, tip black | dusky flesh

Samaipata, Nov. 5.

Mike went down valley, but got only a *Guiraguira* & 2 common birds which were checked.

Bert went to a party last night & got drunk as a fool, no good today. I stayed in & wrote labels & did odd jobs till noon. After lunch I got a horse & went up to head of Piedra Blanca valley when I spent night. Went shooting in evening up on ridge to north, but got nothing.

16451 *Guiraguira*

♂ 405

38-10 | orange | reddish orange, olive at base below | leaden

Samaipata Nov 6.

Bert still on a spree today I learned when I got back at 4 P.M. Mike went to some mine with a Catholic priest & got her birds.

I started out at 6 A.M., went far up ridge to north of the "Meson", then cut down the mountain to lead into Piedra Blanca valley. Was doing fine, with a Cryptorellus & Catharus & Murrey, when it started raining & kept it up till 11 A.M. I got into bad country & had difficult time getting down below to a couple of clearings & a small trail leading back up to where I slept. Did not reach home till 1 P.M. Had lunch & saddled up & started for Samaipata about 2 P.M. I was soaping well, but had a dry wool poncho to put on so did not get very cold, except crossing the "Meson".

[47] ✓

16452 *Cebus* Murrey 870-435-134-49 - ♂16453 ✓ *Chlorospingus ophthalmicus* — ♀ 142  
brown / b. / b. b.16454 ✓ *Catharus dryas maculatus* (T.E.) ♂ 185  
brown / crimson, dusky on ridge / orange yellow\* 16455 ✓ *Emberizoides herbicola* ♀ 226  
brown / black, yellow below / brown / yellowish pink16456 ✓ *Turdus rufiventris* (M) ♂ 260  
brown / olive yellow, thin stripes above / brown blue39/40 16457 ✓ *Cryptorellus obsoletus* (M) with No. 16405 (T.E.) ♂ 305  
dusky hazel / b., brown blue below / olive drab.

39-10

Alcamari Leo Pucher

10

X carried off by cat.

~~16458 Sceloporus trachidopyrus ♂ 350  
yellow/pale brown head, body, orange belly/olive~~

106 species taken at Sanaipata.

	Shms	Total Shms	New Species	Mammals
El. El.	= 2468	537	125	68
Sanaipata	= 285	39	12	3
	2753	576	135	71
	3101	588	141	75

### Sanaipata Nov. 7

Packed up today to go to Vermejo tomorrow since a truck is promised by the Vialidad.

### Sanaipata, Nov. 8.

No truck, very sorry, but it had to take the payments down to Vermejo & their baggage. Manaña, sin falta.

### Sanaipata Nov 9.

No truck, busted, & making repairs. Sent at 4 P.M. to find out if there will be truck tomorrow.

I am plumb disgusted & decided not to go to Vermejo at all, but work another week here, now in Piedra Blanca valley & down the road, then go to Aiguile on next trip of don Militer's truck.

### Sanaipata, Nov 10

Up at 3<sup>15</sup> & off at 4 Am. for Piedra Blanca valley. Mike went down road about 5 miles & back & I hit it over the mountain. We separated at foot of afternoon & I don't know when he went. I spent over an hour on top of mountain looking for Marsh Wren & got 3 also a Myiospiza. Then worked down valley to road I came out on last Saturday & back to pueblo on that road, around to east side of "Merón". I found it very long & bad, and

up & down & rocky. Given 3 hours getting to village  
from the bush fence & ditch. Got in at 4<sup>45</sup>, pretty  
tired. My shooting bag & contents weighed 15 pounds.

16458 ✓ *Cistothorus platensis* ——— (O.E.) ♀ 127  
brown | b, flesh below | flesh.

16459 ✓ " " " " ♂ 128

16460 ✓ " " " (T.E.) ♂ 133

16461 ✓ *Serpophaga munda* ♀ 115  
brown | b | b.

16462 ✓ *Mecocerculus stictopterus taeniopterus* (T.E.) ♂ 132  
brown | b, flesh below barath, | leaden black

16463 ✓ " " " (T.E.) ♂ 140.

16464 ✓ *Colibii seminostri* (T.E.) ♂ 130  
b | b

16465 ✓ *Spinus sanctaerucis* ♂ 122  
brown | black, dark tan all round at base | blackish brown

16466 ✓ " " " ♂ 123

16467 ✓ " " " ♀ 120

16468 ✓ *Thamnophilus connectens* ♂ 167  
brown | b, leaden below | l. b.

16469 ✓ *Myiospiza humeralis* ——— (T.E.) ♂ 139  
brown | b, bluish flesh below | flesh.

X

16470 ✓ Chlorospingus ophthalmicus fulvigularis (T.E.) ♂ 148  
brown | b | l.b.

16471 ✓ " " " (T.E.) ♂ 145

16472 ✓ Turdus nigricaps (M) ♀ 224  
brown | blackish | brownish flesh.

\*\* 16473 ✓ Grallaria (near erythrota) (M) (T.E.) ♂ 245  
brown | b, leaden blue below | l.b.

16474 ✓ Bataia cinerea ? (M) ♂ 320  
brown | leaden blue, ridge, (back) | l.b.

16475 ✓ " " " ♀ 332

16476 ✓ Myiodymastes solitarius (T.E.) ♂ 242  
brown | b, dusky, flesh below | dusky | b.

16477 ✓ Trogonotus collaris ♂ —  
brown | eyelid red | dusky yellow | pale brown

Males birds from about 5 miles down valley,

16478 Trogodytes musculus rex (T.E.) ♂ 126  
brown | b, flesh brown | dusky flesh

16479 Pyrrhonorias c. cinnamomea (T.E.) ♂ 145  
brown | b | b

16480 " " " " (T.E.) ♂ 144

16481 Chloroneryx rubiginosus ♂ 245  
T-1 | brown | b | leaden blue

✓ 16482 Scapanus leucopogon ♂ 333  
yellow | black wing | black

✓ 16483 Heptoptila verreauxi decipiens (M) (T.E.) ♂ 310  
brown | b | purplish black.

✓ 16484 Cinclos leucocephalus ♀ 165  
muddy blue | black | l. b.

✓ 16485 Turdus rufiventris ♀ 257  
drab | blackish, brown blue below | pale tan.

✓ 16486 Syndactyla rufosuperciliaris (T.E.) ♂ 196  
brown | b., flab. below | olive.

\* ✓ 16487 Aratinga m. mitrata ♂ 368  
yellow | flesh | flesh.

✓ 16488 " " " (M) ♀ 365

✓ 16489 Penelope bridgesi ♂ 827  
drab | black |

[51] ✓ 16490 "Melero" 965-380-80-43-♀

Berti's Birds (High ridge between valley + P.B. slopes)

✓ 16491 Adelomyia inornata ♀ 94  
b | blackish

✓ 16492 Cistothorus platensis (T.E.) ♂ 128  
brown | b., flab. below | flesh

X

- 16493 ✓ *Synalaxis superciliosa* (T.E.) ♂ 170  
dusky | b, blue | ...
- 16494 ✓ *Thraupis ...* (T.E.) ♂ 170  
brown | b | d
- 16495 ✓ *Thraupis sayaca* ♀ 186  
brown | b, blue | ...
- 16496 ✓ *Chloronotus rubriscapula* (T.E.) ♂ 249  
brown | b | b
- 16497 ✓ " " " ♂ 249
- 16498 ✓ " " " ♂ 258
- 16499 ✓ *Aulocorythus caeruleirostris* ♀ 390  
yellow | leaden blue, darker | ...
- \* 16500 ✓ *Columba vitiensis* ♀ 326  
red | b | ...
- 16501 ✓ " " " T.E. ♂ 340
- [48] 16502 ✓ Squirrel 360-170-43-23 ♂
- [49] 16503 ✓ " 353-162-49-23 ♀
- [50] 16504 ✓ " 370-175-50-25 ♂
- 16505 ✓ *Amazona aestiva xanthopteryx* (M) ♂ 387  
orange | black | blackish

2-1



2-1

X

[41]

\* 16506 ✓ *Rhynchotus rufescens maculicollis* (M) ♀ 465  
dusky yellow | b, flesh below | pale drab

16507 ✓ *Penelope s. sclateri* (M) ♀ 660  
brown | blackish, pale below | pink blood.

Samaipata, Nov. 11

We all stayed in to skin the 50 birds from yesterday, finished about 5 P.M. Cloudy today

Samaipata, Nov. 12

Mike went down valley again, but only got 5 good birds. Bert & I went again to Piedra Blanca, by way of El Muon. He went up the ridge & down into valley & out by the "China", same way I went the day it rained. I worked down part the "China" & all near the valley, then across the slopes to north for some distance & back out to Muon.

We reached village at 5 P.M. with 45 birds between us. Cloudy in morning & light shower about 7:30, then broke up - partly cloudy till about 2 P.M. & 3.

16508 ✓ *Cyanocorax c. chrysops* ♂ 364  
yellow | black | b

16509 ✓ " " " " ♂ 355

16510 ✓ *Cacicus* \_\_\_\_\_ (Black, yellow crest & rump) ♀ 203  
pale green | pale leaden blue | b.

16511 *Picumnus* \_\_\_\_\_ (Rio Ayacu) ♂ 108  
brown | b, leaden blue below, top black | leaden.

16512 ✓ *Serpophaga munda* (T.E) ♂ 122  
brown | b | b

3-1

\*\*

16513 ✓ "Hummer" (laying) ♀ 96

bill red, top black

Brown, green above & on sides of throat & sides of breast & wings, vent white, crown dirty white.

16514 ✓ Picumnus (Ruficeps) im ♀ 107

brown t, olive below / leaden

16515 ✓ Troglodytes solstitialis frater ♀ 117

brown t, fluff below, top leaden / dark brown

16516 ✓ " " " " ♀ 110

16517 ✓ Hemicorhina leucophrys boliviana im ♀ 110

brown t, bluish fluff below / sb

16518 ✓ " " " " (O.E.) ♀ 117

16519 ✓ " " " " ♂ 120

16520 ✓ " " " " ♂ 118

16521 ✓ " " " " ♀ 111

16522 ✓ Campsarthlypis pitiauyuni melanogenys (T.E.) ♂ 118

brown t, yellow below / brownish yellow

16523 ✓ Basileuterus signatus flavovirens ♂ 146

brown t / brownish yellow

16524 ✓ " " " " ♀ 145

16525 ✓ *Thlypopsis ruficeps* ♂ 137  
brown | b, leaden blue below | l. b.

16526 ✓ " " ? 137

16527 ✓ *Pyrrhomyias c. cinnamomea* ♀ 140  
brown | b | b

16528 ✓ " " " (T.E.) ♂ 140

16529 ✓ *Mecocerculus stictoptera taenioptera* (T.E.) ♂ 122  
brown | b, blue | blue below | l. b.

16530 ✓ " " " ♀ 130

16531 *Vireosylva leucophrys laetissima* ♀ 129

16532 ✓ *Elaenia strepera* ♂ 159  
brown | b, blue below | b

16533 ✓ " " ♂ 159

16534 ✓ *Thamnophilus caerulescens* din. (T.E.) ♂ 169  
brown | b, leaden below | l. b.

16535 ✓ *Tangara argyrophenges* (T.E.) ♂ 136  
brown | b | leaden

16536 ✓ " " (T.E.) ♂ 136

16537 ✓ " " ♂ 145

4-2

x

16538 ✓ *Chiroxiphia pareola boliviana* ♂ 144  
brown | b | purplish brown

16539 ✓ " " " " ♂ 145

16540 ✓ *Chlorospingus ophthalmicus fulviventris* (T.E.) ♂ 149  
brown | b | b

16541 ✓ *Prospiza whitii* ♂ 147  
brown | b, leaden blue below | b

16542 ✓ " " " ♂ 146

16543 ✓ *Lepidocolaptes lachymiger bolivi* ♂ 215  
brown | brown blue, base below blackish | leaden blue

16544 ✓ " " " " ♀ 216

16545 ✓ " " " (T.E.) ♂ 220

16546 ✓ *Chamaeza brevicauda* ♂ 226  
brown | b, flesh below | dark brown

16547 ✓ " " " ♂ 232

16548 ✓ *Grallaria* (distinct crown) ♂ 235  
brown | b, leaden blue below | b

16549 ✓ *Pipreola f. frontalis* ♀ 192  
dusky yellow | b, yellowish at gape | yellow

16550 ✓ *Turdus albicollis contemptus* ♀ 239  
brown (eyelid yellow) | blackish, dusky yellow below | dark brown

4-2

- \* 16551 ✓ *Platycichla flavipes leucops* ♀ 225  
brown | b | yellowish brown
- 16552 ✓ *Myiotheretes striaticollis* ♂ 233  
brown | b | b
- 16553 ✓ *Trogonorus collaris* ♂ 270  
brown | eyelid red | yellow | brownish yellow
- 16554 ✓ " " ♀ 278  
— (eyelid black) | yellow, ridge black | —
- 16555 ✓ *Pharomacrus [antisiensis?]* ♀ 320  
carmine | b, pale at base below | leaden
- 16556 ✓ *Columba rufina sylvestris* ♀ 310  
purplish red | b | purplish black
- \*\* 16557 ✓ *Pionus corallinus* (M)(T.E) ♂ 309  
brown | crimson | blackish

Samoaipata, Nov. 13

We all stayed in to skin the birds from yesterday.  
Mike skinned & partly stuffed 3 in afternoon, leaving 47  
A clear fine day today.

Samoaipata, Nov. 14.

We all went out at 4 AM. Today, taking lunch for  
whole day's trip. Mike went before & over into  
another valley to south. He got the 2 Newkeys.  
The *Lepidocolaptes angustirostris*, *Lechmias* + 3 more  
common species. Bert & I went to the "Meru",  
6-3 worked over the whole top for more than an hour

6-3

x

Then both went up the ridge & worked the heavy front to east, but did not go down into Piedra Blanca Valley. I left him at noon, & came home by way of "Dry" valley & "La Cruz". But got nothing on the way. Day very hot, a gust of wind blowing from south, cloudy & a good part of time & threatened rain, but only a little shower fell. I got in at 5, Muck at 4 & Bute at 6<sup>30</sup>

- \*\* ↓ Mac + Mike (part)
- 16558 ✓ *Melanopareia maximiliani* ————— sub. imm. ♀ 158  
brown | b, sub. imm. & want leaden blue, tip black | dusky feet
- 16559 ✓ *Anthus rufescens* (T.E.) ♂ 158  
brown | b, black feet below, tip black | feet
- 16560 ✓ " " " ♀ 158
- 16561 ✓ *Thamnophilus connectans* (T.E.) ♂ 166  
brown | b, leaden below | d.b.
- 16562 ✓ *Troglodytes solstitialis* (T.E.) ♂ 115  
brown | b, pink below basally | dusky pink
- 16563 ✓ *Meocerculus striaticeps taenipectus* ♂ 142  
brown | b, pink below at base | leaden black
- 16564 ✓ *Cnemotriccus fuscatus bimaculatus* ♂ 140  
brown | b, pink below | b
- 16565 ✓ *Tangara argyrophenges* (T.E.) ♂ 134  
brown | b | blackish
- 16566 ✓ " " (laying) ♀ 141  
7-4 | — | b, leaden brown below | leaden

7-4

X

[44]

\* 16567 ✓ *Lochnias nematura obscurata* ♀ 170  
brown | b | b

16568 ✓ *Catharus dryas maculatus* (T.E.) ♂ 195  
brown (eyelid red) | crimson, ridge black at nostril + tip | red  
orange

16569 ✓ *Platyrichia flavipes leucops* (T.E.) ♂ 226  
bluish white | orange yellow; top pale | yellow

16570 ✓ *Vireosylva leucophrys lactissima* (T.E.) ♂ 125  
brown | b, dark above below tip | black | l. b.

16571 ✓ " " " " (T.E.) ♂ 131

16572 ✓ *Chlorospingus ophthalmicus fulvigularis* (T.E.) ♂ 142  
brown | b | l. b.

16573 ✓ " " " " (T.E.) ♂ 146

\*\* 16574 ✓ *Atlapetes* \_\_\_\_\_ (near *fulviceps*) (T.E.) ♂ 162  
brown | b | brownish horn

16575 ✓ *Lepidocolaptes lachrymiger* \_\_\_\_\_ (T.E.) ♂ 212  
brown | horn blue, blue below & long max. blackish  
olive

16576 ✓ " " " " (T.E.) ♂ 220

16577 ✓ *Vireo chivi* (?) (T.E.) ♂ 147  
brown | b, leaden blue below | l. b.

16578 ✓ *Lepidocolaptes angustirostris corthiolus* (T.E.) ♂ 235  
brown | pale bluish horn, long max blackish | leaden

16579 ✓ " " " " ♀ 215

9-5

9-5

X

16580 ✓ Myiodynastes solitarius ♂ 235  
brown l., fluff at base below l.

16581 ✓ Troginorhis collaris ♂ 279  
brown (cylindrical) yellow yellow

16582 ✓ Scapanus trachelopyrus ♀ 340  
straw / very / ridge / dusky / leaden blue

16583 ✓ " leucopogon ♂ 347  
yellow / dusky / very / leaden

16584 ✓ Buteo nattereri (?) ♀ 435  
straw / black, leaden basally, some yellow / yellow  
Buteo burti

16585 ✓ " Flycatcher" juv (?) 140  
brown l., brownish black below / dark brown above

16586 ✓ Vireosylva leucophrys laetissima ♀ 130  
brown l., brown blue below / l. l.

16587 ✓ " " " " (T.E.) ♂ 128

16588 ✓ Tanager argyrophenges (T.E.) ♂ 134  
brown l. / leaden black

16589 ✓ " " " " ♂ 131

16590 ✓ Chiroxiphia parvula beliv. ♀ 140  
brown l. / reddish brown

16591 ✓ Anthus rufescens (T.E.) ♂ 157  
brown l., plain below, top black / fluff

9-5



- 16592 ✓ *Myiospiza humeralis* (T.E) ♂ 137  
brown | bluish plum, ridge black | dusky, flesh
- 16593 ✓ *Chlorospingus ophthalmicus fulvicularis* (T.E) ♂ 140  
brown | b | l. b.
- 16594 ✓ *Myiarchus tuberculifer atriceps* ♂ 196  
brown | d | b
- 16595 ✓ *Veniliornis f. fumigatus* ♀ 190  
brown | b, horn blue below | leaden
- 16596 ✓ *Turdus albicollis* ♂ 235  
brown | b, dusky yellow below | dark horn
- 16597 ✓ *Xiphihynchus triangularis bangsi* ♀ 229  
brown | pale horn blue, base + tip of max. black | leaden blue
- 16598 ✓ " " " " (T.E) ♂ 228
- 16599 ✓ *Lepidocolaptes lechrymiger saliv.* ♀ 216  
(see No 575)
- 16600 ✓ " " " " ♀ 208
- 16601 ✓ " " " " ♀ 207
- 16602 ✓ " " " " ♀ 215
- 16603 ✓ *Xiphocolaptes promeropyrhynechos lin.* ♂ 322  
brown | leaden blue, tip dusky | olive

9-5

16604 ✓ *Crypturellus obsoletus* (laying) (M) ♀ 306  
 pale hazel | b, black fluff below | drab

16605 ✓ *Pharomacrus antisimensis* ♂ 335  
 carmine | yellow | olive yellow

[52] 16606 ✓ *Cebus Monkey* 728-385-105-35-♂

[53] 16607 ✓ " " 655-337-100-30 ♀

Samaipata, Nov. 16

Mike & Bert went up on hills early today, but very windy & as they were only looking for certain things (which they did not find) they got very little. Back at 12 & 1:30. I stayed in, wrote labels & posted up birds.

16608 ✓ *Myioborus b. brunneiceps* ♀ 145  
 brown | b | b.

16609 ✓ *Anthus rufescens* (T.E.) ♂ 157  
 brown | b, fluff below, tip black | fluff.

16610 ✓ *Spinus sanctaerucis* ♀ 124  
 brown | black brown laterally, black apically | black tip

16611 ✓ *Elaenia chiriquensis albivertex* (T.E.) ♂ 157  
 brown | b, fluff below, tip black | b.

16612 ✓ *Chlorospingus ophthalmicus fulvigularis* ♀ 145  
 brown | b | b.

16613 ✓ *Antrostomus rufus* (T.E.) ♂ 284  
 brown | brown tip black | brown brown

9-5

9-5

Temperature at Samaipata over 3 weeks

Oct. 26 to Nov 17:

Maximum = 27°C (in shade) = 80.6°F.  
Minimum = 11°C ( " ) = 52°F.

[46]

Samaipata Nov. 17

Had an all day trip planned for Piedra Blanca today, but it began raining at 4 AM & rained till 2 P.M.

Samaipata, Nov. 18

Berto & I went today to Piedra Blanca. I worked 1 1/2 hours on top of Meron, but got but 1 *Cistothorus* & lost a *Rhycolotis*. Flushed it when I had No. 12. in gun, pursuing a Sparrow. We both worked in the second valley running down from the ridge, also up on top of the high ridge beyond the 2nd valley, which has an elevation of about 5000 ft. Birds very scarce & I reached pueblo at 5 P.M. just about all in, with only 12 birds, but 10 good ones. Berto pulled in about 6 P.M. with 13 birds. He had same experience as I with extreme scarcity of birds. Mike did not go out.

16614 *Cistothorus platensis* (T.E.) ♂ 126  
brown | b, flesh below | flesh

16615 *Mesocerculus hellmayri* ? 124  
brown | b, reddish flesh below | head, b.

16616 " *stictopterus taeniopterus* ♀ 127  
brown | b, flesh below | tip black | dark head.

16617 " *l. leucophrys*. ♂ 145  
brown | b | b

16618 *Ochthoeca jelskii boliviana* ♀ 130  
brown | b | brownish black

9-5

9-5

16619 ✓ *Basilopterus tristriatus punctipennis* (T.E.) ♂ 144  
brown/blackish, pale brown below, yellowish brown

16620 ✓ " *signatus flavivirens* ♀ 138  
brown/b, yellowish brown

16621 ✓ " " " (T.E.) ♂ 150

16622 ✓ *Thamnophilus connectens* ♀ 161  
brown/b, leaden blue below, l. b

16623 ✓ *Atlapetes* ——— ♀ 159  
brown/b, blackish brown

16624 ✓ " " " (T.E.) ♂ 165

16625 ✓ *Knipolegus cabanisi* ♀ 157  
brown/blackish brown, brown blue below, top dusky, b

16626 ✓ *Sittosomus griseicapillus* ——— (T.E.) ♂ 164  
brown/b, leaden brown below, leaden brown

16627 ✓ " " " ♀ 160

16628 ✓ *Dendrocolaptes pallascens* (?) ♀ 295  
brown/blackish laterally, dark brown apically, brown blue below, leaden olive

16629 ✓ *Corinostomus lugens* ♂ 132  
brown/b, leaden

16630 ✓ *Vireosylva leucophrys laetissima* (T.E.) ♂ 125  
brown/b, bluish flesh below, top darker, l. b

16631 ✓ " " " ♀ 126

- 16632 ✓ *Tangara argyrophenges* (T.E.) ♂ 138  
brown | b | dark leaden
- 16633 ✓ *Pipraeidea melanota venel.* (T.E.) ♂ 155  
brown | b, leaden blue below | l. beam
- 16634 ✓ *Chaunaxo brevicauda boliviana* ♂ 223  
brown | b, flesh below at base | dusky beam.
- 16635 ✓ *Pipreola frontalis* ♀ 182  
straw | bl., brownish black below | dull scarlet.
- 16636 ✓ *Turdus albicollis* ♀ 235  
brown | b, dusky yellow below medially | dark beam blue.
- 16637 ✓ *Oreopeleia frenata* (egg in oviduct) ♀ 343  
yellow | b | purplish black.
- 16638 ✓ *Pharomacrus antisiensis* ♀ 331  
carmine | b | yellowish brown

### Sawaiyata, Nov. 19

We skinned yesterday's birds, then Jaronom + I wrote up field notes & letters in P.M. Mike has been sick with diarrhea for past 3 days.

### Sawaiyata, Nov. 20

Bert & Mike went down valley about 6 miles this morning, starting at 4 P.M., for what may be our last day's collecting here, since we may get a truck tomorrow or early the following day. I did not go out, a touch of the grippe. I guess I merdied things on my last trip to Piedra Blanca, as I had a chill & some fever that night & felt

9-5

pretty rotten all day yesterday, Better today but  
not up to much yet. Boy returned at 12:30,  
caught a truck coming up. Report only low Thamy  
woodland + birds scarce. Valley warm, side steep  
dry clear, but still cool, 26°C. in shade at 1:30 p.m.

16639 ✓ Picumnus \_\_\_\_\_ ♀ 108  
brown | black, dark blue below, black especially | leaden

16640 ✓ " " " " ♀ 108

\* 16641 ✓ Synallaxis scutata whitii (Layman) ♀ 156  
brown | black, leaden below | pale tan

16642 ✓ " " " " ♂ 160

16643 ✓ " " " " (T.E.) ♂ 160

\*\* 16644 ✓ Empidonax trailii brewsteri (?) ♂ 154  
brown | <sup>pale</sup> b, brownish below | b.

16645 ✓ " " " " ♀ 148

16646 ✓ Thamnophilus caeruleus dinellii ♀ 167  
brown | b, leaden blue below, tip black | l.b.

16647 ✓ Sittasomus g. griseicapillus (T.E.) ♂ 172  
brown | b, leaden below | leaden

\* 16648 ✓ Sayornis nigricans latirostris ♂ 196  
brown | b | b.

12-6

12-6

[48]

- 16649 ✓ *Pyriplona leucopota hellmayri* ♂ 188  
carmine | b | b
- 16650 ✓ " " " " ♀ mobil  
— | b, fluff below | leaden black
- 16651 ✓ *Veniliornis olivinus frontalis* ♀ 177  
brown | b, brown blue below | leaden
- 16652 ✓ *Nystalus maculatus striatipectus* ♂ 209  
yellow | dark crimson, ridges, tip & base below | dark crimson
- 16653 ✓ " " " " ♂ 209
- 16654 ✓ " " " " ♀ 217
- 16655 ✓ " " " " ♀ 217

[145 species taken to here]

12-6

Samaiyata, Nov 21

No truck. Also I felt very bad all day, a touch of dysentery, with low fever & general weakness.

Samaiyata, Nov 22

Still no truck, I think they have been spoofing me all along about the truck. I learned today that the truck was here at the Vialidad shop, being repaired instead of coming from Sta Cruz.

I was still pretty swollen today & glad there was no truck, as I fear the trip to Aguila on top of a truck would have been more than I could stand. I have given up hopes of the road truck, & will wait for Nilette.

12-6

x

Samoaipata, Nov. 23

No news of Mulete, but we know the truck is in Vila Pila. There is a rumour tonight that the highway is blocked with slides between Matanua & Paalquina. I felt much better today, but stomach & bowels all shot to pieces still.

Samoaipata, Nov. 24

Today news confirmed about road. 10 kilometers out of commission & will take 4 to 5 days to open. There are 3 large gangs working. That sure is bad news. It seems there is no end to our hard luck this year. Poor Mulete will be furious. I felt better today & spent some of day writing on bird data, etc. <sup>but not up to par yet.</sup> Mike sick again tonight, stomach & bowels.

Samoaipata, Nov 25. (Thanksgiving)

Rather a gloom Thanksgiving Day for us, although we should be thankful that we are in fairly good health & no real serious trouble has befallen us. Also the wonderful collection made

year for this year

Samoaipata, Nov. 26

Berto & I went shooting today, I went far up near head of Samoaipata Creek & Berto over to north around base of "Mesa". I got 13 & Berto only 7, all common except the Spizella.

16656 ✓ Myioborus brunneiceps  
brown | b | b

♀ 137

16657 ✓ Stigmatura b. budytes  
brown | b | leaden

♂ 150

12-6



16658 ✓ *Thamnophilus ruficapillus cochabambae* ♂ 175  
red | b | l. b.

16659 ✓ " " " " ♀ 166  
— | b, leaden blue below | l. b.

16660 ✓ *Thamnophilus caerulescens dinellii* ♀ 159  
brown | b, leaden blue below | l. b.

16661 ✓ *Sporophila* \_\_\_\_\_ (same as *Pud. Blaue*) ♀ 118  
brown | blackish, olive leaden below | blackish brown

16662 ✓ *Cranioleuca pyrrhopia striaticops* (T.E.) ♂ 158  
hazel | b, purplish flesh below, tip black, | leaden olive

16663 ✓ *Pooecypia whitii* ♀ 152  
brown | b, leaden blue below | blackish

\* 16664 ✓ *Tapera naevia chochi* ♂ 290  
straw, hazel under | bluish flesh, ridge black | l. b.

16665 ✓ *Zonotrichia capensis hypoleuca* ♂ 155  
brown | blackish brown, pale below | brownish flesh

16666 ✓ *Spinus santacruis* ♂ 122  
brown | pale brown basally, black apically | b.

16667 ✓ " " " ♂ 127

16668 ✓ " " " ♀ 125

16669 ✓ *Furnarius rufus commersoni* ♂ 202  
brown | blackish, flesh below, tip black

13-6

+

16670 ✓ Empidonax v. varius ♂ 197  
brown | b | b.

16671 ✓ " " " ♀ 196

16672 ✓ Pachyrhamphus polychropterus spixii ♂ 172  
brown | leaden blue | leaden

16673 ✓ " " " ♂ 172

16674 ✓ Turdos amaurochalinus ♂ 235  
brown | yellow, tip dusky | leaden blue

16675 ✓ Chloronerypes rubiginosa — ♀ 245  
brown | b | l. b.

Samaiyata, Nov. 27.

Berto & I went shooting today, but with scant hope of getting much of value. I went back up Samaiyata Creek & Berto went north again. Mike did not go out, why, I don't know, apparently not sick.

16676 ✓ Molothrus b. bonariensis ♂ 224  
brown | b | b

16677 ✓ " " " ♂ 222

16678 ✓ Colibri serrirostris ♂ 131  
b | b

16679 ✓ Mecocerculus stictopterus taeniopygus (T.E.) ♂ 132  
brown | b, flesh at base white | leaden

13-6

✓ 16680 Myioborus brunneiceps ♀ 141  
brown | b | b

✓ 16681 Compsothlypis p. pitagumi (T.E.) ♂ 116  
brown | b, yellow below | brownish yellow

✓ 16682 Poozippa t. torquata (?) (T.E.) ♂ 132  
brown | b | blackish brown

✓ 16683 Tanagra chlorotica serrirostris ♂ 118  
brown | b, leaden blue below | l. b.

✓ 16684 Cnemotriccus fuscatus bimaeculatus (T.E.) ♂ 142  
brown | black, flush below | b.

• ✓ 16685 Thamnophilus ruficapillus cochabambae ♂ 170  
red | b, leaden apical bar below | l. b.

✓ 16686 " " " " ♂ 170

✓ 16687 Schistospiza griseocristata ♂ 146  
brown | b, flush below, tip dusky | blackish brown

✓ 16688 " " " " ♀ 146

✓ 16689 Myiospiza humeralis — (T.E.) ♂ 140  
brown | black, throat + mand. flush | flush

• ✓ 16690 Phacellodomus striaticollis maculipectus ♀ 121  
gray | b, leaden blue below | l. b.

✓ 16691 Cyanocorpsa cyanea argentina (T.E.) ♂ 128  
brown | b, horn blue below locally | b

13-6

X

16692 ✓ *Piranga flava flava* (T.E.) ♂ 203  
brown | b, leaden blue below | leaden black

\* 16693 ✓ *Echthornis chacuro uncirostris* ♀ 227  
gray | salmon red | blackish brown  
[This bird may be the nominate form - Paraguay]

16694 ✓ *Myiodynastes solitarius* (T.E.) ♂ 240  
brown | b, flesh below basally | leaden

14-6

	<u>Sp. Known</u>	<u>total Species</u>	<u>New Spec.</u>	<u>Mammals</u>
El Estre	2468	537	125	68
Samai pata	<u>522</u>	<u>53</u>	<u>16</u>	<u>9</u>
	2990	590	141	77

152 species collected  
15 " observed, not taken.

Tomina, D. Chequisaca (6700ft)

Dec. 21, 1937.

Weather fair, with drifting cumulus + cirrus clouds till noon, afternoon clear + cloudless, warm Mike sick with malaria. Bert + I went down valley + I went up a branch valley opening off to left just below village. Birds rather scarce up this side valley, no running water, but fresh from recent rain. Trees + shrubbery recently (but not all) out in fresh leaf.

16695<sup>✓</sup> *Colibri serrirostris* ♂ 133  
d. | b.

16696<sup>✓</sup> *Serpophaga munda* (T.E) ♂ 118  
brown | b. | b.

16697<sup>✓</sup> *Stigmatura b. bodytes* (?) ♂ 151  
brown | b. | leaden

16698<sup>✓</sup> " " " ♂ 153

16699<sup>✓</sup> *Synallaxis frontalis fuscipennis* ♂ 175  
hazel | b., leaden blue below | black chin

16700<sup>✓</sup> *Thamnophilus coerulescens dinellii* ♂ 164  
brown | b., leaden blue below | l. b.

16701<sup>✓</sup> *Upucorthis harterti* ♀ 183  
brown | b., flat below laterally | dark brown

16702<sup>✓</sup> *Vireo. e. chivi* ♀ 146  
brown | b., pale leaden blue below | l. b.

X

16703<sup>✓</sup> *Coturnicops japonicus* juv ♂ 133  
brown yellow, tip dusky | b.

16704<sup>✓</sup> *Proospiza t. torquata* (T.E.) ♂ 134  
brown | b., under black below | dark leaden

16705<sup>✓</sup> *Zonotrichia capensis hypoleuca* ♀ 145  
brown | b., brown blue below | brown glab.

16706<sup>✓</sup> *Dyotopicus lignarius puncticeps* ♀ 174  
brown | b., dark brown below | broadly | leaden

16707<sup>✓</sup> *Cyclocheilus japonensis viridis* (O.E.) ♀ 192  
yellow | brown brown, leaden blue below | leaden

16708<sup>✓</sup> *Turdus t. fuscator* (T.E.) ♂ 280  
brown | red orange | yellow

16709<sup>✓</sup> *Leptoptila verreauxi decipiens* ♂ 284  
yellow | b. | purplish black  
(Borneo birds)

16710<sup>✓</sup> *Chlorostilben a. aureicentris* ♂ 97  
red, tip black | b.

16711<sup>✓</sup> *Leucippus chinensis hypoleucus* ♀ 112  
b., dusky brown below | broadly | b.

\* 16712<sup>✓</sup> *Comptostoma obsoletum* ——— ♀ 122  
brown | b., glab. below | leaden

16713<sup>✓</sup> *Phaeomyias<sup>m.</sup> murina* ♂ 170  
brown | b., glab. below | b.

1-0

1-0

X

[52]

16714 ✓ Stigmatura b. budytes ♂ 156  
brown | dr | leaden

16715 ✓ Sublegatus mimodacta (Layney) ♀ 156  
brown | dr | dr

16716 ✓ Trogodytes musculus rex (T.E) ♂ 130  
brown | dr, fluk below (anally) | dusky fluk

16717 ✓ Thamnophilus caerulescens dinellii ♂ 165  
brown | dr, leaden below | l. l.

16718 ✓ Cranioleuca pyrrhopia striaticeps ♀ 150  
gray | bl. fluk below, top black | olive

16719 ✓ Poesia torquata ♀ 131  
brown | dr, in l. l. | blackish-brown

16720 ✓ Catantonia a. analis juv ♂ 131  
brown | yellow, top black | blackish

16721 ✓ Arremon flavirostris orbignii ♀ 160  
brown | yellow, ridge black | leaden brown

16722 ✓ Knipolegus a. aterrimus ♂ 177  
brown | rusty, thin, top black | dr

16723 ✓ Furnarius rufus coniamersoni ♂ 206  
brown | blackish-brown, dull fluk below (anally) | drish brown

16724 ✓ Turdus amaurochalinus ♀ 227  
brown | greenish black | pale brown blue

1-0

+

Tomina, Dec. 22

Clear + hot

Mike in bed, but better today, no chill thru. Bm.  
 Bert + I went out before 6 am, he down valley  
 + I across river into a large side valley  
 with many trees + shrubbery. Birds fairly  
 abundant, but very little of interest, most  
 everything common. Predominant species here  
 seem to be, <sup>some</sup> those of the El Estero + Sauaiyata  
 N.E.C. birds

16725<sup>✓</sup> *Colibri serrirostris* ♂ 134  
 b | b

16726<sup>✓</sup> *Euscarthmus m. margaritaceiventris* ♂ 121  
 shaw | blackish, slightly paler below | purplish brown

16727<sup>✓</sup> *Polioptila d. dumicola* (T.E.) ♂ 135  
 brown | b, leaden below, top black | leaden

16728<sup>✓</sup> *Stigmatura b. budytes* ♀ 146  
 brown | b | b

16729<sup>✓</sup> *Phaenopygia m. murina* ♂ 130  
 brown | b, pink at base below | b

16730<sup>✓</sup> *Sublegatus m. modesta* (T.E.) ♂ 152  
 brown | b | b

16731<sup>✓</sup> *Synallaxis frontalis tuscipennis* ♀ 163  
 hazel | b, bluish pink below | olive

16732<sup>✓</sup> *Schistospiza griseocristata* (T.) 147  
 brown | black, pink below | blackish brown

T-0



1-0

x

[53]

16733 ✓ *Cranioleuca pyrrhopia striaticops* (T.E.) ♂ 156  
brown | b, flush below, top black | olive

16734 ✓ *Elaenia parvirostris* ♂ 162  
brown | black, flush below variably | b.

16735 ✓ *Piranga flava flava* juv ♂ 200  
brown | black, leaden blue below | leaden black.

16736 ✓ *Trichopicus caetorum* ♂ 201  
brown | b | dirty olive

16737 ✓ *Turdus f. fuscater* (T.E.) ♂ 287  
brown | orange red | yellow

16738 ✓ *Thectocercus acuticaudatus* ♂ 323  
brick red | flush, black below | pale salmon  
(Bertr)

16739 ✓ *Polioptila d. demicola* (T.E.) ♂ 131  
brown | b, leaden below variably | leaden

16740 ✓ *Serpophaga munda* (T.E.) ♂ 119  
brown | b | b

16741 ✓ *Stigmatura b. budytes* (Rayn) ♀ 149  
brown | b | b

16742 ✓ *Colibri isolata* (T.E.) ♂ 148  
b | b

16743 ✓ *Spinus sanctaerucis* ♂ 122  
brown | b, pale brown below variably | b

1-0

1-0

+

16744 ✓ *Cranioleuca pyrrhopygia striaticeps* (T.E.) ♂ 156  
hozel | b, flesh below | blue

16745 ✓ *Thamnophilus caerulescens dinellii* ♂ 170  
brown | b, black below | l. b

16746 ✓ *Hirundinea bellicosa pallidior* ♀ 187  
brown | b | b

16747 ✓ *Saltator aurantirostris bolivianus* ♂ 217  
brown | orange red | dark brown

16748 ✓ *Molothrus p. bonariensis* ♂ 222  
brown | b | b

16749 ✓ *Leucocarpus candidus* (T.E.) ♂ 227  
pale blue | b | olive | skin around eye olive yellow

Tomina, Dec. 23

Clear till about 11, then clouded up, but broken.

Mike still in bed, but no fever.

We started at 5:30, Berto down river, then circled back into hills on east side. I followed trail to Serrano for long way up into hills, then left it & followed a deep, narrow valley (water in upper part) which heads up in a high range of Mts east of here. Back at 12:30.  
Berto Birds.

16750 ✓ *Piaya cayana* (same as 36.56) ♂ 540  
carmine | pale bluish olive, darker laterally | l. b.

16751 ✓ *Knipolegus a. atenivus* juv ♂ 185  
brown | milky blue laterally | black apically | b

1-0

1-0

x

[54]

16752 ✓ Myiarchus cephalotes (T.E.) ♂ 205  
brown | b, brownish below | b.

16753 ✓ Empidonax a. aurantio-atro-cristatus ♂ 178  
brown | b | b.

16754 ✓ Piranga f. flava juv ♂ 186  
brown | b, leaden blue below | dark horn

16755 ✓ Dactyopicus lignarius puncticeps ♂ 183  
brown | b, dark horn below basally | leaden horn.

16756 ✓ " " " ♀ 178

16757 Platypsaris rufus audax (?) (T.E.) ♂ 200  
brown | b, leaden blue below | leaden

16758 ✓ " " " ♀ 195

16759 ✓ Tanagra chloiotica serrirostris ♂ 115  
brown | blackish blue below, tip black | leaden

16760 ✓ Falco sparverius eidos ♀ 286  
brown | leaden blue, tip black | yellow

MAC-Birds

16761 ✓ Satrapa icterophrys hellmayri ♀ 170  
brown | b | b.

\* 16762 ✓ Lesbia sparganura ♀ 127  
b | b.

16763 ✓ Bearremon fimbriatus ♀ 188  
brown | b | blackish horn

2-0

2-0

+

16764<sup>✓</sup> Elaenia strepera ♂ 165  
brown | dr, tawny flk, below | dr.

16765<sup>✓</sup> " " (T.E.) ♂ 158

16766<sup>✓</sup> " " (T.E.) ♂ 170

16767<sup>✓</sup> " " (T.E.) ♂ 168

\* 16768<sup>✓</sup> Poospiza erythrophrys ♂ 148  
brown | dr, leaden blue below | dark brown

16769<sup>✓</sup> " " ♂ 149

\* 16770<sup>✓</sup> Chlorospingus ophthalmicus argentivus ♀ 145  
red-brown | dr | bluish brown

\*\* 16771<sup>✓</sup> Atlapetes fulviceps (T.E.) ♂ 173  
red-brown | dr | blackish brown

16772<sup>✓</sup> Dpucethia harterti ♀ 181  
brown | dr, flk below, tip black | dark brown

16773<sup>✓</sup> Tanager chlorotica serrirostris (T.E.) ♂ 112  
brown | dr, leaden blue below | leaden brown

16774<sup>✓</sup> Dactylopius lignaris puncticeps ♂ 172  
red-brown | dr, dark brown below basally | leaden

16775<sup>✓</sup> " " " " ♂ 182

16776<sup>✓</sup> Thraupis b. bonariensis (T.E.) ♂ 188  
brown | dr, flk below | dark brown brown

5-1

5-1

X

[55]

16777<sup>✓</sup> *Thraupis b. bonariensis* ♀ 181

16778<sup>✓</sup> *Thraupis sayaca* ♀ 176  
brown | b, leaden blue below | leaden

Tomina, Dec. 24

Cloudy till noon, but not heavy, P.M. clear, with drifting clouds. Mike still sick (?), at least spends most of time in bed, but eats everything & has no fever or other symptoms of illness. Bert & I went over where I was yesterday, took same route & to another quebrada to south of it. Started at 5 Am., back at 1<sup>30</sup>.

[S] 16779<sup>✓</sup> *Penelope obscura bridgesi* (O.E.) ♀ 765  
brown | black, brown | black below | blackish brown  
shin of throat pale reddish, with tinge of salmon.

[S] 16780<sup>✓</sup> " " " ♂ 780

16781<sup>✓</sup> *Penelope sclateri* — (P) (T.E.) ♂ 720  
brown | blackish, dark flesh at base & below | light brown below  
throat & around eye reddish flesh

16782<sup>✓</sup> " " " (Laying) ♀ 710

16783<sup>✓</sup> *Mecocerculus l. leucophrys* ♂ 137  
brown | b | b.

16784<sup>✓</sup> *Myioborus b. brunneiceps* (Laying) ♀ 145  
brown | b | b.

16785<sup>✓</sup> *Picumnus albosquamatus* ♂ 108  
brown | black, brown blue below | locally | olive leaden

5-1

5-1

\*

16786 ✓ *Elaenia strepera* ♂ 167

brown/black, yellow flesh below

16787 ✓ " " ♂ 168

16788 ✓ " " (T.E.) ♂ 164

16789 ✓ " " (T.E.) ♂ 175

16790 ✓ *Pooipiza melanoleuca* (T.E.) ♂ 138

red-brown/black, blackish throat

16791 ✓ *Leptasthenora f. fuliginiceps* ♀ 162

brown/black, bluish flesh below

16792 ✓ *Cranioleuca pyrrhops* ♂ 152

gray/b, flesh below, top black, yellowish above

16793 ✓ *Phacellodomus striaticollis maculipectus* ♀ 153

gray/b, milky blue below/b.

16794 ✓ *Chlorospingus ophthalmicus argentatus* (TE) ♂ 150

red-brown/b | l. b.

16795 ✓ *Pooipiza whitell* ♂ 147

black, thin blue below/blackish

16796 ✓ *Upucerthia harterti* (laying) ♀ 182

brown/black, white flesh below basal 1/2, leaden brown

16797 ✓ *Atlapetes fulviceps* ♀ 181

gray/b | dusky brown

16798 ✓ " " ♂ 165

5-1

5-1

X

[56]

✓ 16799 *Elaenia parvirostris*

♀ 155

brown | b, flesh below basally | b.

✓ 16800 *Elaenia parvirostris* (?)

(T.E) ♂ 172

(looks like a large *parvirostris*)

brown | b, flesh below, top black | b.

\*\*

✓ 16801 "Flycatcher" ?

♀ 161

Slaty olive above, more olive on wings; auriculars slate gray; narrow eye-ring sulphur; wings & tail blackish, latter edged with olive; primaries very faintly edged olive, secondaries yellowish olive & tertials with white 3 wing bars of cinnamon ochraceous, inner paler olive whitish, throat ashy, chest dark grayish olive, rest below pale sulphur, also under wing coverts & lining of wing

brown | b, flesh below | b.

✓ 16802 *Tanagra musica aureata*

♂ 122

brown | b, below at base below | blackish base

✓ 16803 *Cyclarhis gujanensis viridis* (T.E) ♂ 184

yellow | brown base, below blue below | pale bluish base

✓ 16804 *Turdus nigricops*

(TE) ♂ 216

brown | yellow | yellow

6-2

Tomuina, Dec. 25

No collecting today. Cloudy in forenoon, but clear in P.M. Heavy rain up at head of Tomuina river last night, for today river much swollen. I wrote all labels to date. Mike skinned 2 turkeys from yesterday we dried all birds in drier. rested from 3 P.M. on

6-2

X

Toumaia, Dec. 26

Mike apparently decided to quit loafing, got up at 4 AM, when alarm sounded & made head, first time this week. Clear warm day, River down sufficiently for crossing on tumbled. Bert & I went back into full triad. Serrano again today, starting at 5 PM (quite light now at 5). I got back at 1 P.M. & Bert at 2. Mike labelled birds. Two specimens.

(Mac. Birds)

16805 ✓ *Lesbia sparganura* ♀ 125

b|b.

16806 ✓ " " ♀ 120

16807 ✓ *Colibri serrirostris* ♂ 130

b|b

16808 ✓ *Myiobates b. brunneiceps* ♀ 137

brown | b | b

16809 ✓ *Pyrrhomyias c. cinnamomea* ♂ 137

brown | b | b

16810 ✓ *Thamnophtilus ruficapillus coelab.* ♂ 150

red-brown | b | l. b.

16811 ✓ *Elanina strepera* (T.E.) ♂ 171

brown | b, tawny plum below, tip black | blackish

16812 ✓ " " (T.E.) ♂ 162

16813 ✓ *Chlorospingus ophthal. argentatus* ♂ 150

red-brown | b | l. b.

6-2



6-2

+

[57]

- 16814 ✓ Myiarchus tuberculifer atriceps ♂ 197  
brown | b | b.
- 16815 ✓ Atlapetes fulviceps ♂ 173  
brown | b | dark brown
- 16816 ✓ " " ♂ 172
- 16817 ✓ Poospiza hypochondriaca ♂ 165  
brown | b, brown below | brown blue
- 16818 ✓ Pachyramphus polychr. - niger ♂ 170  
brown | leaden blue | leaden
- 16819 ✓ Dystopieus lignaris puncticeps ♀ 172  
brown | b, leaden brown below | leaden
- 16820 ✓ Zonotrichia capensis hypoleuca (T.E.) ♂ 159  
brown | blackish, dark brown below (partly) | brown horn
- 16821 ✓ Phaceticus a. aureoventris ♂ 228  
brown | b, leaden brown below | leaden  
(Berta Berta)
- 16822 ✓ Penelope sclateri (M) ♀ 690  
brown | blackish, white & rufous apically, pale | light brown
- 16823 ✓ " " ♂ 740  
— | — | Reddish brown
- 16824 ✓ Myioborus b. brunneiceps ♀ 136  
brown | b. | b.
- 16825 ✓ Myiophaps fasciatus flammiceps ♀ 138  
brown | b, flat below | b.

6-2

6-2

- 16826<sup>✓</sup> *Pooecetes erythropus* ♀ 143  
brown l., leaden blue below | dusky below
- 16827<sup>✓</sup> " " ♂ 157
- 16828<sup>✓</sup> *Buarremon fimbriatus* ♂ 192  
brown l. | blackish brown
- 16829<sup>✓</sup> *Atlapetes fulviceps* ♀ 172  
red-brown l. | brownish brown
- 16830<sup>✓</sup> *Phacellodomus striaticeps maculipennis* ♂ 182  
gray l., leaden blue below | l. l.
- 16831<sup>✓</sup> *Piranga f. flava* ♂ 198  
brown l., leaden blue below | leaden

(72 species included to here)

Tomina, Dec 27

Rain this forenoon, not hard, but useless to go out. I packed up birds, wrote labels & field notes complete. The boys wrapped all birds (except yesterday's) & loaded all 32 cartidges. Bert & I went out at noon. Several showers in P.M. Returned at 4<sup>30</sup>. Bert went down valley & up into hills a short way. I went up road & then far back into hills & down a long valley. I got all the birds except the *Dryocopus* & 1 *Platypis*

- \*\* 16832<sup>✓</sup> *Microstilbon insperatus* (T.E.) ♂ 87  
l. | l.
- 16833<sup>✓</sup> *Phacellodomus s. striaticeps* (?) (T.E.) ♂ 176  
7-3/ gray | blackish, black below | l. l.

7-3

[58]

- 16834 ✓ *Upucerthia harterti* ♂ 188  
brown | b, white flub below basal $\frac{1}{2}$  | leaden brown
- 16835 ✓ " " " " in ♂ 175  
— | black, dusky flub at extreme base below | —
- 16836 ✓ " " " " in ♂ 182
- 16837 ✓ *Piranga f. flava* (T.E.) ♂ 201  
brown | b, leaden blue below | leaden brown
- 16838 ✓ *Dyctiopicus lignaris puncticeps* ♀ 168  
brown | b, dusky brown below basally | leaden olive
- 16839 ✓ *Platypsaris rufus aedax* (T.E.) ♂ 197  
brown | b, leaden blue below | leaden
- 16840 ✓ " " " " in ♂ 187  
— | b, bluish flub below | —

Tomina, Dec, 28

Heavy clouds most of day, slight showers during forenoon. Bert & I went out. I went back up valley where I was yesterday P.M., but found little of interest.

- 16841 ✓ *Phaenopygia m. murina* (T.E.) ♂ 136  
brown | b. | b.
- 16842 ✓ *Poospiza t. torquata* (T.E.) ♂ 134  
brown | b; paler below | blackish brown

7-3

7-3

16843 ✓ *Hirondinea bellicosa pallidior* ♀ 185  
brown | l. | l.

16844 ✓ *Upucorthis harterti* ♀ 180  
brown | l., fluff below basal 1/2 | bluish brown

16845 " " ♂ 179

16846 ✓ " " ♂ 177

16847 ✓ *Cycalathis gujanensis viridis* ♂ 180  
yellow | brown brown, leaden blue below basal 1/2 | l. l.  
(Bent's Bird)

16848 ✓ *Buteo mattereri* ♂ 392  
yellow | leaden blue basally, tip black | yellow

These labels measured on skins  
Reverse sides

16849 ✓ *Arremon flavirostris 'orbigny' (T.E.)* ♂ 169  
brown | yellow, ridge black | brown blue

16850 ✓ *Upucorthis harterti* ♀ 184  
brown | l., fluff below, tip bluish | brown blue

16851 ✓ *Myiochanes f. fumigatus* ♀ 185  
brown | l., brown brown below | l.

16852 ✓ *Pachurhynchus pel. niger* ♂ 175  
brown | leaden blue | leaden

7-3

Tomina, Dec 29

Rained. till about 10.30 AM. Spent forenoon drying birds, labelling & packing, posting notes etc. Clearing grass & packing up. May get away this afternoon to Padilla. Telegraph line down between Indang & Tarabuco since 11 km. yesterday, hence no wire from Ichazo.

Tomuna, Dec. 30

Finished packing in forenoon + waited for truck for Padilla which came along about 3 P.M. Reached Padilla at 5:30 (35 K.M. Unpacked + got ready to work tomorrow.

[59]

	<u>Skins</u>	<u>Total Spec.</u>	<u>New Spec.</u>	<u>Mammals</u>
Samaipata =	2990	590	141	77
Tomina =	158	7	3	0
	<u>3148</u>	<u>597</u>	<u>144</u>	<u>77</u>

76 species collected

15 " observed (not collected)

Padilla, Dec. 31. (7100 ft)

All three went out shortly after 6 AM. Berto + J over to mts about 4 1/2 miles to N.W. where patches of shrubs + trees are still left in ravines + on sunny slopes. Make worked bare hills to west of Tomina.

✓ 16853 *Pseudocolaptes acutipennis* ♂ 125  
brown | blackish

✓ 16854 *Prospiza t. torquata* ♀ 133  
brown | b, dark brown below | blackish

✓ 16855 *Buarremon fimbriatus* (T.E) ♂ 198  
brown | b | blackish brown

✓ 16856 *Prospiza erythrophrys* (T.E) ♂ 156  
brown | b, head blue below | dark brown

✓ 16857 " *hypochondriaca* ♂ 170  
brown | b, head blue below | dusky brown

✓ 16858 *Upucerthia andacola* ♀ 197  
brown | b, plus, medially below | dark brown

- 16859 ✓ *Asthenes d. d'orbigny* (T.E) ♂ 167  
gray brown | b, blue below | l. b.
- 16860 ✓ " " " (T.E) ♂ 172
- 16861 ✓ " " " (T.E) ♂ 167
- 16862 ✓ *Cranioloba pyrhopia striaticeps* imm ♂ 154  
brown | black, brown below | medially | blue above
- 16863 ✓ " " " imm ♀ 156
- 16864 ✓ *Atlapetes fulviceps* ♀ 177  
gray | b | dark brown
- 16865 ✓ " " " (T.E) ♂ 181
- 16866 ✓ " " " ♀ 178
- 16867 ✓ *Sicalis pelzelni* ♂ 137  
brown | blackish, pale leaden blue below | black above
- 16868 ✓ *Upucethia hasterti* ♂ 187  
brown | b, flesh below basal | blue above
- 16869 ✓ *Schistospiza griseocristata* ♀ 155  
brown | b, flesh below | dusky above
- 16870 ✓ *Phacelodames striaticellis maculipectus* (T.E) ♂ 174  
gray | b, leaden blue below | l. b.
- 16871 ✓ " " " (T.E) ♂ 184
- 16872 ✓ " " " (T.E) ♂ 179

✓  
16873 *Amorphsittaca aymara* ♀ 203  
brown | blackish plum | sooty horn

✓  
16874 *Turdus nigricaps* (T.E) ♂ 222  
brown | yellow | yellow

✓  
16875 *Turdus f. fuscater* (T.E) ♂ 300  
brown | red orange | yellow

✓  
16876 *Turdus chiguanco anthracinus* ♀ 275  
brown | red orange | yellow

✓  
16877 *Nothoplecta pentlandi* subsp. ♀ 270  
beige | brown horn, tawny plum below | yellow

✓  
16878 " " " (T.E) (M) ♂ 261

Padilla, Jan 1, 1938.

Rain last night, but none today, cloudy till noon, then partly clear. All three of us went over to where I was yesterday, Bertie & Mike got ahead of me & beat me to my place, so I climbed up to top of mountain & went south to head of valley on west side & came down it & up over by the *Luzes Fontaluna*. Met Bertie & Mike about 10 am & we got up at 1:30. Mike there.

✓  
16879 *Chaetocercus nelsoni* ♀ 77  
b | b

✓  
16880 *Hesbia sparganica* im ♂ 140  
b | b

✓  
16881 " " " ♂ 143

16882 ✓ *Colibrisserioides* (T.E.) ♂ 130  
b | d-

16883 ✓ *Myioborus brunneiceps* ♀ 138  
brown | b | d-

16884 ✓ *Myiophobus fasciatus flavus* (mitch. cap.) ♀ 140  
brown | b, flesh below | d-

16885 ✓ *Atlapetes fulviceps* ♀ 165  
hazel | b | dusky horn

16886 ✓ " " ♀ 172

16887 ✓ " " (T.E.) ♂ 181

16888 ✓ *Anthus rufescens* ♀ 158  
brown | b, flesh below | tip black | black

16889 ✓ *Geositta tenuirostris* (T.E.) ♂ 198  
brown | b, flesh white below | black | b

16890 ✓ *Poospiza whitii* ♂ 153  
brown | b, brown blue below | b

16891 ✓ " " juv ♀ 143  
— | —, flesh at back | black horn

16892 ✓ *Poospiza hypochrysiaca* ♀ 161  
brown | b, flesh brown | black | b

16893 ✓ *Phytotoma rutila angustirostris* (T.E.) ♂ 15  
yellow | leaden horn, leaden blue below | leaden horn



16894 ✓ *Spinus sanctacrucis* ♂ 124  
brown) b, dark brown below) b-

16895 ✓ " " ♀ 118

16896 ✓ *Catamnia a. analis* ♂ 132  
brown) yellow) b-

16897 ✓ *Agriornis microptera andicola* ♀ 240  
brown) b) b-

16898 ✓ *Cyclarhis gujanensis viridis* ♂ 177  
yellow) brown above, under brown below, basal) l. b.

16899 ✓ " " " " ♂ 181

16900 ✓ *Phacellodinus striaticeps mand. ped. (T.E)* ♂ 182  
gray) b, darker brown) l. b.

16901 ✓ *Upucerthia harterti* (T.E) ♂ 187  
brown) b, blue below tip dusky) blue) brown

16902 ✓ *Pooeciza t. torquata* ♀ 136  
brown) b, dark brown below) l. b.

16903 ✓ *Nothoprocta pentlandi* ♀ 255  
gray) brown above, tawny, blue below) yellow

[S] ✓ 16904 *Penelope sclateri* ? ♂ 725  
brown) blackish, long vertical & blue below dusky patch  
feet dull dusky, pinkish in front, blackish in rear.

1-1

+

Padilla, Jan 2. (Sunday)

No collecting today. hard rain in evening

Padilla, Jan. 3

Bert & Mike went out today. I felt badly & stayed, cleaning up a bit of little jobs. Boys back at 1 P.M. Went up to mountain where we went on Saturday. Morning clear P.M. cloudy.

16905 ✓ *Cranioleuca pyrrhoptera* imm. ♀ 137  
brown | d. | blackish, dark.

16906 ✓ *Thamnophilus roticaepillus ceciliabambae* ♂ 184  
red-brown | d., blackish, basal | l. b.

16907 ✓ *Atlapetes fulviceps* (T.E) ♂ 177  
gray | l. | dusky, brown.

16908 ✓ " " " ♀ 173

16909 ✓ *Asthenes d. d'orbigny* imm. ♀ 160  
brown | d., dusky, blackish, basal | l. b.

16910 ✓ *Spinus sanctaecrucis* ♀ 122  
brown blackish, dark brown | blackish

16911 ✓ *Chlorospingus ophionotus argentinus* ♂ 147  
brown | l. b.

16912 ✓ " " " " ♀ 152

16913 ✓ *Turdus nigriceps* ♀ 212  
brown | blackish, lip + mand. brownish | brownish yellow

1-1

	<u>skins</u>	<u>species</u>	<u>new species</u>	<u>mammals</u>
Tomina =	3148	597	144	77
Padilla =	61	1	1	0
	<u>3209</u>	<u>598</u>	<u>145</u>	<u>77</u>

34 species collected

24 " observed

58

25 K.M. East of Padilla Jan 5 (8202K)

We climbed up the mountain in afternoon with Joe Sabar, collecting Rhynchotus & Phrygilus & Lesbia & Phrygilus. Clear day, no rain.

16914 ✓ Rhynchotus rufescens maculicollis (M) (T.E.) ♂ 420  
dusky yellow/black, plum below / plum / plum / plum

16915 ✓ Phrygilus unicolor tucumanus (?) ♂ 159  
brown / black, dusky brown below / brown

25 KM. East of Padilla, Jan 6.

We both went upon mountain & down on east side to forest. (mas. birds) clear day, no rain

16916 ✓ Vestipodes glaucopoides ♀ 108  
t / b

16917 ✓ Lesbia sparganaria (T.E.) ♂ 183  
w / b.

16918 ✓ Troglodytes solstitialis ♀ 111

brown / black, plum below / plum

16919 ✓ " " in ♀ 110  
— / — / — / dusky brown

16920 ✓ Meocerculus stictopterus taen. - (T.E.) ♂ 115

brown / b, plum below / t, b.

- 16921 ✓ *Synallaxis superciliosa* (T.E.) ♂ 167  
 hazel b, brown below | l. b.
- 16922 ✓ *Knipolegus calurus* (T.E.) ♂ 168  
 red-brown above, black below
- 16923 ✓ " " (O.E.) ♀ 165  
 blackish, brown below
- 16924 ✓ " " ♀ 165
- 16925 ✓ *Geositta tenuirostris* ♂ 186  
 brown | b, dusky, black below
- 16926 ✓ *Pipraeidae melanocata venezuelensis* ♀ 152  
 brown | b, black below | leaden black
- 16927 ✓ *Syndactyla rufoscapularis* ? (T.E.) ♂ 185  
 brown | b, black below, black below
- 16928 ✓ *Muscivora alpina grisea* (?) ♀ 178  
 brown | b | b
- 16929 ✓ *Myiarchus tuberculifer olivaceus* (T.E.) ♂ 250  
 brown | b | b
- 16930 ✓ *Geositta tenuirostris* iii ♀ 187  
 brown | b | b
- 16931 ✓ *Myiarchus tuberculifer* (T.E.) ♂ 160  
 brown | b, black below | black
- 16932 ✓ *Phacellodomus striatocollis maculipectus* ♀ 170  
 gray | b, black below | pale l. b.
- 16933 ✓ " " " " iii ♀ 157
- 16934 ✓ *Atlapetes fulvicaeps* ♀ 167  
 hazel | b | black brown below
- 16935 ✓ " " " " ♀ 192
- 16936 ✓ *Chlorospingus ophthalmicus argentius* (T.E.) ♂ 145  
 brown | b | l. b.
- 16937 ✓ *Phrygilus unicolor tucumanus* ♂ 156  
 brown | b, brown below | brown below, true black
- 16938 ✓ " " " " ♀ 150

X

16939 ✓ *Knipolegus cabanisi* (T.E) ♂ 172  
brown | bluish white | b [63]

16940 ✓ *Soroplex r. ruficollis* ♂ 342  
greenish yellow | b | olive yellow

16941 ✓ " " " (D.E.) ♀ 335

(Berta bird)

16942 ✓ *Microstilbon insipidus* (T.E) ♂ 88  
b | b.

16943 ✓ *Capsiempis f. flavescens* ♂ 130  
brown | b, feet yellowish.

16944 ✓ *Alysiaburus b. brunneiceps* ♀ 144  
brown | b | b.

16945 ✓ *Campephilus p. pitagorae* ♀ 112  
brown | b, yellow below | yellowish brown

16946 ✓ *Knipolegus cabanisi* (T.E) ♂ 176  
red brown | bluish white | b

16947 ✓ " " " ♀ 168  
dark brown | bluish white | b

16948 *Elaenia parvirostris* (T.E) ♂ 162  
brown | b, feet brown | b

16949 ✓ *Elaenia obscura* (T.E) ♂ 191  
brown | b, dark plum below | dark red

16950 ✓ *Buarremon fimbriatus* (M) (T.E) ♂ 193  
gray | b | dark brown

16951 ✓ *Syndactyla ruficeps perillaris* ? ♀ 192  
brown | b, feet below | yellowish olive

16952 ✓ *Phrygilus unicolor tucumanus* ♀ 148  
brown | b, dark below | brown brown

16953 ✓ *Phrygilus unicolor* " ♂ 155  
brown | b, pale brown below | brownish black

16954 *Turdus chiguaco anthracina* (T.E) ♂ 286  
brown | red orange | yellow

16955 ✓ *Turdus rufiventris* (T.E) ♂ 264  
brown | yellowish olive | bluish black

\*\*

16956 ✓ "Hawk" ? (chestnut back) ♂ 512  
yellow | black | yellow

T-1]

1-1 25 KM. East. Padilla, Jan 7. ✕

fine clear day. We went up in mountain, Bertie working in brush & low trees on this side, while I went by more highest portion of range (10000 ft) near little there. Bertie got most of birds.

16957 ✓ Phacellodinus striaticeps maculicollis ♂ 172

gray/blackish, brown below, dusky blackish fluff

16958 " " " " imm ♀ 151

blackish brown, black below, fluff

16959 ✓ " " " " imm ♂ 156

16960 ✓ Vestipedes glaucopoides ♀ 105

b) b

16961 ✓ Lesbia sparganoides (T.E) ♂ 187

a) b

16962 ✓ Tyranniscus uropygialis (T.E) ♂ 121

brown t, brownish below, leaden

16963 ✓ Leptosthenus fuliginiceps ♀ 159

brown t, blackish below, fluff

16964 ✓ " " " " imm ♀ 159

16965 ✓ Melanoparvia maximiliani ? (T.E) ♂ 170

brown t, brownish below, leaden blue, up black, dusky fluff

16966 ✓ Atlapetes fulviceps ♀ 168

hard t, brownish below

16967 ✓ " " (T.E) ♂ 180

16968 ✓ Pooecetes erythropneustes ♀ 145

brown t, leaden brown below, dark brown

16969 ✓ Phacellodinus s. striaticeps (T.E) ♂ 171

gray t, black below, brown blue

16970 ✓ " " (T.E) ♂ 168

16971 ✓ Geositta tenuirostris ♀ 190

brown t, black below, basal, b

16972 ✓ Embernagra olivascens (T.E) ♂ 225

front salmon red, ridge black, brownish yellow

16973 ✓ " " ♂ 217

2.5K. M. East of Podilla, Jan. 8.

1-1  
Fine clear day. A slight shower last night about 8 P.M.  
We went over mountain & down to forest on east side. (5 to 12<sup>30</sup> P.M.)

[64]

- 16974 ✓ *Mecocerculus stictopterus taeniop.* (T.E.) ♂ 115  
brown | b, flesh below | leaden
- 16975 ✓ " " " " (P) 112
- 16976 ✓ " " " " ♀ 118
- 16977 ✓ *Vestipedes glaucopoides* (T.E.) ♂ 115  
b | b
- 16978 *Troglodytes s. solstitialis* ♀ 117  
brown | b, flesh below basally | dark tan
- 16979 ✓ " " " " ♂ 118
- 16980 ✓ " " " " un ♀ 116
- 16981 *Melanoparidea maximiliani* ? (T.E.) ♂ 169  
brown | black, below below basally | dusky, flesh
- 16982 ✓ *Pyrhomyias cinnamomea* (T.E.) ♂ 141  
brown | b | b
- 16983 ✓ " " " " ♀ 140
- 16984 ✓ *Synallaxis superciliosa* (T.E.) ♂ 166  
hazel | b, below blue below | dull leaden blue
- 16985 ✓ *Elaenia strepera* (T.E.) ♂ 166  
brown | b, flesh below | leaden black
- 16986 ✓ " " " (T.E.) ♂ 162
- 16987 ✓ *Buarremon fimbriatus* (T.E.) ♂ 195  
brown | b | dark tan
- 16988 ✓ *Geositta tenuirostris* (O.E.) ♀ 193  
brown | b, flesh below basally | b
- 16989 " " " ♀ 192
- 16990 ✓ *Chlorospingus ophthalmicus argentinus* (T.E.) ♂ 154  
brown | b | leaden tan

1-1

- 16991 ✓ *Syndactyla rufosuperciliatus* (laying) ♀ 195  
 brown | b, flesh below | olive  
 (T.E.) ♂ 228
- 16992 ✓ *Turdus nigricaps*  
 brown | yellow | yellow  
 (T.E.) ♂ 222
- 16993 ✓ " " " " " " " "

- 16994 ✓ *Phrygilus unicolor tucumanus* ♂ 161  
 brown | b, dusky throat below | brown throat, tail black

- 16995 ✓ *Spinus santarosensis* (?) ♂ 124  
 brown | dusky throat, dusky tip black | b

- 16996 ✓ " " " " ♀ 121

- 16997 ✓ " " " " ♀ 120

- 16998 ✓ " " " " ♀ 118

- 16999 ✓ *Platypsaris rotus aedax* (laying) ♀ 204  
 brown | b, leaden blue below | leaden

- 17000 ✓ *Phrygilus alaudinus excelsus* (T.E.) ♂ 165  
 brown | yellow | yellow

- 17001 ✓ " " " " ♀ 162

- 17002 + *Cacicus* (dusky-headed) ♀ 214  
 blackish yellowish below | yellow wing & rump  
 blue | white | pale leaden blue | b

- 17003 ✓ " " " " (T.E.) ♂ 225

- 17004 ✓ *Leptoptila verreauxi decipiens* (D.E.) ♀ 296  
 brown | b | purplish black

25 K.M. east of Padilla, Jan. 9 (Sunday)

Up at 4:30 AM, ready to go at 5, but looked like rain, so did any housework 3 wooded ranges, one this side + 2 opposite side mt. Birds worked over toward clouds in quadrangle on that side (meal)

- \*\* 17005 ✓ *Seytalopus* sp. (O.S.E.) ♀ 117  
 green | black | dorsum pale

- 17006 ✓ " " " " (T.M.E.) ♂ 122  
 brown throat

- 17007 ✓ *Spizitornis flavirostris* (T.M.E.) ♂ 121  
 brown | black, orange below | black | b

- 17008 ✓ *Ochthoeca l. leucophrys* (O.S.E.) ♀ 149  
 brown | b | b



4-4

[65]

- 17028 ✓ *Pipraeidea melanonota* venez. — ♂ 150  
Carmine | b, leaden blue below | dark leaden
- 17029 ✓ *Zenotrichia capensis hypoleuca* ♀ 153  
brown | blackish horn, paler below | dusky flesh
- 17030 ✓ *Chloronotus rubiginosus tucumanus* ♂ 244  
brown | b | leaden
- 17031 ✓ " " " " ♀ 238
- 17032 ✓ *Rhynchotus rufescens maculicollis* (T.E.) ♂ 422  
brown | blackish, flesh below, top dusky | pale drab

25 KM. East Padilla, Jan 11

Up at 3<sup>30</sup> for all day trip over mountain & down in valley by time breakfast over, very foggy & looked bad. I went anywhere & Berta went east on highway. Reached valley at 6<sup>30</sup> & at 7 AM rain began. Stayed under tree till rain down we met, then social to Indian fort. Rained till 1<sup>30</sup>. Still foggy & <sup>rest of day</sup> ~~nothing~~ Got back at 3<sup>30</sup> with birds below. B. got nothing.

- 17033 ✓ *Pseudocolopterus acutipennis* (T.E.) ♂ 122  
brown | b | b
- 17034 ✓ *Leptasthenura f. fuliginiceps* ♀ 160  
brown | b, flesh below | olive
- 17035 ✓ " " " " ♀ 168
- 17036 ✓ *Phacellodemos striaticeps* ♂ 168  
gray | black; flesh below, top black | leaden blue
- 17037 ✓ *Rhynchotus rufescens maculicollis* (M) ♀ 440  
brown | blackish, ~~blackish~~ top dusky | pale drab  
(1 left in organ)

4-4

25 KM. East Padilla, Jan 12

Again up at 3<sup>45</sup> pm trip across mountain. Started at 5. Thick fog, everything mist. We worked clear down to bottom of point areas. (to about 7500 ft), but fog thick as soup. Very difficult to work & impossible to distinguish birds up in large trees. Flushed a *Nothopsecta ornata*, again today, but due to fog

faded to get a skin. Bertr got in about 4 P. M., went  
 further east to 2nd patch of forest.

- 4-4
- 17038 ✓ *Troglodytes s. solstitialis* (near birds) ♂ 115  
 brown \ black, pluk; below basally \ dark horn
  - 17039 ✓ *Pseudisopterus acutipennis* ♀ 118  
 brown \ black, tip of mand. pluk \ b.
  - 17040 ✓ " " (OSE) ♀ 117
  - 17041 ✓ *Mecocerculus stictopterus taeniopterus* ♂ 115  
 brown \ b, pluk below \ leaden blue
  - 17042 ✓ " " " " ♀ 113
  - 17043 ✓ *Scytalopus* ——— n. sp. ♂ 121  
 brown \ b \ brownish pluk.
  - 17044 ✓ " " " " imm ♂ 115
  - 17045 ✓ *Melanopariaea maximiliani* ———? ♂ 120  
 brown \ brown around leaden blue, tip black \ pal horn
  - 17046 ✓ *Thamnophtilus ruficapillus cichabambae* ♀ 174  
 carmine \ b, leaden blue below basally \ l. b.
  - 17047 ✓ *Buarremon fimbriatus* ♂ 192  
 brown \ b \ dark horn
  - 17048 ✓ " " " " ♀ 186
  - 17049 ✓ " " " " ♂ 185
  - 17050 ✓ *Phacellodemos*<sup>s.</sup> *striaticiceps* ♂ 166  
 gray \ b, bluish pluk below \ l. b.
  - 17051 ✓ *Phacellodemos striaticellus maculipotes* ♀ 179  
 gray \ black, horn blue below \ dull leaden horn
  - \* 17052 ✓ *Amazilia tucumana* (red front) (M) incubating ♀ 304.  
 orange \ old wing max. yellowish on sides, basally  
 4 eggs
  - 17053 ✓ *Mecocerculus stictoptera taenioptera* ♂ 117  
 brown \ b, pluk below basally \ l. b.
  - 17054 ✓ *Thlypopsis ruficeps* ♀ 137  
 brown \ b, leaden blue below \ l. b.
  - 17055 ✓ " " " " ♂ 134

5-4

- 17056 ✓ *Buarremon timbriatus* ♀ 193  
brown | b | dark brown
- 17057 ✓ " " ♂ 198
- 17058 ✓ *Thamnophilus ruficapillus cochab.* ♂ 172  
hazel | b, leaden blue below | dusky | b. b.
- 17059 ✓ *Pooecetes erythrophrys* ♂ 152  
brown | black, leaden blue below | dusky | brownish brown
- 17060 ✓ *Lesbia sparganera* ♀ 125  
b | b
- 17061 ✓ *Phacellodamus striaticollis maculip.* - ♂ 182  
gray | b, leaden blue below | dusky | bluish pink
- 17062 ✓ *Amazona tucumana* ♂ 338  
orange | ivory | dusky | pink
- 17063 ✓ *Rhynchotus rufescens maculicollis* (M) ♀ 432  
dusky yellow | blackish, pink below | pale dusky (laying) 2 laid.

	<u>skins</u>	<u>total sp.</u>	<u>new Sp.</u>	<u>Skins mammal</u>
Padilla =	3209	598	145	77
25K.M. early Padilla =	149	5	4	0
	<u>3358</u>	<u>603</u>	<u>149</u>	<u>77</u>

58 species collected  
25 " observed.

X

Potosi, Jan. 20

Mike went down in valley to <sup>the</sup> river, Bertie went out along R.R. track towards river, while I went out R.R. other way, then started climbing up scrub side of "Cerro Rico" & finally made a complete circuit of the mountain, going up to about 14500 ft. I got the gophers east of Cerro Rico at about 14000 ft in valley

- (54) ✓ 17064 "Gopher" 312-91-45 - ♀
- (55) ✓ 17065 " " 291-90-42 - ♀
- (56) ✓ 17066 " " 330-104-45 - ♂
- (57) ✓ 17067 " " 290-90-40 - ♀ im
- (58) ✓ 17068 " " 228-78-38 - ♂ juv
- ✓ 17069 *Upucerthia a. andaeola* ♂ 190  
 from 1 bl, flesh below ~~body~~ around gonyx) to
- ✓ 17070 " " " " ♂ 198
- ✓ 17071 " " " " ♀ 185
- ✓ 17072 " " " " ♂ 193
- ✓ 17073 *Oreotrochilus s. stellae* ♀ 132  
 b|b
- ✓ 17074 *Colibri iolata* ♂ 154  
 b|b

[57]

\* ✓ 17075 *Leptasthenura aegithaloides berlepschi* ♂ 166  
brown | b | b

17076 ✓ *Ochthoeca a. benanthoides* ♀ 162  
brown | b | b

\* ✓ 17077 *Asthenes m. modesta* (O.S.E.) ♀ 170  
brown | b, paler at base below | b

17078 ✓ " " " (T.E.) ♂ 167

17079 ✓ " " " ♀ 161

\* ✓ 17080 *Geositta punensis* ♀ 159  
brown | b, bluish flesh at base below | b.

17081 ✓ *Geositta rotipennis fasciata* ♂ 181  
brown | b, bluish base at base below | l. b.

17082 ✓ *Upucerthia validirostris pallida* ♂ 204  
brown | b | b.

17083 ✓ *Phacellodomus s. striaticeps* ♂ 168  
gray | b, horn blue below | l. b.

17084 ✓ *Muscisaxicola alpina grisea* ♀ 175  
brown | b | b.

17085 ✓ " " " ♀ 176

\* ✓ 17086 *Phrygilus unicolor unicolor* ♀ 158  
brown | b, dusky base below | brownish black.

17087 ✓ " " " ♀ 149  
4-0

4-0

x

Duplicate No. = No. 17180

- \*  
 17087 *Phrygilus erythronotus* ♀ 176  
 brown/blackish, dusky, tan below blackish
- \*  
 17088 ✓ *Spinus a. atratus* ♀ 130  
 brown/blackish, dusky, yellow below
- 17089 ✓ *Sicalis auriventris* ♂ 145  
 brown, tan blue below brown tan
- 17090 ✓ " " ♀ 145
- 17091 ✓ *Phrygilus gayi atriceps* ♂ 185  
 brown, tan blue below brownish
- \*  
 17092 ✓ *Thinocorus orbignyianus ingae* ♂ 207  
 brown/yellow, ridge & tip below black/yellow
- 17093 ✓ *Psilopsiagon orbigny* ♂ 190  
 brown/orange yellow
- 17094 ✓ *Nothopiocta ornata* ♂ 355 (M)  
 brown, blue below pale drab

7-0

Potosi, Jan 21

Started out at 5<sup>30</sup> AM. Bert & I with lunch. We went up to the labor & on up to head of valley, I up. San Sebastian valley to head & Bert's no pad Gate Ustia. I secured all the mammals except 1 Gopher, the 2 viscachas & the Chestnut Eared Mouse, taken by Bert. Mike came back at noon after working in lower part of valley, with about 7 birds. The forenoon was mostly clear, but about 1<sup>30</sup> clouded up & had some sleet & hail, Rain storm went around to south & we got back without getting wet at 4<sup>30</sup> P.M. pretty well wet out.

7-0

[68]

[59] ✓  
17095 Gopher (M) 260-80-37-9-♀

[60] ✓  
17096 " 262-85-41-9-♀

[61] ✓  
17097 " 280-90-41-9-♀

[62] ✓  
17098 " 200-65-32-7-♀ juv

[63] ✓  
17099 Chestnut Eared Murre. 172-80-24½-20-♀

[64] ✓  
17100 Big Eared Murre 215-92-28-26-♀

[65] ✓  
17101 " " " 190-84-28-25-♀ im

[66] ✓  
17102 " " " 148-69-24-22-♀ juv

[67] ✓  
17103 " " " 180-80-28½-23-♂

[68] ✓  
17104 " " " 150-65-26-23-♀ juv

[69] ✓  
17105 " " " 156-66-27-22-♀

\* 17106 ✓ Phegornis mitchelli ♂ 181  
brown | b | orange yellow

17107 ✓ Orectochilus g. stellae ♂ 133  
b | b.

17108 ✓ Asthenes m. modesta ♀ 163  
brown | black, dark brown below, top black | b

17109 ✓ " " " ♀ 162

17110 ✓ " " " ♂ 170

8-0

8-0

X

- 17111 ✓ *Asthenes m. modesta* ♂ 155  
(see 17110)
- 17112 ✓ *Muscisaxicola albilora* ♂ 181  
brown | b | b
- 17113 ✓ " " " ♂ imm 175
- 17114 ✓ " " " (T.E) ♂ 178
- 17115 ✓ " " " (T.S.E) ♂ 172
- 17116 ✓ *Geositta punensis* ♀ 160  
brown | b, brown blue below locally | b
- 17117 ✓ " " " (T.E) ♂ 163
- 17118 ✓ " " " (T.E) ♂ 166
- 17119 ✓ " " " ♂ 154
- 17120 ✓ " " " ♀ 159
- 17121 ✓ " " " (T.S.E) ♂ 161
- 17122 ✓ *Cinclodes fuscus albidiventris* ♂ imm 173  
brown | b | dusky brown
- 17123 ✓ *Upucerthia validirostris pallida* ♀ imm 204  
brown | b | leaden brown

[70]

17124 ✓ " *Viscacha* 640-280-92-73-♂

[70]

17125 ✓ " (M) 590-245-90-70-♀

8-0



8-0

X

[29]

17126 ✓ *Thriocorus orbignyianus ingae* ♂ 215  
brown \ yellow, ridge + tip below black \ yellow

17127 ✓ " " " ♂ 220

17128 ✓ " " " ♀ 215

17129 ✓ " " " ♀ 240

17130 ✓ *Phrygillus p. plebejus* ♂ 140  
brown \ b, dark brown below \ b

17131 ✓ *Spinus a. atratus* (T.E.) ♂ 141  
brown \ blackish tan, dusky yellow below broadly \ b

17132 ✓ " " " (T.E.) ♂ 132

17133 ✓ " " " ♀ 127

17134 ✓ *Sicalus v. viopygialis* (T.S.E.) ♂ 145  
brown \ blackish, tan blue below

17135 ✓ " " " ♀ 145

17136 ✓ *Phrygillus unicolor unicolor* ♂ 160  
brown \ b, dark brown below broadly \ brown tan

17137 ✓ " " " im ♂ 157

17138 ✓ *Phrygillus erythronotus* ♀ 175  
brown \ blackish tan, dusky tan below \ dark brown

17139 ✓ " " " ♂ 180

8-0

8-0

X

17140<sup>✓</sup> *Phrygilus erythronotus* ♂ 185

(see N. 17133)

17141<sup>✓</sup> " " ♂ 182

17142<sup>✓</sup> " " (T.M.E.) ♂ 174

17143<sup>✓</sup> " " (T.M.E.) ♂ 179

17144<sup>✓</sup> " " ♀ 182

17145<sup>✓</sup> " " ♀ 185

17146<sup>✓</sup> " " ♂ 179

17147<sup>✓</sup> " " ♂ 182

Potosi, Jan. 22.

Skimming yesterday's birds.

Potosi, Jan 23 (Sunday)

Shot shrews about 3:30 P.M., caught us up at about 15000 ft. All time went up to lakes. Left at 6 AM. on truck to foot of Chalviri valley, then up valley, visiting the lakes (Chalviri; + Illimani (15213 ft), then around divide at about 16000 ft over into head of San Sebastian valley, down it to below Lake Maguin, & over ridge to left & down dry valley to Camargo Road. Reached camp at 6 AM.

\* 17148<sup>✓</sup> *Tinamotis pentlandi* ♀ 406  
brown | black | dusky drab

\* 17149<sup>✓</sup> *Anas flavirostris ocyptera* ♀ 382  
brown | yellow, ridge & nail black | drab

17150<sup>✓</sup> " " " " ♂ 426

10-0

\*\*

17151 ✓ *Colymbus occipitalis juninensis* (M) ♂ 305  
scarlet | blackish | blackish outside, head dual mode

17152 ✓ " " " " ♂ 320

17153 ✓ " " " " ♂ 320

\* 17154 ✓ *Fulica gigantea* ♀ 580  
brown | dark brownish crimson, white over ventral + in median line  
of shield, sides of shield yellow | dull scarlet, joints dusky

\* 17155 ✓ *Phalacrocorax m. megalopterus* juv ♂ 545

[74] ✓  
17156 "Viscacha" 655-285-60-75- ♂

[72] ✓  
17157 ✓ Big Eared Mouse 212-87-30-26- ♀

[73] ✓  
17158 " " " 210-84-28-28- ♀

17159 ✓ *Thinocorys orbignyianus ingae* ♂ 216  
brown | yellow, ridge top below black | yellow

17160 ✓ " " " " ♂ 211

17161 ✓ " " " " ♂ 217

17162 ✓ *Asthernes m. modesta* juv ? 152  
brown | b, dark brown below basally | dusky brown, feet blackish

17163 ✓ *Muscisaxicola albilora* ♂ 180  
brown | b | b

13-1  
17164 ✓ " " " " juv ? 176

13-1

X

17165<sup>✓</sup> *Muscisaxicola albilora* mi ♂ 170

(see opposite page)

17166<sup>✓</sup> " " (M) ♂ 175

17167<sup>✓</sup> " " mi ♀ 169

17168<sup>✓</sup> " " (T.E.) ♂ 182

17169<sup>✓</sup> *Upucerthia validirostris pallida* ♂ 212  
brown | black | b.

17170<sup>✓</sup> " " " ♂ 208

17171<sup>✓</sup> " " " ♂ 218

17172<sup>✓</sup> " " " ♂ 207

17173<sup>✓</sup> " " " ♂ 209

17174<sup>✓</sup> " " " (T.E.) ♂ 214

17175<sup>✓</sup> " " " ♀ 205

17176<sup>✓</sup> *Phrygilus unicolor unicolor* ♂ 170  
brown | b, brownish brown below | brown brown top black

17177<sup>✓</sup> " " " mi ♂ 163

17178<sup>✓</sup> " *erythronotus* ♀ 171  
brown | b, pale brown below | blackish brown

17179<sup>✓</sup> *Scolecophagus r. rupicola* ♂ 330  
yellow | b | olive

17180<sup>✓</sup> *Phrygilus erythronotus* ♀ 176  
brown | blackish, dusky brown below | blackish

13-1

13-11

Potri, Jan 24 X

Stayed in today to skin yesterday's birds etc.

[71]

Potosi, Jan 25

Mike & Bert went down in valley today, back at noon. Found very few birds & not much interest. I stayed in to write labels & do other odd jobs which had been accumulating. Rain in late P.M.

17181 ✓ *Mimus dorsalis* ♂ 266  
dusky yellow (b) | leaden black.

17182 ✓ *Thriocorys orbignyianus incae* ♂ 218  
brown | yellow, ridge & tip below black | yellow

17183 ✓ *Lesbia sarganura* ♀ 125  
b | b'

17184 ✓ *Geositta rutipennis fasciata* ♀ 179  
brown | b, dusky brown below, tip black | leaden

17185 ✓ " " " " ♀ 178

17186 ✓ *Phrygilus p. plebejus* ♂ 134  
brown | b, dark brown below | b

17187 ✓ " *f. fruticeti* (T.E.) ♂ 194  
brown | yellow | pale brown, toes darker.

17188 ✓ " " " (T.E.) ♂ 196

17189 ✓ *Sicalis a. auriventris* (T.E.) ♂ 149  
brown | blackish, brown blue below | pale brown below

17190 ✓ *Spinus a. atratus* ♂ 135  
brown | blackish, dusky yellow below | b

17191 ✓ " " " ♀ 132

13-11

13-1

X

17192 ✓ *Spinus atratus* ♀ 130  
(see 17191)

17193 ✓ *Phrygilus gayi atriceps* (T.E.) ♂ 160  
brown l., pale bluish brown at base & below | brown - horn

17194 ✓ *Leptasthenura aegithaloides berlepschi* ♀ 166  
brown | l | b.

Patzi, Jan 26 (Funic day - no rain)

Mike sick today (?) Bert & I went up to lake, starting at 7 AM  
in truck up to point east of "Cerro Rico", then on foot all day, climbing  
again to 16000 ft., & reaching camp at 6 P.M. I went up Cumbre de  
Lobato, which has 3 lakes, Pucirucha; Ulistia & Solato (15180 ft)  
& crossed over divide into upper San Sebastian & down it.  
Bert. worked up whole length of San Sebastian & we returned together  
(75) ✓

17195 Big Eared Mouse 170-75-30-23½ - ♀ min

[76]

17196 ✓ " " " 215-80-29-26½ - ♀

[77]

17197 ✓ " " " 174-75-29-24 - ♀ min

[78]

17198 ✓ " " " 225-95-30-26 - ♂

[79]

17199 ✓ " " " 196-82-28-26 - ♀

[80]

17200 ✓ *Chinchilla Rat* 245-107-35-25 - ♀

[81]

17201 ✓ *Copher* 265-83-41-9 - ♀

[82] ✓

17202 " " 248-83-38-9 - ♀

[83] ✓

17203 " " 300-98-43-10 - ♂

-13-1

13-1

X

[72]

(84) ✓  
17204 Gopher 245-80-40-9 - ♂

(85) ✓  
17205 " 304-87-46-10 - ♂

(86) ✓  
17206 " 280-90-41-9 - ♀

(87) ✓  
17207 " 251-76-38-9 - ♂

(88) ✓  
17208 " 263-84-44-9½ - ♂

(89) ✓  
17209 " 240-76-39-9 - ♀

(90) ✓  
17210 "Viscacha" 672-298-97-75 - ♂

17211 ✓ Orectochilus estellae (moulating) ♀ 130  
b|b

17212 ✓ Muscisaxicola albilora im ♂ 172  
brown|b|b

17213 ✓ " " im ♀ 173

17214 ✓ " " im ♀ 175

17215 ✓ " " im ♂ 177

\*\*  
17216 ✓ Muscisaxicola flavinucha ♀ 197  
brown|b|b

17217 ✓ " " ♀ 197

17218 ✓ Geositta pueriensis ♂ 160  
brown|black, brown blue below (casally)|b

14-2

14-2

17219 ✓ *Upocerthia validirostris pallida* ♀ 205  
brown | b | b

17220 ✓ *Phrygilus erythronotus* ♀ 183  
brown | blackish, dusky, flesh below | b

17221 ✓ " *v. unicolor* ♂ 163  
brown | b, horn blue below locally

17222 ✓ " " " ♂ 163

17223 ✓ " " " ♂ 155

17224 ✓ *Spinus a. striatus* (T.E.) ♂ 136  
brown | blackish, yellowish airy below locally | b

17225 ✓ " " " ♀ 133

17226 ✓ " " " ♂ 136

17227 ✓ *Anas flavirostris oxyptera* (T.E.) ♂ 440  
brown | yellow, ridge & nail black | black dist

14-2

Potmi, Jan 27.

Skinning material collected yesterday.

Jan. 28 - Potmi' to Uyuni.

	<u>Skins.</u>	<u>total</u> <u>Species</u>	<u>New</u> <u>Species</u>	<u>Mammals</u>
25 KM. east of Padilla	3358	603	149	77
Potmi'	164	14	2	37
	3522	617	151	114

35 species collected

10 " observed.



Jan 29 - Uyuni (12700 ft)

Left Potosi at 2<sup>30</sup> P.M. Rio Mulato at 11<sup>30</sup>, dinner on train. Had to stand in coach for La Paz train till 2 AM, then changed cars & arrived in Uyuni at 4<sup>30</sup> AM. Went to hotel & to bed till about 9 AM. Spent day getting organized & finding place to stay & work.

Uyuni, Jan 30. (Sunday)

All went shooting today. Bert & I went east across the pampa to low mts. & crossed range to valley beyond. Mike worked over pampa to S.E. & into low hills. Day partly cloudy, with hot sun at intervals. Got back at 12<sup>30</sup> & found other two just in that time before. Has been almost no rain here this year during month of January & things are abnormally dry.

✓  
17228 *Agriornis microptera andecola* (Fairly common) ♀ 240  
dusky yellow) b | b.

✓  
17229 *Upucethia ruficauda* ♂ 202  
brown) b, bluish flesh below mesially) b.

✓  
17230 " " " ♂ 200

✓  
17231 " " " ♂ 197

✓  
17232 *Leptasthenura aegithaloides borlepsi* (T.E.) ♂ 155  
brown) b | b.

✓  
17233 *Muscisaxicola mimaculirostris* (T.E.) ♂ 151  
brown) b, tawny flesh below basal 2) b.

+

17234 ✓ *Asthenes mimodesta* ♀ 165  
brown | b | b.

17235 ✓ " " " ♀ 162

17236 ✓ " " " (T.E.) ♂ 172

17237 ✓ " " " ♂ 181

\* 17238 ✓ *Upucerthia dumetoria hypoleuca* ♂ 233  
brown | b | leaden horn

17239 ✓ " " " ♂ 225

17240 ✓ *Phrygilus p. plebejus* (T.E.) ♂ 138  
brown | b, blackish horn below | b

17241 ✓ " " " ♂ 135

17242 ✓ *Phrygilus gayi atriceps* (<sup>3 eggs</sup> manaburu) ♀ 162  
brown | black, base above & mand. horn blue | dark brown horn

17243 ✓ " *f. fruticeti* (T.E.) ♂ 195  
brown | orange yellow | clear brown horn.

17244 ✓ " " " (T.E.) ♂ 192

17245 ✓ " " " (O.S.E.) ♀ 192

17246 ✓ *Geositta punensis* (?) (T.E.) ♂ 161  
brown | b, pale horn below basal  $\frac{1}{2}$  | b

(all white below, paler & smaller than Potoni birds of punensis)

17247 ✓ " " " ♀ 157

1-0

17248 ✓ *Sicalis u. uropygialis* (T.A.) ♂ 143  
brown | b, leaden blue below | pale brown above

17249 ✓ " " " ♀ 144

\*\* 17250 ✓ Plover like bird [New subs. from Tambora] ♀ 276  
brown | b | pink breast, tan dusky

\*\* 17251 ✓ *Thinocorys rumicivorus bolivianus* ♂ 185  
brown | brown blue, ridge & tip below black | pale yellow

17252 ✓ " " " ♂ 190

17253 ✓ " " " ♂ 195

● 17254 ✓ " " " ♀ 195

17255 ✓ *Thinocorys orbignyianus ingae* (?) ♀ 205  
brown | yellow, ridge & tip below black | yellow

\* 17256 ✓ *Metriopelia aymara* ♂ 190  
brown | b | pink flesh

17257 ✓ " " " ♀ 183

17258 ✓ " " " ♀ 188

17259 ✓ *Psilopsaigon orbigny* ♀ 187  
brown | pink around base, apically, dull yellowish | blackish

● [91] ✓  
17260 "Tola" Rat. 169-72-23-11½ - ♀

4-2

x

Uyuni, Jan. 31.

Stayed in today to junk up Potosi notes & to move our stuff to another home where it is more convenient Mike & Bert both went shooting. A fairly good rain last night, cloudy today. Mike got in at 12<sup>15</sup>, Bert at about 1 P.M. Mike 4 birds & set of eggs of Plover

17261 ✓ *Geositta punensis* (?) imm ♀ 148  
brown | b, pale brown at base below | leaden black

17262 ✓ *Cumanan Throated Plover* ♀ 274  
brown | b | pink blood

17263 ✓ *Metriopelia aymara* ♀ 189  
brown | b | flesh

17264 ✓ " " " ♀ 184

17265 ✓ *Upucerthia roticauda* ♂ 206  
brown | b, pale mainly below | b

17266 ✓ " " " ♀ 194

17267 ✓ *Thriocorys rumicivorus bolivianus* ♂ 188  
brown | bluish olive, ridge & tip below black | pale yellow

17268 ✓ " " " ♂ juv 180

17269 ✓ *Cumanan Throated Plover* ♀ 270  
brown | b | pink blood

17270 ✓ " " " ♀ 267

17271 ✓ *Phrygilus f. fruticeti* (T.E.) ♂ 192  
brown | brownish orange | clear light brown

4-2)

X

[75]

Uyuni, Feb. 1.

We all worked out on the pampa, Bert. & I to N.W.  
& Mike to N.E. to edge of salt.

[92]

17272<sup>✓</sup> Ropher 305-93-45-8½ - ♂

[93]

17273<sup>✓</sup> " 267-88-40-7½ - ♀ im

[94]

17274<sup>✓</sup> " 273-90-42-9 - ♀ im

17275<sup>✓</sup> *Geositta punensis* \_\_\_\_\_? (T.E) ♂ 156  
brown \ bc, horn blue below basally \ bc

17276<sup>✓</sup> " " " " ♀ 154

17277<sup>✓</sup> " " " " ♀ 152

17278<sup>✓</sup> " " " " ♂ 155

17279<sup>✓</sup> " " " " ♀ 150

17280<sup>✓</sup> " " " " ♀ 158

17281<sup>✓</sup> " " " " ♀ 156

17282<sup>✓</sup> B. " " " ♀ 153

17283<sup>✓</sup> M. " " " ♂ 150

17284<sup>✓</sup> B " " " ♀ 156

17285<sup>✓</sup> M " " " ♀ 155

17286<sup>✓</sup> " " " " ♂ 157

4-2

+

17287 ✓ *Thimocorys rumieivorus bolivianus* juv ♀ 130  
brown | bluish drab, ridge tip below black | brownish yellow

17288 ✓ " " " (T.E) ♂ 188  
— | pale bluish brown, ridge tip below black | dull yellowish

17289 ✓ " " " (T.E) ♂ 186

17290 ✓ " " " ♂ 180

17291 ✓ " " " ♀ 186

17292 ✓ *Phrygilus p. plebejus* (T.E) ♂ 137  
brown | b, dark brown below basally | b.

17293 ✓ *Asthenes m. modesta* ♂ 168  
brown | b, dark brown below basally | b

17294 ✓ " " " ♂ 173

17295 ✓ *Cinnamom Throated Plover* ♂ 277  
brown | b | pink blood, toe blackish

17296 ✓ " " " ♂ 221

\* 17297 ✓ *Speotyto conicularia* — ♂ 232  
yellow | olive brown | dirty drab

5-2

Uyuni, Feb. 2

Heavy clouds this morning + until near noon but no rain. All road out today. Bertie went after Burrowing Owls that he saw yesterday, Mike went out Pulacayo road + I went after Gophers, + got 9. Lost 5 that were shot + got into their holes.

- [95] ✓  
17298 Gopher 222-73-39-6 - ♂ juv
- [96] ✓  
17299 " 240-80-40-7 - ♂ juv
- [97] ✓  
17300 " 249-81-39-7 - ♀
- [98] ✓  
17301 " 285-89-40-8 - ♀
- [99] ✓  
17302 " 264-80-40-7 - ♀
- [100] ✓  
17303 " 280-85-40-8 - ♀
- [102] ✓  
17304 " 282-90-40-8 - ♀
- [103] ✓  
17305 " 283-84-42-8 - ♂
- [104] ✓  
17306 " 307-102-44-8 - ♂
- 17307 ✓ *Thinocorys rumicivorus* boliv. - ♂ 186  
brown, bluish drab, ridges tip below black, dull yellow
- 17308 ✓ " " " ♂ 190
- 17309 ✓ *Asthenes m. modestus* ♀ 166  
brown to light
- 17310 ✓ " " " ♂ 169

5-2

+

- 17311 ✓ *Muscisaxicola flavinucha* ♂ 192  
brown | b | b
- 17312 ✓ *Thinocorys rumicivorus* boliv. — ♂ 192  
see 17309
- 17313 ✓ *Ammannia* *torquata* *Plow* ♂ 275  
brown | b | pink blood, tail blackish
- 17314 ✓ " " " " ♂ 272
- 17315 ✓ *Speotyto cunicularia* — imm ♂ 260  
yellow | blue olive | blackish horn, sole olive
- 17316 ✓ " " " " ♂ 268

Uyuni, Feb 3

Cloudy in early forenoon, then cleared up, with drifting clouds. Rain last night in valley east of mts (below Pulacayo). All went out at 6 AM. Mike & Berta went N.E., don't know when. Mike got nothing at all & Berta only the Falcon. I crossed with to east, to big valley & got all the birds there except the Owl & 1 *Sicalis*, on this side at water-hole near Pulacayo road. I got in at 12<sup>30</sup>, Berta at 1<sup>30</sup>. I shot an additional Dove to replace a back No.

- [235] ✓  
17317 Long Tailed *Peromyscus* (?) imm 218-120-24-21½ - ♀
- 17318 ✓ *Geositta peruviana* — imm ♀ 152  
brown | b, pale horn below, tip black | leaden
- \* 17319 ✓ *Muscisaxicola pallidiceps* ♀ 172  
brown | b | b

6-2



6-2

[77]

- 17320 ✓ *Muscisaxicola pallidiceps* ♂ 178
- 17321 ✓ (no 17314) " " ♂ 181
- 17322 ✓ " " ♂ 181
- 17323 ✓ *Upucerthia dumetaria hypoleuca* ♀ 222  
brown | b | dark brown
- 17324 ✓ " " " " mi ♀ 217  
— | b, pale below medially | black brown
- 17325 ✓ *Agriornis microptera andecola* ♂ 240  
straw | b | b
- \*\* 17326 ✓ *Sicalis olivascens berlepschi* ♀ 146  
brown | blackish, dark brown below | dark brown brown
- 17327 ✓ " " " " (T.E.) ♂ 145
- 17328 ✓ " " " " (T.E.) ♂ 147
- 17329 ✓ " " " " (T.E.) ♂ 147
- 17330 ✓ *Thinicorys orbignyianus ingae* ♂ 210  
brown | pale yellow, ridge + tip below black | yellow
- 17331 ✓ " " " " ♀ 215
- 17332 ✓ " " " " ♀ 202
- 17333 ✓ *Speotyto cunicularia* — ♀ 265  
yellow | bluish blue, blackish medially above | dirty blue
- \* 17334 *Falco fusco-caerulescens* ♀ 434  
brown | bluish yellow basally, black tip | cere, eyelid + feet yellow

8-3

8-3

Uyuni, Feb 4

Up at 4<sup>15</sup> + out at 5<sup>15</sup>. I went to a water hole about 3½ miles up towards Lillo in hope of getting some Tinamous but saw none at all. Got a fine big Gopher up there + 3 other small birds. Berto + Mike went over the range into valley to east where I was yesterday + the two of them brought back 15 birds. Day clear + warm but clouds began to come up about midday. No rain yesterday or last night.

17335 ✓ *Leptasthenura aegithaloides berlep.* ♂ 148  
brown | b | b

17336 ✓ " " " " juv. ♂ 125

17337 ✓ *Muscisaxicola m. maculirostris* ♀ 153  
brown | b, yellow flesh below basally | b

17338 ✓ " *pallidiceps* ♂ 172  
brown | b | b

17339 ✓ " " " ♂ 180

17340 ✓ " " " imm ♂ 180

17341 ✓ *Upucethia dumetoria hypoleuca* imm ♂ 220  
brown | b, pale brown below usually, basal; dark brown

17342 ✓ *Phrygilus f. fruticeti* (M) (T.E.) ♂ 185  
brown | yellow | brown brown

17343 ✓ " " " ♀ 192  
brown | pale brownish flesh, ridge blackish brown | —

8-3



+

Llica, Feb. 6 (1210 aft)

Out at 6 km. as usual. We worked out over the paruppa south of village, where springs at long slope make numerous small rivulets & boggy spots. We then worked in fields on opposite side, going as far as another little Indian village 6 km. from here at long high mountain.

\*\*  
17353<sup>✓</sup> *Phrygilus carbonarius* (?) (T.E.) ♂ 195  
brown | brownish yellow | clear brown bar

17354<sup>✓</sup> " " (T.E.) ♂ 192

17355<sup>✓</sup> " " (T.E.) ♂ 196

17356<sup>✓</sup> " " ♂ 188

17357<sup>✓</sup> " " ♀ 185  
brown | blackish, dark brown from below | —

17358<sup>✓</sup> " " (O.E.) ♀ 192

17359<sup>✓</sup> *Oreotrochilus (estellae?)* (T.S.E.) ♂ 135  
h | h.

17360<sup>✓</sup> " " (T.E.) ♂ 137

17361<sup>✓</sup> " " ♀ 132

17362<sup>✓</sup> " " ♀ 125

17362 duplicate No. = No. 17416. m ♀ 127

17363<sup>✓</sup> " " ♀ 128

1-1

1-1

\*

17364 ✓ *Leptasthenura aegithaloides* — ? ♀ 171  
brown | b | b

17365 ✓ " " " ♂ 174

\* 17366 ✓ *Anthus corvendera catamarcae* ♂ 159  
brown | b, dusky plub below basally | dark brown, tail dark

17367 ✓ *Muscisaxicola mimaculirostris* (T.E.) ♂ 151  
brown | b, tawny plub below basal  $\frac{1}{2}$  | b

\* 17368 ✓ *Lessonia rufa oreas* ♂ 138  
brown | b | b.

17369 ✓ *Muscisaxicola flavinucha* ♂ 196  
brown | b | b

17370 ✓ " " " ♂ 200

17371 ✓ " " " ♂ 195

17372 ✓ *Agriornis microptera andecola* ♂ 265  
brown | b, dark tan below | b

\* 17373 ✓ *Charadrius alticola* (M) ♂ 184  
brown | b | b

17374 ✓ " " " ♂ 184

17375 ✓ " " " ♂ 180

\*\* 17376 ✓ *Pectoral Sandpiper* ♀ 187  
brown | b | leaden black

17377 " " " ♀ 179  
5-2

5-2

T

\*\* 17378 ✓ Andean Tanager (T.E.) ♂ 430  
linked red | b | leaden

17379 ✓ " " (T.E.) ♂ 445

Llica, Feb. 7.

No rain yesterday, mostly clear, but with light thunder  
showers in evening to north. Last night clear & very cold,  
below freezing. Quite a amount of ice on water out  
on pampa this morning, day brilliantly clear, without clouds.  
I worked all over the pampa, up into fields at its head  
& far down towards the Salt Lake, returning at 10 AM.  
Got an Avocet today, wounded.

17380 ✓ Leptasthenura aigilathoides — ♀ 151  
brown | b | b

+ 17381 Sicalis olivascens berlepschi (T.E.) ♂ 155  
brown | blackish, dusky, brown below | dark brown

17382 ✓ Lessonia rufa areas juv ♂ 133  
brown | b | b

17383 ✓ Thinnocorys orbignyianus ? ♀ 212  
brown | brownish yellow, ridge top below black | orange yellow

17384 ✓ Muscisaxicola flavinucha ♂ 202  
brown | b | b

17385 ✓ " " ♀ 197

17386 ✓ " " ♀ 193

6-3

6-3

[80]

17387 ✓ *Sicalis olivascens berlepschi* ♀ 148  
brown | blackish, brown, brown blue below | dark brown

17388 ✓ *Thinicorys d'orbignyi* (O.E.) ♀ 222  
brown | brownish yellow, ridge & tip below black | pale yellow

\* 17389 ✓ *Ptiloscotes resplendens* ♀ 320  
pink | purplish pink basally, black apically | pink blood

\* 17390 ✓ *Anas specularoides* ♀ 565  
orange | leaden, nail black, orange below | blackish brown

17391 ✓ " " " (T.E.) ♂ 660  
Berle's birds.

17392 ✓ *Thinicorys d'orbignyi* ♀ 218  
(see No. 17388.)

17393 ✓ *Leptasthenura aegithaloides berl.* ♀ 157  
brown | b | b

17394 ✓ " " " " ♂ 167

+ 17395 *Lessonia rufa orea* ♂ 143  
brown | b | b

17396 *Asthenes mimodesta* ♂ 175  
brown | b, paler at base below | b

17397 ✓ *Geositta punensis* ♀ 157  
brown | b, brown blue below basally | b

17398 ✓ *Upucerthia dometoria hypo* ♂ 238  
brown | b, pale brown below basally | blackish brown

17399 ✓ *Sicalis olivascens berlepschi* ♀ 154  
brown | blackish, brown blue below | dark brown

8-3

8-3

+

17400 ✓ *Cinnamom Turated Plover* ♂ 285  
brown | b | pink blood, tail blackish

Llica, Feb. 8

Warm & cloudy, all day yesterday & clear last night, with freezing temperature. Today cloudless & warm.  
Berto went out along the road towards the salt lake & around the mountain to east. He got 1 viscacha, 1 Avocet & 3 small birds. I went over across the Pampa & up to little Indian Hamlet 6 Kilometers distant. Both back at 1 P.M. Out at 6 P.M., before sunrise.

[137] ✓  
17401 *Viscacha* 688-300-95-93 - ♀

[138] ✓  
17402 " 620-275-95-80 - ♂

17403 ✓ *Avocet* (D.E.) ♀ 454  
brick-red | b | leaden blue

17404 ✓ " (T.E.) ♂ 432

17405 ✓ *Oreotrochilus estollae* (?) (T.E.) ♂ 132  
b | b

17406 ✓ " " (T.E.) ♂ 137

17407 ✓ " " ♀ 135

17408 ✓ *Ochthoeca oenanthoides* ♀ 156  
brown | b | b

17409 ✓ *Muscisaxicola alpina grisea* (?) im ♀ 170  
brown | b | b

8-3  
17410 ✓ *Geositta punensis* ♂ 164  
brown | b, ham blue below basally | b



\*\* 17411 ✓ *Asthenes d'orbignyi arequipae*. ♀ 171  
 brown | b, brown below | mainly | leaden

17412 ✓ *Agriornis m. montana* (T.E.) ♂ 251  
 straw | b | b

17413 ✓ " " " " " ♀ <sup>tail</sup> <sup>meat</sup> 230

17414 ✓ *Phyrgilus carbonarius* (T.E.) ♂ 183  
 brown | orange yellow | clear brown | brown

Llica, Feb. 9.

We were supposed to go on a long trip today over to the Chilean frontier, but as usual with these people, the promises of mules were not kept, & the trip is off. Also, the truck is leaving for Uyuni tomorrow & it may not make another trip for 10 days. Meanwhile, the rains may start & we would be stranded here, & not be able to cross the salt lake, so we will return to Uyuni tomorrow. We went shooting out over the pampa this morning, for about 2 1/2 hours but found little. I shot another *Arrebat* & Bertie got 2 *Thimocorys*, which were put under number of 2 birds destroyed by a cat day before yesterday. In P.M. caught fish in 2 little creeks out on pampa.

17415 ✓ *Arrebat*. (T.E.) ♂ 455  
 brick red | b | leaden blue.

17416 ✓ *Oreotrochilus e. estellae* ♀ in 127  
 b | b

	Total Skins	Total Species	New Species	Mammals
Uyuni =	3647	625	154	129
Llica =	64	10	4	2
	<u>3711</u>	<u>635</u>	<u>158</u>	<u>131</u>



X

- 17420<sup>✓</sup> *Muscisaxicola albilora* ♀ 178  
brown | b | b
- 17421<sup>✓</sup> " " ♀ 177
- 17422<sup>✓</sup> " *flavivucha* ♀ 195  
brown | b | b
- 17423<sup>✓</sup> *Phrygilus plebejus* ♀ 138  
brown | b, from blue below
- 17424<sup>✓</sup> *Sicalis olivaceus-berlepsch* ♂ 148  
brown | b, from blue below
- 17425<sup>✓</sup> *Phrygilus unicolor* (T.E.) ♂ 160  
brown | b, dusky from below | b
- 17426<sup>✓</sup> " " " " ♀ 162
- 17427<sup>✓</sup> " " " (T.E.) ♂ 162
- 17428<sup>✓</sup> *Phrygilus erythronotus* ♂ 180  
brown | dark brown, black from below | dark brown
- 17429<sup>✓</sup> " " " ♀ 170

		Total Skins	Total Sp.	New Sp.	Mammals
Vyoni	=	3711	635	158	131
Pulacayo	=	13	0	0	0
		<u>3724</u>	<u>634</u>	<u>158</u>	<u>131</u>

Uyuni, Feb. 13 (Sunday)

This morning Bert & Mike skinned & stuffed the birds I brought from Pulacayo, while I sorted up birds on cards & wrote up field notes.

In afternoon (2<sup>30</sup> P.M.) Mike & I went out looking for *Ostriches* with Sr. Tinto. We located a flock of about 12, one very large ♂, 5 smaller females & young male & 6 half grown birds. After a long stalk I got a shot with rifle at 1 of the smaller ♂s, wounded it, but it finally escaped.

Uyuni, Feb. 14

This morning we all went out on foot after *Ostriches* again, starting at 5<sup>30</sup> P.M. All we could locate was the big ♂ seen yesterday P.M. Mike & I followed it for about 4 miles. I shot it at Tinico (very long shot) but missed both times. In afternoon packed up all specimens for shipment to La Paz.

Uyuni, Feb. 15

We packed up and shipped all baggage today, went in to hotel in Uyuni to spend night, since our train leaves tomorrow morning at 4<sup>40</sup> A.M. for Cochaya.

Uyuni to Cochaya, Feb. 16.

Train 3 hours late, reached Cochaya about 9<sup>30</sup> A.M. There was some delay in getting settled up at mine & getting our baggage up from station, so that no work could be done today.

Chocaya, Feb. 17 (13000 ft. at "Rancho")

Mike's trunk got left down at Sta. Ana, so he could not go out today. Bert & I went up on to tableland to south east & worked at about 14000 ft, or close to that. Birds very scarce. Saw no Tinamotes, but heard one on top of plateau after I had started down & too late to go back after it. Day clear & cool. Frost in early morning, drifting clouds.

17430 ✓ *Leptasthenora aegithaloides* berl. (T.E.) ♂ 152  
brown | b | b

17431 ✓ *Muscisaxicola m. maculirostris* ♂ 155  
brown | b, yellow flesh below basally | b

17432 ✓ " " " " juv ♀ 150

17433 ✓ *Asthenes m. modesta* juv ♂ 163

17434 ✓ " " " " juv ♀ 170

[139] ✓  
17435 *Viscacha* 706-305-103-91-♀

17436 ✓ *Muscisaxicola pallidiceps* ♂ 180  
brown | b | b

17437 ✓ " " " " ♂ 174

17438 ✓ " " " " juv ♀ 170

- 17439 ✓ *Muscisaxicola alpina grisea* ♂ 172  
brown | b | b
- 17440 ✓ *Geositta rufipennis fasciatus* ♀ 180  
brown | b, bluish flesh below, tip black | leaden
- 17441 ✓ *Sicalis auriventris* (T.E.) ♂ 148  
brown | blackish, some blue below | brown horn
- 17442 ✓ *Agriornis m. montana* ♂ 247  
dusky yellow | b | b
- 17443 ✓ " " " ♂ 250
- 17444 ✓ *Thinnocorys d'orbignyianus* ♂ 207  
brown | olive yellow, ridge + tip below black | orange yellow
- 17445 ✓ " " " ♂ 217
- 17446 ✓ " " " (O.E.) ♀ 222

Chocaya, Feb. 18

Berto & I went down to the R.R. Station & worked in the valley, he below & I above. Day clear & warm until 12<sup>30</sup>, then rain & hail for several hours. Birds scarce except a few common species, & not many species present. In addition to the species listed below, the following were noted: *Septatherina aegithaloides berlepschi* (2) *Phrygilus gayi atriceps* (a pair) *P. plebejus* (common) *Muscisaxicola maculirostris* (4 or 5, mostly along river) *Thinnocorys d'orbigny* (3) The most abundant species were *Phrygilus plebejus* & *Sicalis vropygialis*, the latter mostly along the river bed, which is almost dry now, very wide, sandy bed, with a few trees.

of water meandering over the surface. Geositta peninsularis fairly numerous in vicinity of river & some springs near golf course.

✓ 17447 Muscisaxicola pallidiceps ♂ 177  
brown | b | b

✓ 17448 Geositta peninsularis (T.S.E) ♂ 147  
brown | black, horn blue below | variably | b

✓ 17449 " " (T.S.E) ♂ 152

✓ 17450 Geositta rutipennis fasciatus (T.E.) ♂ 170  
brown | b, horn blue below basal  $\frac{1}{2}$  | leaden

✓ 17451 " " " " ♀ 182

✓ 17452 Sicalis auriventris (T.E.) ♂ 149  
brown | blackish, bluish fluff below | pale brown horn

✓ 17453 Sicalis v. vropygialis ♂ 140  
brown | blackish, l. b. below | dusky horn

✓ 17454 " " " " ♂ 138

✓ 17455 " " " " ♂ 135

✓ 17456 " " " (T.E.) ♂ 143

✓ 17457 Sicalis olivaceus berlepschi ♀ 140  
brown | blackish, horn blue at base & below | leaden horn

✓ 17458 " " " " ♀ 145

X

17459 ✓ *Sicalis luteocephala* ♂ 149  
brown/blackish, leaden blue below, fluff at base | clear brown <sup>ham</sup>

17460 ✓ *Psilopsiagon orbigny* ♂ 179  
brown | yellowish olive, bluish at base | br.

17461 ✓ " " ♀ 175

17462 ✓ *Upucerthia roficauda* ♀ —  
brown | black, brown blue below mainly |

Cerdas, Feb. 20. (12750 ft)

Late yesterday afternoon Bert & I went up to Cerdas on a freight train, a small hamlet 19 kilometers north of Chicaya. We took cot & bedding & slept in Station Bldg., securing food from one of native houses. We went especially after Rheas & next morning started out, covering perhaps 20 miles on foot, & secured 1 old bird & 1 young. Only 5 old & 3 young birds seen. Returned to Chicaya on freight train at 5:30 P.M. today.

[140] ✓

17463 Tola Rat. 165-67-23-12- ♀

[141]

17464 ✓ " " 181-84-25-13- ♂

17465 ✓ *Upucerthia dumetoria hypoleuca* imm ♀ 233  
brown | br, pale below mainly | dark leaden

17466 ✓ " " " " ♀ 233

17467 ✓ " " " " ♂ 235

17468 ✓ *Upucerthia andaccola* ♀ 210  
brown | br, slightly paler below mainly | leaden

17469 ✓ " " " " ♂ 208



Chocaya (\* species taken 1938)

[85]

- *Tinamotis pentlandi*  
⊕ — *Melospiza ayмара* (quite a few in valley)  
\* *Arremonops m. nudata*  
\* *Geothlypis rufipennis fasciata*  
\* " *pinneus* (valley only)  
\* *Leptasthenura aegithaloides* Berl. (mesa & valley)  
— *Upucerthia validirostris pallida*  
\* " *ruficauda*  
\* *Agriornis m. montana*  
— *Muscisaxicola capistrata*  
— " *frontalis*  
\* " *pallidiceps* (mesa & valley)  
— *Ochthoeca oenanthoides*  
— *Phrygilus fruticeti*  
⊕ " *gayi atriceps* (several seen)  
⊕ " *plebejus* (very common)  
— " *unicolor tucumanus*  
\* *Sicalis auriventris* (mesa & valley)  
\* " *vireopygialis* (" " )

- Thinocorys orbignyianus* (mesa & valley)  
*Psilopsiagon orbignyi* (mesa & valley)  
*Sicalis olivascens* Berl. (common in valley)  
" " *luteocephala* (?) (one immature)  
*Muscisaxicola m. maculirostris* (on mesa & in valley)  
" *alpina grisea* (1 on mesa)

Cerdas

<i>Pterocnemis pennata garleppi</i>	2	
<i>Spinas atratus</i>	1	(few)
<i>Upucerthia dumetaria hypoleuca</i>	3	(fairly common)
" <i>andacola</i>	2	(only ones seen)
<i>Speotyto cunicularia</i> —	1	(rare)
<i>Phrygilus f. fruticeti</i>	1	(fairly common)

17470 ✓ Phrygilus f. froticeti (T.S.E) ♂ 193  
 brown | yellowish brown | clear pale brown, feet darker.

17471 ✓ Sicalis olivascens berlepschi ♀ 147  
 brown | blackish, <sup>pale</sup> brown blue below | back cream

17472 ✓ Speotyto unicoloria ♂ 270  
 yellow | bluish olive, <sup>above</sup> brown, blackish | dirty leaden

\*\* [142] ✓ 17473 Pterocnemia pennata garleppi (M) ♂ 1345  
 Height from sole of foot to tip of back = 848  
 eye dark blue | black, slightly brownish below | olive drab

17474 ✓ " " " " juv ♀ 465  
 blue | br | br.

17475 ✓ Spinus a. atratus ♂ 136  
 brown | blackish, pale yellow below | br

[143] ✓ 17476 Armadillo 295-97-50-31- ♂

	<u>Total SRins</u>	<u>Total Species</u>	<u>New Species</u>	<u>Mammals</u>
Pulacayo =	3724	634	158	131
Chocaya + Cerdas =	47	1	1	4
	3771	635	159	135

Oploca, Feb. 24 (10300 ft)

We all went shooting this morning, getting out rather late, due to late breakfast. All went back in hills to west, & later I came down into fields in valley about 10<sup>30</sup>. Day clear & hot. Birds abundant & apparently more species & more individuals here now than there were in late June & early July, (1936)

17477 ✓ Spizitornis f. flavirostris ♀ 115  
brown | black, orange yellow below, tip black | t

17478 ✓ " " " juv ♂ 95  
— | b, dusky flesh below | t

17479 ✓ Ochthoeca o. oenanthoides ♀ 157  
brown | b | b

17480 ✓ " " " juv ♂ 126

\* 17481 ✓ Asthenes d'orbignyi — ♂ 161  
brown | b, pale horn below basally | leaden

17482 ✓ " " " ♀ 163

17483 ✓ Knipolegus a. aterrimus ♂ 180  
brown | leaden blue basally, tip black.

17484 ✓ " " " ♂ juv 185  
— | b, leaden at base below | b,

17485 ✓ " " " ♂ juv 160

17486 ✓ Upucerthia a. andaccola juv. ♂ 191  
brown | b, pale below mesially at base | dark horn

\*\* 17487 ✓ *Micropus* \_\_\_\_\_ ? (M) ♀ 142

brown | blackish horn

Entire under parts white (feathers dusky laterally) & <sup>creamy</sup> white band across rump; rest of upper parts, wings, tail & apical half of under tail coverts sooty black.

17488 ✓ *Sicalis luteocephala* (T.E.) ♂ 138

brown | bl, dark leaden below | dark horn

17489 ✓ *Spinus magellanicus bolivianus* (T.E.) ♂ 127

brown | dusky horn, tip of max. (black) |

17490 ✓ " " " (T.E.) ♂ 127

17491 ✓ " " " ♂ 125

17492 ✓ *Phytotoma rotula angustirostris* (T.S.E.) (M) ♂ 211

yellowish legs | blackish, leaden blue below |

+ 17493 ✓ " " " ♂ 210

17494 ✓ *Dyctiopicus lignaris puncticeps* ♀ 178

brown | bl, dusky horn below laterally | dark leaden horn

\* 17495 ✓ *Zonotrichia capensis pulacayensis* (T.E.) ♂ 178

brown | blackish horn, paler horn below laterally | pale brown horn

17496 ✓ *Thraupis b. bonariensis* (T.E.) ♂ 190

brown | bl, flesh below | blackish horn

17497 ✓ *Phrygilus f. fronticeti* ♂ 190

brown | pale brownish yellow, paler below | reddish brown

- \* 17498 ✓ *Phrygilus dorsalis* (M) ♀ 173  
brown | blackish brown, leaden blue below | leaden brown
- 17499 ✓ " " ♀ 174
- 17500 ✓ " " (T.E.) ♂ 178
- 17501 ✓ " " (T.E.) ♂ 182
- 17502 ✓ " " (O.E.) ♀ 185
- 17503 ✓ *Zenaidura macroura* ♂ 268  
brown | b | purplish black
- 17504 ✓ *Oreotrochilus adela* ♀ 156  
b | b
- 17505 ✓ *Oreotrochilus estellae* ♀ 130  
b | b
- 17506 ✓ *Lesbia sparganura* (T.E.) ♂ 189  
b | b
- 17507 ✓ *Ochthoeca oenanthoides* ♂ 158  
brown | b | b.
- 17508 ✓ *Leptasthenura aegithaloides* berlep. (T.E.) ♂ 170  
brown | b | b
- 17509 ✓ *Asthenes d'orbignyi* ♀ 165  
brown | b, pale brown below | dark brown
- 17510 ✓ *Upucerthia dumetaria hypoleuca* ♀ 224  
brown | b | dark brown

Oploca, Feb. 25

Rain in early morning, so we did not get out till about 9 AM. Berts ascended down the valley. I went back of garden, then across by cemetery, & on down valley, through fields & along irrigation ditches.

Returning at noon met a pair of juncos not far from hacienda, beside R.R., & secured the ♀. Had only .410 gun or could have got both.

[144] ✓  
17511 Bat 86-45-8-260-13-♂

[145] ✓  
17512 Fox 813-300-120-75-♀

17513 ✓ *Columba albipennis* ♂ 373  
brown \ blackish, with a whitish "blow" | purplish blue

17514 ✓ " " ♂ 357

\*\*  
17515 ✓ *Nothoprocta pentlandii* — ♂ 290

hazel \ reddish brown, pale below \ pale yellow

No white stripes on back feathers; wing coverts & tertials sandy brown, spotted with white; front, cheek, throat & chest gray, without white spots; neck below dusky ochraceous. wing 143; bill 35; tarsus 45

17516 ✓ *Gymnopenia ceciliae gymnops* ♂ 195  
blue \ skin around eye red orange | b \ flesh

17517 ✓ " " " " ♀ 193

5-2

X

17518 ✓ *Falco sparverius eidos* (?) ♀ 277  
brown | leaden blue, tip black | pale yellow

17519 ✓ *Mimus dorsalis* ♂ 257  
dusky yellow | b | b

17520 ✓ *Molothrus badius bolivianus* ♀ 203  
brown | b | b

17521 ✓ " *b. bonariensis* ♂ 212  
brown | b | b

17522 ✓ *Pseudocolaptes acutipennis* ♀ 115  
brown | b, flake at base below | b

\* 17523 ✓ *Pygochelidon cyanoleuca patagonica* ♂ 125  
brown | b | b

17524 ✓ " " " " ♀ 133

17525 ✓ *Spinus magellanicus bolivianus* ♂ 122  
brown | dusky brown basally, black apically | b

17526 ✓ " " " " ♀ 122

17527 ✓ *Troglodytes musculus puna* juv ♀ 134  
brown | b, flake below | dusky brown

17528 ✓ *Catamenia a. analis* ♂ 130  
brown | yellow | b

17529 ✓ " " " (T.E) ♂ 134

6-2



- 17530 ✓ *Muscisaxicola pallidiceps* ♂ 180  
brown | b | b
- 17531 ✓ *Sicalis auriventris* (?) (T.E.) ♂ 147  
brown | b, bluish flesh below | pale reddish brown
- 17532 ✓ *Zonotrichia capensis pulacayensis* (T.E.) ♂ 120  
brown | blackish, pale brown below | bluish flesh.
- 17533 ✓ *Phytoloma rutila angustirostris* ♀ 212  
brown | b, flesh at base below | leaden black.
- 17534 ✓ *Agriornis microptera andecola* ♀ 238  
brown | b | b.

Finca Salo (Oploca) Feb. 26.

This morning we packed up & went to Finca Salo, 12 miles east, over a low range, into another large valley, which unites with Oploca valley, above Tupiza. Baggage went in cart, <sup>around valleys</sup> & we rode under across mountain, arriving at 11 AM. After lunch we went shooting. I worked in small marsh with pond & shot the ducks, shorebirds, Titlarks, Coot & 2 Flycatchers.

- 17535 ✓ *Anthus correndera catamarcae* (M) ♂ 148  
brown | black, bluish flesh below | brownish flesh
- 17536 ✓ " " " " ♂ 165
- 17537 ✓ " " " " ♀ 157
- 17538 ✓ " " " " ♀ 150

6-2

+

- 17539 ✓ *Anthus correndera catamarcae* ♂ 157
- 17540 ✓ " " " " ♂ 160
- 17541 ✓ *Petrochelidon a. andecola* ♂ 137  
brown | b | dusky flash,
- 17542 ✓ *Spizitornis parulus aequatorialis* ♂ 123  
brown | b | b
- 17543 ✓ *Ochthoeca oenanthoides* ♀ 154  
brown | b | b.
- 17544 ✓ *Muscisaxicola pallidiceps* ♂ 175  
brown | b | b
- 17545 ✓ " " " ♀ 177
- 17546 ✓ " " " ♂ 180
- 17547 ✓ *Knipolegus a. aterrimus* ♀ 172  
brown | b, leaden blue below basally | b
- 17548 ✓ *Upucerthia andacola* ♀ 198  
brown | b, bluish flash below basally | b
- 17549 ✓ *Spizus magellanicus bolivi.* - (T.E.) ♂ 130  
brown | pale brown basally, black apically | blackish
- 17550 ✓ *Sicalis luteocephala* ♀ 143  
brown | blackish, leaden below | leaden brown
- 17551 ✓ *Phrygileus dorsalis* ♂ 127  
brown | b, leaden blue below | blackish brown

6-2

6-2

X

[90]

17552 ✓ Phrygilus f. fruticeti ♂ 195  
brown | yellow | reddish brown

17553 ✓ " " " ♂ 185

17554 ✓ Agriornis microptera andicola ♂ 249  
straw | b | b

\* 17555 ✓ Lesser yellowlegs ♂ 260  
brown | b | dusky yellow

\*\* 17556 ✓ "Sandpiper" ♂ 240  
brown | b, dusky yellow at base | yellowish dorsal

17557 ✓ " " ♂ 235

● [146] ✓ 17558 Wild Guinea Pig 230-0-45-20-♀

\*\* 17559 ✓ Fulica ardesiaca ♂ 460  
red | white, saffron yellow inside & around gonyx |  
legs greenish yellow, joints blackish

\* 17560 ✓ Anas spinicauda (M) (T.E.) ♂ 540  
dusky yellow | olive yellow, ridges & tomiae black, tip of beak  
le | leaden blue

17561 ✓ " " (T.E.) ♂ 540

17562 ✓ " " ♂ 520

10-4

10-4

X

## Oploca [Finca Salo], Feb. 27

Mike stayed in to skin the Ducks, Coot & 4 small birds left from yesterday. Bert & I went on mule back far back into mountains to east, working up to about 1500 ft higher than Hacienda. Got back at 2<sup>30</sup>. I shot all the Arthurs — (?) & most of the Hummers.

- 17563 ✓ *Oreotrochilus adela* ♂ 144  
b | b
- 17564 ✓ " " ♂ 146
- 17565 ✓ " " ♀ 136
- 17566 ✓ " " ♀ 141
- 17567 ✓ " " juv ♂ 142
- 17568 ✓ " " ♀ 142
- 17569 ✓ *Oreotrochilus e. estellae* ♂ 137  
b | b
- 17570 ✓ *Patagona gigas* ♀ 211  
b | b
- 17571 ✓ *Ochthoeca l. leucophrys* ♂ 156  
brown b | b
- 17572 ✓ " " " ♂ 158
- 17573 ✓ " " " ♂ 155

10-4

10-4

X

[90]

17574 ✓ *Ochthoeca o. oenanthoides* ♀ 156  
brown | b | b

17575 ✓ *Asthenes d'orbignyi* ——— ♀ 163  
brown | b, brown blue below basally | l. b.

17576 ✓ " " " " " in ? 163

\*\*  
17577 ✓ *Asthenes [near punensis cuchicanchae]* ♀ 187  
brown | b, dusky, plum of base below | Harris bluish plum, base black

17578 ✓ " " " " ♂ 180

— | — | leaden ham, base black

17579 ✓ " " " " ♀ 187

— | — | like 577

17580 ✓ " " " " ♂ 187

— | — | like 578

17581 ✓ " " " " ♂ 198

— | — | like 577

17582 ✓ *Phacellojonus s. striaticeps* ♀ 172  
gray | b, bluish plum below basally | leaden ham

17583 ✓ *Phrygilus unicolor tocomanus (T.E.)* ♂ 160  
brown | b, dusky, base below basally | brownish black

17584 ✓ " " " " ♀ 152

17585 ✓ *Chrysoptilus melanochloros melanocemus* ♂ 295  
brown | b | olive

11-5

11-5

x

Finca Salo [Oploca], Feb. 28.

Mike went up valley back of hacienda, got 6 birds, including Burrowing Owl. Bert & I went on muleback far up valley to east & around behind high mountain, then up on mountain to at least 12500 ft. There were a lot of Quercus trees where I went in great masses of broken rock. Up there I got the big bellied Spinus, Patagona gigas abundant there. The Xolmis Bert got high up on mountain, only one seen. Back at 1:30 & 2:15.

- 17586 ✓ Oreotrochilus adela ♀ 135  
b | b
- 17587 ✓ " " " im ♀ 142
- 17588 ✓ Ochthoeca l. leucophrys ♂ 160  
brown | b | b
- 17589 ✓ " " " ♀ 152
- 17590 ✓ " " " ♀ 143
- 17591 ✓ " " " ♂ 155
- 17592 ✓ " " " ♂ 155
- 17593 ✓ Patagona gigas im ♀ 212  
b | b
- 17594 ✓ " " " ♀ 218
- 17595 ✓ " " " ♂ 215
- 17596 ✓ " " " ♀ 213

11-5

17597 ✓ *Palagona gigas* ♀ 217

17598 ✓ *Phacellodomus s. striaticeps* ♂ 183  
gray | b, fluff at base below | l. b.

17599 ✓ *Upucerthia a. andaeicola* ♂ 205  
brown | b, pale below inially at base | b

17600 ✓ *Geositta rufipennis* ♂ 183  
brown | b, bluish fluff below basally | l. b.

\* 17601 ✓ *Xolmis myiina* ♀ 190  
brown | b | b

17602 ✓ *Dyctiopicus lignaris puncticeps* (T.E.) ♂ 185  
brown | b | dark olive below

17603 ✓ *Spinus magellanicus bolivianus* ♂ 128  
brown | pale brown basally, black apically

\*\* 17604 ✓ *Spinus* (T.E.) ♂ 140

brown | blackish, dusky fluff below | b

Huge bill, head & throat black; olive green above, rump  
olive yellow; below yellow, basal half of tail &  
band across wing yellow

♀ dull grayish olive above; mantle streaked dusky, bill  
pale yellowish below

17605 ✓ " " inc ♀ 134

17606 ✓ *Sicalis auriventris* (T.E.) ♂ 146  
brown | blackish, bluish fluff below | pale brown, feet dusky

13-6

x

17607 ✓ *Phytotoma rutila angustirostris* ♀ 210  
brick-red | blackish brown, fluff below | t

17608 ✓ *Metriopelia cymara* ♂ 190  
blue | b | fluff

17609 ✓ *Chrysoptilus melanochloros melanolaemus* ♀ 285  
brown | b | olive

17610 ✓ *Speotyto conicoloria* ♂ 271  
yellow | olive brown, sides of max. blackish | leaden olive

[147] ✓  
17611 *Viscacha* 695-325-95-86 - ♂

Finca Salo (Oploca), March 1

Berto + I started out at 6<sup>30</sup> on mules, up valley. Berto went back into mountain, but struck bad place + got little. I went up on a high mountain to left of valley, (about 4 miles up valley) could only ride about a mile up a box canyon, then climbed out on foot + went up to about 13000 ft. A large area with thick growth of Quina trees + I found lots of birds there. Got 10 Sparrows; 4 *Cyanocitta*; 2 Honeycreepers; 2 *Viscacha* + 4 other birds, back at 4<sup>30</sup>. Mike stopped work at 8<sup>30</sup> with headache. Berto + I finished at 11<sup>30</sup>

17612 ✓ *Soropteryx ruficapilla* ♂ 337  
yellow | b | olive

17613 ✓ *Dactylopicus lignaris puncticeps* ♂ 183  
brown | b | dark leaden

17614 ✓ *Oreotrochilus estellae* ♂ imm 132  
b | b

13-6



13-6

X

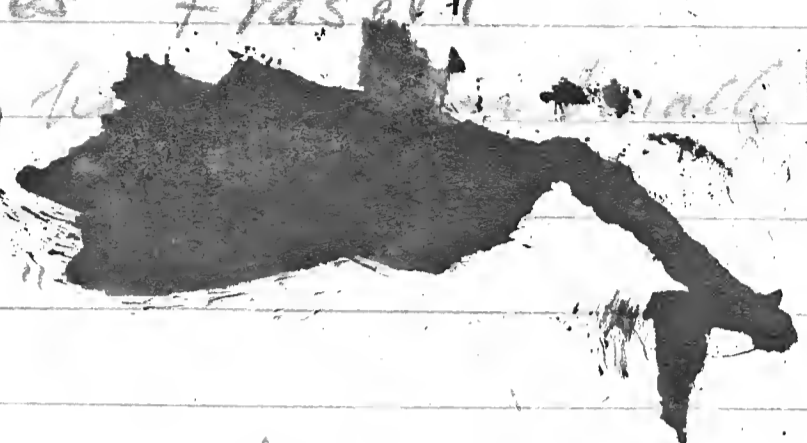
[93]

- 17615 ✓ Oreotrochilus e. stellae ♂ 140  
d/b
- 17616 ✓ Phacellodomus s. striaticeps ♂ 173  
gray/b, leaden blue below variably/b
- 17617 ✓ " " " (T.E.) ♂ 167
- 17618 ✓ Muscisaxicola alpina grisea ♂ 180  
brown/b/b
- 17619 ✓ Spinus \_\_\_\_\_ (big bill) imm ♀ 138  
brown/blackish horn, dark horn blue below/b
- 17620 ✓ " " — — —, pale horn below — ad. ♂ 137
- 17621 ✓ " " " ad ♂ 141
- 17622 ✓ " " " ad ♂ 141
- 17623 ✓ " " " ad. (T.E.) ♂ 143
- 17624 ✓ " " " (M) ad ♀ 135
- 17625 ✓ " " " ad ♀ 138
- 17626 ✓ " " " ad ♀ 137
- 17627 ✓ " " " imm ♂ 142
- 17628 ✓ " " " imm ♂ 137
- 17629 ✓ " " " imm ♂ 142
- 17630 ✓ " " " imm ♂ 142

13-6

17631 ✓ *Poospiza hypochondriaca* ♂ 167  
brown | b, brown blue below | b

\*\*  
17632 ✓ *Oreomanes fraserii* ♀ 175  
brown | b, brown | dark leaden



17633 ✓ " " ♂ 176

17634 ✓ *Cnemarchus rotipennis* ♂ 216  
brown | b | b

17635 ✓ " " ♂ 211

17636 ✓ " " ♀ 195

17637 ✓ " " ♀ 205

17638 ✓ *Ochthoeca oenantheoides* ♂ 160  
brown | b | b

\*\*  
17639 ✓ *Asthenes m. modestus* (?) ♀ 161  
brown | b | b

17640 ✓ " " " ♀ 166

17641 ✓ " " " ♂ 168

[148]

17642 ✓ *Vireo* 765-305-102-82-♂

[149]

17643 ✓ " 730-320-100-82-♀

Finca Salo (Oploca), March 2.

Bert & I went 3 miles down valley today to a big potatoe patch after Tinamous & got 3. Then I went to some cliffs looking for owls, but found none. a flock of about 7 Swifts there, & shot 1. Then I came back up to marsh & got 3 Anttins & the Swallow. All Bert got was 2 Tinamou.

17644 ✓ *Anthus correndera catamaicae* ♂ 163  
brown | b, fluff below barally | dusky fluff, joints darker

17645 " " " ♀ 154

17646 " " " ♂ 162

\*\*

17647 ✓ Swallow (?) ♂ 167  
brown | b | b

Metallic blue above, front dark chestnut; legs black; throat dark chestnut; red below paler chestnut supra outer rectrices elongated & acuminate; tail blackish with a white subterminal band across it; under wing coverts rufous.

17648 ✓ *Micropus* ——— (white below) ♀ 145  
brown | b | b

17649 ✓ *Cinclodes atacamensis* ♂ 220  
brown | b | b

17650 ✓ *Chrysoptilus melanochloros melanolae* ♂ 283  
brown | b | olive

16-9 17651 ✓ *Nothoprocta pentlandi* \* (T.M.E) ♂ 300  
hazel | brown horn, paler below | pale yellow

\* Malloph. from 651-2-3 all in 1 vial.

16-9

111111

17652<sup>✓</sup> *Nothoprocta pentlandi* ♂ 295  
(see No. 17651)

17653<sup>✓</sup> " " " (T.E.) ♂ 290

17654<sup>✓</sup> *Patagona gigas* ♂ 225

17655<sup>✓</sup> " " " ♂ 225

61 species taken at Oplaca & Salo

16-9 | " " observed " " " "

	Total <u>Skins</u>	Total <u>Species</u>	New <u>Species</u>	<u>Mammals</u>
Chocayo & Ceidas =	3771	635	159	135
Oplaca & Finca Salo =	<u>179</u>	<u>16</u>	<u>9</u>	<u>6</u>
Totals =	3950	651	168	141

3701  
 33  
 11163  
 11103  
 122133

[95]

(3701 meters.)

Callipampa, Lake Prope, Mar. 6 (12210 ft)

Arrived here yesterday morning after an all night train ride in day coach, so did nothing till today. Bert & Mike went over to the lake, about — miles west. Mike got 3 Shore birds. Bert got 1 Tinamou, the Avocet &

17656 ✓ Pectoral Sandpiper (?) ♂ 186  
brown | black | black

17657 ✓ Charadrius alticola ♀ 175  
brown | b. | b.

17658 ✓ Totanus flavipes ♂ 256  
brown | b. | dusky yellow

\*\*  
17659 ✓ Stilt Sandpiper (?) ♀ 235  
brown | b. | yellowish brown

17660 ✓ " " ♀ 225

17661 ✓ Upocerthia validirostris pallida (?) ♀ 205  
brown | b. | dark leaden

17662 ✓ Spinus a. atratus ♀ 134  
brown | black chin basally, tip blackish | b.

17663 ✓ Sicalis olivascens — (TE) ♂ 151  
brown | blackish brown, brown below | pale brown

17664 ✓ " " " " ♀ 148

1-1

1-1

x

17665 ✓ *Sicalis u. uropygialis* ♀ 145  
brown | lean blue, top of max. black | pale brown

\* 17666 ✓ *Geositta cunicularia titicacae* ♀ 167  
brown | blackish, bluish plub below basal 1/2 | leaden black

\* 17667 ✓ *Phrygilus alaudinus venturii* (T.E.) ♂ 176  
brown | yellow | yellow

17668 ✓ " " (M) (T.E.) ♂ 167

17669 ✓ *Phrygilus f. fronticoti* (T.E.) ♂ 191  
brown | dusky yellow, top blackish | pale reddish brown

17670 ✓ *Gymnopolia celiliae gymnops* ♂ 193  
blue | b | plub.

17671 ✓ *Audean Avocet.* ♂ 470  
red | b | l. b.

17672 ✓ *Nothoprocta ornata* (Laying) ♀ 350  
brown | b, dusky plub below, top blackish | pale drab.

17673 ✓ " " (M) ♂ 345

3-1

## Callipampa, March 7.

We all worked along base of mountain today, Bert to north, Mike to South & I straight east.

I had to return early to get off mail, & only got 6 small birds. Mike as usual got 7 small birds, of which 2 were thrown away. Bert got all the rest, the Tinamous the Hawk, the Heron & 3 small birds.

- \* 17674 ✓ Nothura ♂ 280  
 hazel \ brownish horn, flesh below \ flesh.
- 17675 ✓ " " (2 eggs broken in oviduct) ♀ 262
- 17676 ✓ Nothoprocta o. ornata (egg in oviduct <sup>laying</sup> without shell) ♀ 370  
 hazel \ black, flesh below, tip black \ pale drab
- 17677 ✓ Nycticorax nycticorax cyanocephalus ♂ 692  
 carmine \ black, olive yellow below, tip bl. \ olive yellow
- 17678 ✓ Chestnut Backed Hawk. (same as 25 K.M. east of Padilla) ♀ 561  
 brown \ black, olive green around base \ cere olive  
 feet indian yellow
- 17679 ✓ Oreotrochilus s. stellae juv ♀ 120  
 b \ b
- 17680 ✓ " " juv ♀ 118
- 17681 ✓ Geositta tenuirostris ♀ 185  
 brown \ b, bluish flesh below basally \ b
- 17682 ✓ Geositta conicularia titicacae juv ♀ 166  
 brown \ b, pale horn at base below \ dark leaden
- 17683 ✓ Idiospiza inornata (T.E) ♂ 150  
 brown \ reddish brown \ pale reddish brown

4-1

17684<sup>✓</sup> *Phrygilus alaudinus venturii* (T.E.) ♂ 176  
brown | yellow | yellow

17685<sup>✓</sup> " " (T.E.) ♂ 165

17686<sup>✓</sup> " " (T.E.) ♂ 173

17687<sup>✓</sup> " " ♀ 165

17688<sup>✓</sup> " " ♀ 165  
— blackish brown, dusky flesh below | brownish yellow

17689<sup>✓</sup> *Phrygilus f. fruticeti* (T.E.) ♂ 195  
brown | yellow | reddish brown

17690<sup>✓</sup> " " " (T.E.) ♂ 195

17691<sup>✓</sup> *Zonotrichia capensis pulacayensis* (?) ♂ 165  
brown | blackish, brown blue below | pale brown, too dusky

17692<sup>✓</sup> " " " juv ♀ 163

17693<sup>✓</sup> *Gymnopolia ceciliae gymnops* ♂ 190  
blue | b | flesh | skin around eye red orange

Callipampa, March 8

Berto & I went down to the lake this morning (about 6 miles from here), having made arrangements with an Indian to take us out on lake after Flamingos.

Finally found Indian, but he had no boat, & the whole trip was a fiasco. There were hundreds of Flamingos out in lake & we tried to get at them by wading out, but they were too shy. Broke leg of one with rifle, but it got away. Got back at 12:30 without anything at all.

4-1



Callipampa, March 9

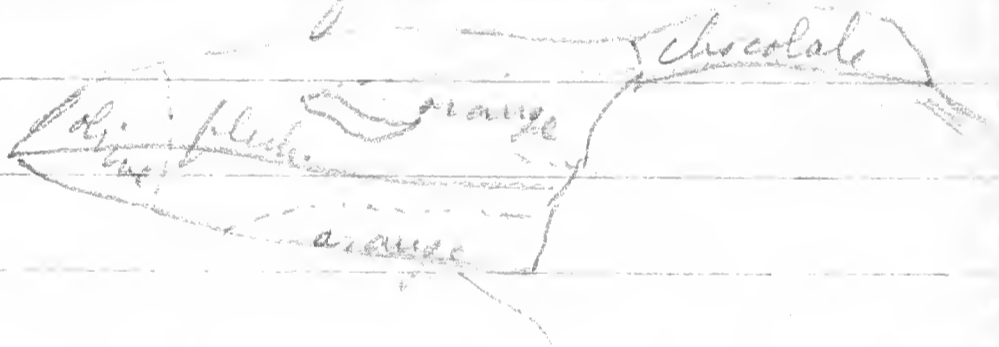
Berto went to lake with Indian in boat, back at 3 P.M., but the Plamango had departed. Saw 7, but unable to connect. Collected the 2 Anas, Colymbus + Himantopus. Much I went in car to Dracaguadero River below Porpi, back at 2 P.M. Very few birds except coots, some ducks & thousands of Shorebirds. Saw yellow & blue billed Teal, flightless Grebes, cattle have destroyed all the reeds, & very few small birds. Saw 1 Blackbird. River very low & very black shores on river, but many out in lake.

17694 ✓ *Nycticorax nycticorax* ♂ 673  
carmine | b, pale olive yellow below, tip black | pale yellow

17695 ✓ " " ♂ 663

17696 ✓ *Fulica ardesiaca* ♂ 482

brown | orange yellow on sides of both mandibles, from nostril back, tip olive, rest flesh; shield dark chocolate legs yellowish green, girth & under side of lober blackish



17697 ✓ *Anas specularoides alticola* ♂ 584  
red | leaden blue, nail black, pale salmon below | dull leaden

17698 ✓ " " " ♀

17699 ✓ *Andean anas* ♂ 475  
carmine | b | l. b.

17700 *Colymbus chilensis* ♂ 300  
red | blackish horn, flesh below usually | dark mottled horn

\*\* 17701 *Himantopus* (?) ♀ 372

5-2 red | b | pinkish blood (rest black - wings + upper back) - Head to occiput, band across upper back, under parts white.

5-2

\* 17702 ✓ *Tachuris rubrigaster grandis* ♂ 129  
brown | b | b.

17703 ✓ " ♂ no tail

\* 17704 ✓ *Phloeocryptes melanops schoenbeanus* ♂ 157  
brown | b | pale at base | b

17705 ✓ *Stell Sandvicensis* ♀ 269  
brown | b | dusky brown | yellow

Callipampa, March 10 (Shower in P.M.)

No collecting today. Bert & I both pretty well tired out from last two days. Also my right foot is bothering me, badly bruised underneath from walking over stones with thin sole. Also had to repair Bert's gun. The pin which cocks left hammer was worn off until it did not push hammer back far enough to engage the trigger arm. Had to have pin heated & lengthened. Labelled all birds except yesterday's.

Callipampa, March 11

All went shooting. Bert's back to lake with Indian & boat, Mike south over pampa, & myself north over pampa, towards Porpi. My foot still bothers & I could not go far. Back at 10 AM with following 14 birds. Mike came in at 1<sup>30</sup> with 4 common birds, one had to be thrown away. Bert's back at 2<sup>30</sup> after unsuccessful pursuit of *Flamingo*. Got 1 *Himantopus*.

17706 *Asthenos m. modesta* ♂ 170  
brown | b, bluish-brown below | basally | b

7-2

7-2

[98]

17707 ✓ *Geositta cunicularia titicaca* ♂ 170  
brown | b, horn blue below basally | b

17708 ✓ " " " ♂ 168

17709 ✓ " " " ♂ 167

17710 ✓ " " " ♂ 165

17711 ✓ *Anthus forcatsus brevirostris* ♂ 160  
brown | b, flesh below, tip black | flesh, joints dusky

17712 ✓ " " " ♀ 155

17713 ✓ *Cinclodes a. atacamensis* ♀ 229  
brown | b, dark horn at base below | b

17714 ✓ *Phrygilus alaudinus venturii* ♂ 178  
brown | orange yellow | feet same

17715 ✓ " " " ♂ 175

17716 ✓ " " " (O.S.E.) ♀ 160

17717 ✓ *Sicalis auriventris* ♂ 154  
brown | blackish horn, leaden blue below | pale brownish horn

17718 ✓ *Metriopelia melanoptera* ♀ 216  
blue | b | leaden black (skin around eye leaden, orange in front)

17719 ✓ " " " ♂ 228

17720 ✓ *Himantopus* (Berta) ♂ 385  
red | b | pink blood

7-2

7-2

Nike birds

17721 ✓ *Ochthoeca oenanthoides* ♂ 157  
brown b | b

17722 ✓ *Sicalis olivascens* ♀ 152  
brown | blackish, leaden blue below | feet pale horn

17723 ✓ " " " (T.E.) ♂ 147

Callipampa, March 12

Clear & cold, in morning, later warm.

Berta went to lake again today, starting at 5 Am. & got back at 10<sup>00</sup> with a fine Flamingo. I went out on pampas to north & got the rest of the birds, back at 11 Am. Nike did not go out at all.

\*\* [150] ✓ 17724 *Phoenicoparrus jamesi* ♂ 1220

dark blue | eyelids & spot before eye crimson; base of bill ivory, purple band along base of mandible; top of max. salmon orange; rest of bill black | legs pale drab, tibial joint & feet orange.

17725 ✓ *Anthus furcatus brevirostris* ♀ 157  
brown | black, bluish flesh below, top black | flesh

17726 ✓ " " " (T.E.) ♂ 162

17727 ✓ *Aythya d'orbigny* ——— ♀ 162  
brown | b, dusky horn below basally | leaden

17728 ✓ *Geositta cunicularis titicacae* ♀ 173  
brown | b, bluish flesh below basally | b

17729 ✓ " " " ♂ 165

17730 ✓ " " " ♀ 159

8-3

8-3

[99]

- 17731 ✓ *Phrygilus alaudinus venturii* ♂ 173  
brown | yellow | yellow
- 17732 ✓ " " " " ♂ 170
- 17733 ✓ " " " " juv ♂ 166  
— | blackish, dusky, horn below | flesh
- 17734 ✓ *Phrygilus f. fronticeti* ♀ 182  
brown | brown horn, black at base above | reddish brown
- 17735 ✓ *Sicalis auriventris* (T.E.) ♂ 152  
brown | blackish, horn blue below | brown horn, taw darker
- 17736 ✓ " " " (T.E.) ♂ 142
- 17737 ✓ " " " ♀ 151
- 17738 ✓ *Zonotrichia capensis pulacayensis* ♀ 160  
brown | b, dark horn at base below | pale brown horn
- 17739 ✓ " " " " ♂ 170
- 17740 ✓ *Metriopelia melanoptera* (T.E.) ♂ 225  
blue | b | blackish | salmon red in front & below eye
- 17741 ✓ " " " (O.E.) ♀ 225
- \*\* 17742 *Accipiter* (?) ♂ 435  
yellow | black, darker at base on sides & below; cere olive yellow  
Entire upper parts, wings, head & throat feet orange yellow  
slate, head & throat paler; chest ashy gray, mottled with  
white; rest below white, with narrow chestnut crown bars  
wings white underneath, nearly apical half of primary black  
& short black tips on rest of quills. Tail slate gray with black  
two + blackish bars,

9-4

Callipampa, March 13 (Sunday)

No shooting today. The boys loaded 400. 32 cal. & I went up  
field notes, labels; sorted birds on cards etc. H&C clear.

9-4

Callipampa, March 14

Berl has a bad toe & could not go far, went out on pampa  
& got 2 *Anthus* & 3 *Pterygila alaudina*. 3 went far up into hills  
& got rest of birds. Mike did not go out. Birds scarce & shy.

17743 ✓ *Anthus fuscatus brevirostris* ♂ 165  
brown | b, flesh below | pale brownish flesh

17744 ✓ " " " ♀ 158

17745 ✓ *Pygochelidon cyanoleuca patagonica* ♀ 129  
brown | b | blackish | horn

17746 ✓ " " " ♀ 132

17747 ✓ *Petrochelidon a. andecola* ♀ 140  
brown | b | blackish | sub horn

17748 ✓ " " " ♂ 140

17749 ✓ " " " ♀ 135

17750 ✓ " " " ♂ 141

17751 ✓ " " " ♂ 144

17752 ✓ " " " ♂ 140

17753 ✓ *Geositta tenuirostris* ♀ 198  
brown | b, bluish below at base below | b

17754 ✓ *Cinclodes a. atacamensis* ♀ 230  
brown | b | b.

9-4

[100]

Quero to Viloca (Araca Mine) March 19. (Sat)

Our train was due to leave Quero at 9 P.M., but due to a work-out on the Chilean Division, was three hours late. We left at 12<sup>15</sup>, reached Eucalyptus at 1<sup>30</sup>.

Found that our baggage had not been brought on the passenger train, but was coming later on cargo train.

This is very bad, as there will be no more trucks up to the mine till Tuesday. We left in auto, after having lunch, at about 2<sup>30</sup>, & reached the camp at Viloca at 7 P.M. It was a wonderful trip. At one place about 15 Kilometers from mine we crossed a divide at 5200 metres (17160 ft), the highest I have been since the trip up to Sierra Nevada de Sta. Marta (Colombia) in 1912.

Viloca, March 20-21-22.

Nothing to do here until baggage arrives. On Sunday I rested all forenoon, then after lunch went down in valley to farm belonging to mine (Tanapaca) at 10000 ft, where we will work later. Conditions rather poor there but we may turn up something. In evening went up to the mine (4700 metres) to have dinner & spend evening with 2 friends there (Veitch & Hall).

On Monday I went up valley with both cameras & took photos of glaciers & peaks from about 15500 ft.

On Tuesday nothing much to do. Baggage arrived about 5 P.M. & we got ready to start working tomorrow.



9-4

[101]

17755 ✓ *Phrygilus alaudinus venturii*

♂ 174

brown | yellow | yellow

17756 ✓

"

"

"

♂ 171

17757 ✓

"

"

"

♀ 163

blackish, pale brown below | brownish plum.

17758 *Nothoprocta ornata* (egg in oviduct) ♀ 370

hazel | b, plum below, tip dusky | pale dull yellow

Egg measured: - 54 x 37 mm. (without shell)

9-4

	Total Specimens	Total Species	New Species	Mammals
Oploca + Salo =	3950	651	168	141
Callipampa =	103	9	4	0
	4053	660	172	141

37 species collected

24 " observed, but not collected.

Callipampa to Oruro, March 15

We packed up today & left by train for Oruro at 4<sup>30</sup> P.M., arriving there at 6<sup>30</sup>.

Oruro, March 16-17-18

Stenibach arrived from Cochabamba last night. Arranged to go to Araca Niño, but we can't leave until Saturday morning, by train for Eucalyptus, no train sooner.

Spent most of Thursday with Stenibach, arranging exchange with him of shotgun & supplies for birds which I needed. Friday packed & separated outfit, part to go with me & part to go to La Paz.

Viloca, March 23 (mill camp = 13800ft)

I went up valley above camp, working up to 16000 ft  
valley narrow, sides very steep & rocky, also floor  
of valley, with glacier up at head. I got back about 1<sup>30</sup>  
went over camp road to Eucalyptus & below a short  
distance. Got 6 birds, of which 2 were ditched, all common  
few. *Carrion Hawk*; *Spinus atralis*; *Sicalis uropygialis* & ♂ *Oreotrochilus*  
*estellae*

17759 ✓ *Oreotrochilus estellae* ♂ 138

b | b

17760 ✓ " " " ♀ 139

\* 17761 ✓ *Chalcopteryx olivacea* ♂ 148

b | b

17762 ✓ " " " ♀ 135

17763 ✓ *Spinus atratus* ♀ 132

brown | dusky olive basally, blackish apically | b

17764 ✓ *Ochthoeca oenantheoides* ♂ 164

brown | b | b

17765 ✓ *Sicalis uropygialis* (T.E.) ♂ 139

brown | blackish, brown blue below

\* 17766 ✓ *Phrygilus unicolor inca* (T.E.) ♂ 155

brown | black, dusky brown below | brown, with blackish

17767 ✓ " " " ♀ 143

17768 ✓ *Upucerthia validirostris pallida* ♂ 197

brown | b, dark brown below - mainly of blue | blackish brown

2-0

[102]

\* 17769 ✓ *Asthenes humilis robustus* ♀ 167  
brown | b, blackish brown below | dark olive, tail blackish

17770 ✓ " " " ♀ 166

17771 ✓ " " " ♀ 166

17772 ✓ " " " juv. ♂ 147

17773 ✓ *Agriornis microptera andicola* ♂ 256  
brownish white | b | b

\* 17774 ✓ *Idiopsar brachyurus* ♀ 184  
tawny | blackish brown, pale brown below | dusky brown

● 17775 ✓ *Diuca speculifera* ♂ 192  
tawny | blackish | b

17776 ✓ " " " ♀ 199

17777 ✓ *Carriion Hawk* im ♂ 527  
brown | black, cere pale brown |

Viloca, March 24

Foggy again this morning, with thick mist. Visibility very bad. I went west, over to west valley 1 1/4 hours walk by road, but I went up over mountain & dropped down at lake at head of valley, alt. about 1500 ft., then walked down valley to road. Mike went up valley above camp, got

● 1 ♂ *Oreotrochilus*, nothing more. I got back at 1:30, still

17778 ✓ *Oreotrochilus zisostellae* ♂ 140  
b | b.

17779 ✓ " *adela* (?) ♀ 134

4-0

4-0

17780<sup>✓</sup> *Asthenes humilis robustus* ♂ 165  
brown | b | black

17781<sup>✓</sup> " " " ♀ 167

\* 17782<sup>✓</sup> *Muscisaxicola tenuirostris* ♂ 183  
brown | b | b

17783<sup>✓</sup> *Muscisaxicola flavinucha* imm ♂ 190  
copper | b | b

\* 17784<sup>✓</sup> *Muscisaxicola albifrons* (T.S.E.) ♂ 236  
brown | b | b

17785<sup>✓</sup> " " " ♀ 225

17786<sup>✓</sup> " " " ♂ 230

17787<sup>✓</sup> *Cinclodes a. atacamensis* ♂ 227  
brown | b | b

17788<sup>✓</sup> *Diuca speculifera* (T.E.) ♂ 186

Viloca, March 25

We both went over to valley to snow. Day mostly foggy, but with little sun. Got back at 2:15. Went up valley to lake, then on up above the falls + on to where valley ends in huge cliffs + narrow gorges. Could not see snow above, too cloudy. worked up to about 15,200 ft. We got 8 birds: 2 *P. unicolor*; 2 *Cinclodes atacamensis*; 1 *Idiopsar*; 1 *Diuca*; 2 *Muscisaxicola alpina*.

6-0

6-0

[103]

17789 ✓ *Cinclodes a. atacamensis* ♂ 219  
brown | b, brownish below | brownish black

17790 ✓ " " " ♀ 225

17791 ✓ " " " ♂ 230

17792 ✓ *Muscisaxicola tenuirostris* ♂ 182  
brown | b | b

17793 ✓ " " " ♂ 183

17794 ✓ " [cinerea] Ⓜ ♂ 176  
brown | b | b

17795 ✓ " " " ♀ 190

17796 ✓ " " " imm ♂ 170

17797 ✓ " alpina grisea ♀ 189  
brown | b | b

17798 ✓ " " " ♀ 186

17799 ✓ " " " ♂ 187

17800 ✓ " flavinucha ♀ 184  
brown | b | b

17801 ✓ " albitrons ♂ 235  
brown | b | b

17802 ✓ *Phrygilus unicolor inca* (O.S.E) ♀ 156  
brown | b, dusky brown below | brown horn, tan blackish

6-0

6-0

17803 ✓ *Phrygilus unicolor inca* (T.M.E.) ♂ 155

(see No 802)

17804 ✓ (T.M.E.) ♂ 156

17805 ✓ *Idiopsar brachyurus* ♂ 198  
hazel | blackish, dusky, brown below | pale brown, tan below

17806 ✓ " " ♀ 195

17807 ✓ " " ♂ 194

17808 ✓ " " ♀ 190

17809 ✓ *Duca speculifera* ♂ 190  
brown | b | blackish

17810 ✓ " " ♀ 195

Viloca, March 26

A fine day today, just a few drifting clouds. We went up the valley to top of pass, on the trail to Caracota Mine, 7 hours from here. Started at 7:57 returned at 1:45, reaching an altitude at the pass of 16,600 ft. Glacier all about, snow & ice. I took gun & milk the bag, with camera etc.

17811 ✓ *Chaleostigma<sup>o</sup> olivace* ♀ 146  
b | b\*\*  
17812 ✓ *Asthenes heterura* ♀ 163  
brown | b, dusky, flesh below | tanally | blackish17813 ✓ *Asthenes humilis robustus* ♂ 165  
brown | b, dark brown below | tanally | blackish

17814 ✓ " " " ♂ 165

7-11

7-1

[104]

17815 ✓ *Asthenes humilis robustus*

♀ 164

(see No 813)

17816 ✓

"

"

"

juv, ♀ 153

17817 ✓ *Muscisaxicola cinerea*

♂ 176

brown | b | b.

17818 ✓

"

"

mi ♀ 171

17819 ✓

"

"

mi ♀ 168

17820 ✓

*Muscisaxicola alpina grisea*

♂ 193

brown | b | b.

17821 ✓

*Idiopsar brachyurus*

♀ 190

hozd | dusky brown, bluish plum, below | pale brown, tail dark

Viloca, March 27 (Sunday)

Did not shoot today, was a bit done up from trip yesterday. Developed films last night taken up around pass. They came out fine. Took photos in outdoor market today & went up to mine in P. M. to see Vetch & Hall. Wrote labels today & changed blotters on plants. Have collected quite a lot of interesting plants here

7-1

7-1

## Viloca, March 28

I went around the mountain to N.W., nearly on a level from Viloca to a long deep valley, about 6 Km, distant, then went up the valley to a range, crossing over to east side at about 16800 ft. I missed the crossing down to right, which would have taken me over dead or dried into another valley running down into main Viloca valley. It was very foggy & no landmarks visible & I dropped down about 1500 ft towards the "Yungas" & reached a little mine called Los Mercedes, at 3 P.M. I secured a bit of food there, rode a half hour, then climbed back up to divide (1 1/2 hours climb) then down again in other valley 1/2 hour, & again up to at least 16500 ft (1/2 hour climb) very steeply, & over into valley running down to Viloca, & reached the camp at 7 P.M. very foggy & quite dark. I sent Tubo to about 1000 ft in valley towards Encalyptus, but he got no birds, said he went half way & then returned because it was foggy! He is absolutely useless in the field.

17822 ✓ *Chalcostigma olivacea* ♂ 150  
t/b.

17823 ✓ " " ♀ 156

17824 ✓ *Ochthoeca aeneanthoides* ♂ 157  
brown | t | t.

17825 ✓ " " " ♀ 157

17826 ✓ " " " ♂ 155

7-1



7-1

[105]

17827<sup>✓</sup> *Asthenes humilis robustus* ♂ 169  
brown | b | blackish brown

17828<sup>✓</sup> " " " ♂ 162

17829<sup>✓</sup> " " " ♂ 178

17830<sup>✓</sup> *Muscisaxicola cinerea* ♀ 172  
brown | b | b.

17831<sup>✓</sup> " *alpina grisea* ♂ 194  
brown | b | b.

17832<sup>✓</sup> " *albifrons* ♀ 231  
brown | b | b.

17833<sup>✓</sup> *Phrygilus unicolor inca* (T.E.) ♂ 155  
brown | b, pale brown at base below | brown, tan blackish

17834<sup>✓</sup> " " " ♀ 160

7-1

Birds observed at Viloca, not collected.

*Larus serranus* (no takes in most valleys)

*Petrochelidon andecola* (fairly common in all the big

Andean Goose (valleys between 13 + 15,000 ft.)

*Zonotrichia capensis peruviana* (not very abundant)

Yellow-billed Teal (7 only seen in & in vicinity of camp)

*Phrygilus gayi atriceps* (not abundant, seen up to 15,800 ft., at mine camp.

" *plebejus*. (one of the most common species here, seen up to 16,000 ft.)

*Cinclodes fuscus* (fairly abundant in all the valleys where water is found.

Big Chestnut Backed Hawk (Saw a pair high up a valley

	<u>Total Skins</u>	<u>Total Species</u>	<u>New Species</u>	<u>Mammals</u>
Callipampa =	4053	660	172	141
Viloca =	76	7	1	0
	<u>4129</u>	<u>667</u>	<u>173</u>	<u>141</u>
Steinbach } purchase }	50	20	19	2
	<u>4179</u>	<u>687</u>	<u>192</u>	<u>143</u>
	73	5	2	
	1000	6	1	

Skins purchased from Steinbach

- \*\* Psophia leucoptera 1
- \*\* Euxenura galeata 1
- \*\* Harned Screamer (sp?) 1
- \*\* " " (") 1
- \*\* Dendrocygna viduata 1
- \*\* " \_\_\_\_\_? 1
- \*\* Anas brasiliensis 1 - ♀
- \*\* "Duck" (3409; 3441) 2 ♂♀
- \*\* Psittacula vivida flaves 2
- \*\* Nyctibeus griseus 1 - ♂
- \*\* Herpetotheres cachinans 1
- \* Ramphastos vitellinus culminatus 1
- Veniliornis fumigatus 1 - ♂
- \*\* Thamnophilus puncticeps sticturus 2 - ♂♀
- Upucerthia dumetoria hypoleuca 1 (Cochabamba)
- Leptasthenura yanacensis 2
- Asthenes heterura 2
- Chlorophonia cyanura longipennis 2
- Calospiza argyrophenges 2 - ♂♀
- \*\* " chrysotis 1
- \*\* " ruficervix fulvicervix 2
- Dyctiopicus lignaris puncticeps 2
- \*\* Chlorochrysa fulgentissima 1
- Muscisaxicola albilora 2
- Pipramapha maccannellii 1

**	<i>Serpophaga suberistata</i>	2
●	+ <i>Empidonomus</i> _____?	2
	<i>Buarremon fimbriatus</i>	3
	<i>Paroaria gularis cervicalis</i>	2
**	"Parroquet" (?)	2
*	<i>Tatania plumbea</i>	1
**	<i>Nycticorax nycticorax hoactli</i>	<u>1</u>
		48
	2 small mammals (Gopher & Rat)	<u>2</u>
		50

Viloca, March 29

We returned yesterday birds this forenoon. I wrote labels & field notes in P.M.

Viloca March 30

Today we labelled packs birds, I printed field notes & packed up, & in afternoon we went down to Tanapaca farm, to collect for a few days.

Species collected at Viloca.

- Phalaebocenus m. megalopterus* (1♂j)
- Chalcostigma o. olivacea* (5)
- Oreotrochilus e. stellae* (4)
- Phrygilus unicolor inca* (7)
- Asthenes humilis robusta* (13)
- Sicalis v. uropygialis* (1)
- Cinclodes<sup>a.</sup> atacamensis* (4)
- Spinus a. atratus* (1)
- Upucerthia validirostris pallida* (1)
- Asthenes* \_\_\_\_\_ (7812) ♀
- Agriornis microptera andecola* (1)
- Muscisaxicola albitrons* (5)
- " *alpina grisea* (5)
- " *cinerea* (?) (7)
- " *flavinucha* (2)
- " *tenuirostris* (3)
- Diuca speculitera* (5)
- Idiopsar brachyurus* (6)

March 31.

Tanapaca Farm (below Vilca) (10600 ft)

Went up slope of valley, got 4 birds (one skinned)  
Nothoprocta, Cistothorus + Patagona. Went north, along sides  
of range, following a road running more or less level, for  
a long distance, ascending in a valley. Went to a deep narrow  
valley + up flow, where there was considerable scrubby. Birds  
rather abundant, but many common things, like Zonotrichia + Saltator  
auratus.

17835 ✓ Nothoprocta p. pentlandi (T.E.) ♂ 282  
haze | pale reddish brown | yellow.

17836 ✓ Aglaeactis pamela ♂ 121  
b | b

17837 ✓ Patagona gigas peruvianus ♀ 197  
b | b

17838 ✓ Cistothorus platensis minimus (?) 103  
brown | b, flesh below | flesh

17839 ✓ Thlypopsis ruficeps ♂ 150  
brown | b, brown below | l. b

17840 ✓ Scytalopus acutirostris ♀ 120  
brown | b | brown below

\*\* 17841 ✓ Asthenes berlepschi im. ♀ 161  
brown | b, dusky brown below broadly | leaden

\* 17842 ✓ Spinus xanthogaster stejnegeri (T.E.) ♂ 120  
brown | blackish, dark brown below broadly | b

17843 ✓ " " " (T.E.) ♂ 120

17844 ✓ " " " (T.E.) ♂ 124

- \* 17845 ✓ *Conirostrom cinereum* (T.S.E.) ♂ 128  
brown | b | b.
- 17846 ✓ *Diglossa s. sittaoides* ♂ 132  
brown | b, leaden blue below, black at tail | brownish tan
- 17847 ✓ " " " (T.M.E.) ♂ 127
- 17848 ✓ *Diglossa carbonaria* (T.E.) ♂ 155  
brown | b, leaden blue below | b
- 17849 ✓ " " " juv ♀ 148  
— | b, bluish black below | dark brown
- \* 17850 ✓ *Phrygilus fronticeti peruvianus* (T.E.) ♂ 190  
brown | yellow | reddish brown
- 17851 ✓ " " " ♀ 187  
— | black, brown at tail below | —
- 17852 ✓ *Pooecetes hypochondriaca* ♀ 164  
brown | b, pale brown below | black
- 17853 ✓ " " " (T.E.) ♂ 160

Altitudes at Tamapaca

Tilco Valley where lower trail crosses at	= 10800 ft
" " " <i>Asthenes heterura</i> began	= 11500 "
" " " upper trail crosses (ruins)	= 12500 "
Highest point worked (thicket "junco" trees)	= 13500 "

Tauapaca, April 1

I went out to work in same area as yesterday, but instead of going on into the quebrada & climbing up mountainside, working in brush & large trail of low "gumina" trees. Slope very steep & work difficult. Birds very scarce, I had rotten luck all morning, losing & missing (?) birds. Got back at 1 P.M. While out up more than when I was yesterday & got 6 birds.

- 17854 ✓ *Cistothorus platensis minimus* ♂ 126  
brown d, plum below | flesh
- 17855 ✓ *Pseudoeolopteryx acutipennis* (T.S.E.) ♂ 119  
brown | b | leaden brown
- 17856 ✓ *Spinus xanthogaster stejnegeri* (laying) ♀ 117  
brown | blackish brown, pale brown below | blackish brown
- 17857 ✓ *Scytalopus acutirostris* ♀ 125  
brown | b | brownish black
- 17858 ✓ " " ♂ 115
- 17859 ✓ *Leptasthenura fuliginiceps* ♂ 146  
brown | b | dark olive
- 17860 ✓ *Phacellodomus s. striaticeps* ♂ 164  
gray | blackish, dusky, black below | pale brown
- 17861 ✓ *Cinclodes fuscus* ♀ 183  
brown | b | b
- 17862 ✓ *Patagona gigas peruvianus* ♀ 219  
b | b

17863 ✓ *Phrygilus fruticeti peruvianus* (T.E.) ♂ 190  
brown | yellow | pale, brown

17864 ✓ " " " " (T.E.) ♂ 191

Tanapaca, April 2.

Today I went back to the valley visited day before yesterday, but went nearly to the top of it (more or less 13000 ft). It rises rapidly, is narrow & V-shaped, but with dense scrubber, brush & low trees in bottom, higher up, many more covered scrub in bottom, & for the last 1000 ft the vegetation is largely quina trees (except along middle of bottom). Saw a pair of *Asthenes heterura*, but ♂ escaped, they were in thick brush. The *Leptasthenora yanacensis* were all up in the quina trees, near top of valley. Mike went around in valley bottom & I left a quina, had usual set of 5 birds (one ditched) 3 *Spinus* & 1 *Leptasthenora fuliginiceps*. I got back at 4 P.M.  
Bands from above 11500 ft.

17865 ✓ *Troglodytes musculus panensis* im ♂ 132  
brown | b, yellowish flab below | dusky flab.

17866 ✓ " " " " ♀ 128  
— | — bluish flab below | dusky bluish tann

\*\*  
17867 ✓ *Asthenes heterura* ♀ 166  
brown | b, flab below basal 1/2 | pale olive tann.

17868 ✓ *Leptasthenora yanacensis* ? ♀ 174  
brown | b, flab especially at base below | olive

17869 ✓ " " " " ♂ 170

17870 ✓ " " " " ♀ 174

17871 ✓ " " " " ♀ 176

4-2)

17872 ✓ *Aglaeactis pamela* in ♀ 122  
b | b

17873 ✓ " " " ♀ 123

17874 ✓ *Mecocerculus l. leucophrys* ♂ 153  
brown | b | b

17875 ✓ *Scytalopus acutirostris* ♂ 128  
brown | b | <sup>dark</sup> brown

17876 ✓ *Ampelion rubra-cristata* ♂ 240  
carmine | milky white basally, black apically | b

birds from 10600 to 11000ft

17877 ✓ *Leptasthenura fuliginiceps* ♂ 161  
brown | b | olive

17878 ✓ " " " ♀ 162

17879 ✓ *Conirostrum c. cinereum* (T.E.) ♂ 127  
brown | b | b

17880 ✓ *Diglossa sittoides* (T.E.) ♂ 137  
brown | b, plub at base below | dark brown below

17881 ✓ *Spinus xanthogaster stejnegeri* (O.E.) ♀ 121  
brown | blackish brown, paler below | black

17882 ✓ " " " " (T.E.) ♂ 123

17883 ✓ " " " " (T.E.) ♂ 125

17884 ✓ *Phrygilus p. plebejus* (T.E.) ♂ 134  
brown | b, brown blue below | b

4-2)



\* 17885 ✓ *Catamenia analis subinsignis* (T.E.) ♂ 133  
brown | yellow | b.

17886 ✓ " " " " (T.E.) ♂ 135

Tanapaca, Apr. 3 (Sunday)

We only skinned last night till dark, doing 8 birds, & left rest to do this forenoon. We finished at 11 Am. Forenoon mostly foggy, but P.M. clear. I wrote labels, cleaned gun & changed & skinned plant bottles & plants. Ranted in P.M. Had a hard day yesterday & expect a harder one tomorrow.

Tanapaca, April 4. (10600)

We took lunch today & went up. The high valley where I was on Saturday. I went around road by Hacienda Tiles & up valley, while I sent Mike up the mountain & across through the "quinna" woodland & on into Tiles valley by upper trail going into valley at old ruined tower. We met there at about noon & worked up the valley to head of vegetation ("quinna" trees) at about 13500 ft. We returned together over the mountain & down through quinna wooded slope. (Mike?)  
M. shot 2 *Notiopectylax* both skinned for specimens.

K.M. North Hill. Birds taken from 10600 to 11510 ft.

17887 ✓ *Catamenia analis subinsignis* ♀ 122  
brown | yellow | b.

17888 ✓ *Asthenes berlepschi* ♂ 162  
brown | b, brown blue below (locally) | leaden blue

17889 ✓ " " ♀ 165

17890 ✓ " " ♀ 163

Labels lacking from here on —

17891 ✓ *Phacello domus s. striaticeps* ♂ 172  
gray | b, bluish pink below | pale leaden blue

5-2

10 K.M. North of Viloca.

Birds from 11500 to 13500 ft

- 17892 ✓ *Leptasthenura yanacensis* ———— imm ♀ 162  
brown | bl, flesh below basally | brown
- 17893 ✓ " " " " imm ♂ 170
- 17894 ✓ " " " " ♂ 173  
— | — yellow flesh below —
- 17895 ✓ *Leptasthenura f. fuliginiceps* (T.E.) ♂ 162  
— | — | —
- 17896 ✓\* *Scytalopus acutirostris* imm ♂ 126  
\* This bird is much tawny above & below & has the bill much shorter & more slender than the 3 specimens taken lower down Macas taken at about 13000 ft.  
brown | blackish | pale reddish brown
- 17897 ✓ *Asthenes heterura* imm ♂ 150  
brown | bl, yellow flesh below | pale yellowish dus
- 17898 ✓ " " " " ♂ 161  
— | bl, flesh below | pale olive
- 17899 ✓ " " " " ♀ 174
- 17900 ✓ *Ochthoeca oceananthoides* (?) ♀ 161  
brown | bl | bl
- 17901 ✓ *Muscisaxicola rufivertex occipitalis* ♀ 182  
brown | bl | bl
- 17902 ✓ " " " " ♀ 188
- 17903 ✓ *Oreomanes fraseri* ———— ♂ 169  
brown | bl, — | blackish brown
- 17904 ✓ *Phrygilus unicolor inca* (T.E.) ♂ 151  
5-2 brown | dusky brown below | dark brown, feet black

17905 ✓ *Enemarchus rufipennis*  
brown (d) d.

♂ 215

17906 ✓ " "

♂ 220

17907 ✓ *Idiopsar brachyurus*  
hazel | blackish brown, dusky, flake below | dusky brown,

♂ 201

Tanapasa, April 5

We skinned yesterday's birds today, finishing at about 2:30 P.M.

Tanapasa, April 6 (10600)

I went with down the valley, with instructions to go as far as possible & return at 1:30 or 2 P.M. I went up the mountain to the back of gum trees, & did not get back till 2:20. Up to 3 P.M. Mike has not shown up. Most likely he is at the other baranda where he went with Hall last Sunday, & will show up in evening with a grand alibi. A fine clear day today, no fog, but a storm coming up over the high range to east, at 2:30, with rain showers up there.

17908 ✓ *Asthenes heterera*  
brown (d), yellow flake below | pale olive

juv ♂ 140.

17909 ✓ " "  
— | d, flake below | olive

♀ 167

17910 *heptasthenora f. fuliginiceps*  
brown (d), flake at base below | olive

♂ 162

5-2

17911<sup>✓</sup> *Asthenes berlepschi* ♂ 159  
brown | b, bluish flab below basally | l. b.

17912<sup>✓</sup> " " ♂ 161

17913<sup>✓</sup> " " ♀ 154

17914<sup>✓</sup> " " ♀ 162

17915<sup>✓</sup> " " ♂ 162

17916<sup>✓</sup> *Muscisaxicola maculirostris* ♂ 154  
brown | b, yellow below basally | b

\*\*  
17917<sup>✓</sup> *Upucerthia* (peruvian sp.) ♂ 193

Ther head near to same size etc. They have upper parts dark brown, upper tail coverts without tail surface; wings with broad band of uniform across basal portion, with tips secondary & primary blackish, sides & flanks heavily streaked with dusky.

brown | b, flab below, especially on basal 1/2 | blackish brown

17918<sup>✓</sup> " " ♀ 190

17919<sup>✓</sup> " " imm ♂ 190

17920<sup>✓</sup> *Phrygilus gayi atriceps* (?) (T.E.) ♂ 185  
brown | b, bluish flab below | dark brown

17921<sup>✓</sup> *Saltator aurantirostris bolivianus* ♀ 227  
brown | b, orange below | blackish brown

\*  
17922 *Systellura ruficervix* ♂ 222  
brown | blackish | blackish, edging scales whitish.

7-3

7-3

[111]

Miles birds from down the valley

17923 ✓ *Catamenia analis sibirianis* (O.E.) ♀ 121  
brown | dull, dusky yellow | blackish brown17924 ✓ *Spinus xanthogaster stejnegeri* (T.E.) ♂ 122  
brown | dusky brown band | black | yellowish | L17925 ✓ *Asthenes berlepschi*  
brown | b, bluish flush at base below | L. G. ♀ 168

17926 ✓ " " " " ♂ 165

17927 ✓ *Sicalis auriventris* (T.E.) ♂ 151  
brown | blackish brown, bluish flush below | dusky brownTanapaca, April 7 11500 to 13500

We both took lunch & went up to head of the Tiler valley, taking the short cut up the mountain side & across ridge at top. Birds very scarce everywhere & result I did shoot at got away unharmed or wounded. Saw 2 *Asthenes heterura*, both escaped. Saw 2 *Oreomanes* & shot twice at them, both escaped. 2 *L. yanacensis* like mine shot at & lost. Mike got the *Nothoprocta*, nothing else. We also shot several times at Swifts, wounded 2 but all got away. Fine clear day, back at 5 P.M.

17928 ✓ *Nothoprocta pentlandi* (T.E.) ♂ 273  
hozel | reddish brown, paler below | yellow17929 ✓ *Leptasthenura yanacensis* my ♂ 157  
brown | b, yellow flush at base below | yellowish olive17930 ✓ *Muscisaxicola albilora* ♀ 177  
b | b17931 ✓ *Catamenia analis sibirianis* (T.E.) ♂ 152  
brown | yellow | b17932 ✓ *Upucerthia validirostris pallida* ♂ 216  
brown | b | b

7-3

Tamapaca, April 8. (11500 - 13500)

Today I got a lumber & went on to the next valley beyond the Talar, left lumber & worked up a valley to about 13000. The valley very narrow & steep, with tall, thick brush & very few gumma trees at top. A considerable stream high up (at 13500ft) but it disappears underground before it gets down much below 13500 & does not appear again until down at about 11500ft. Saw no *Oronotus* & scarcely any other *Asthene* or *Asithenoma* beside those secured. The *A.* were taken in little draws high up on ridges between the two valleys. I got down at 3 P.M. With sick with stomach & did not go out. A heavy rain fell behind Illimoni with few exceptions reaching prices as I got in.

- 17933 ✓ *Metallura americana* ♀ 98  
b/b.
- 17934 ✓ *Leptotarsus* *peruviana* ♀ 177  
br. W., yellowish pink below, black above
- 17935 ✓ " " ♂ 177
- 17936 ✓ *Asthene heterota* ♂ 172  
brown W., black below, dull yellowish above
- 17937 ✓ " " ♂ 176
- 17938 ✓ *Asthene berlepschi* ♂ 148  
brown W., black below, tip black | b/b.
- \* \* 17939 ✓ *Asthene punctata* (?) ♀ 182  
brown W., black below, tip black | dorsal band

8-4

[12]

17940 *Upocerthia* \_\_\_\_\_ ♀ 202  
brown b, plum below basically blackish

17941 " " " " ♀ 195

17942 " " " " imm ♀ 190

	<u>Total Skins</u>	<u>Total Species</u>	<u>New Species</u>	<u>Mammals</u>
Viloca =	4129	667	173	141
Tanapaca =	108	8	4	0
	4237	675	177	141
Steinbach patches =	50	20	19	2
Total =	4287	695	196	143

List of Species Collected at Tanapaca

<i>Nothoprocta p. pentlandi</i>	2
<i>Aglaeactis pamela</i>	3
<i>Metallura smaragdinirostris</i>	1
<i>Patagona gigas</i>	2
<i>Systellura ruficervix</i>	1
<i>Scytalopus acutirostris</i>	5
<i>Asthenes berlepschi</i>	12
" <i>heterura</i>	8
" <i>punensis</i> _____ ?	1
<i>Cinclodes fuscus albiventris</i>	1
<i>Heptasthenura f. fuliginiceps</i>	5
" <i>yanacensis</i> _____	10
<i>Phacelodanus s. striaticeps</i>	2
<i>Upocerthia audaccola</i> (17912)	6
" <i>validirostris pallida</i>	1
<i>Cnemarehus rotipennis</i>	2
<i>Mecocerculus l. leucophrys</i>	1
	<u>63</u>

(over)

<i>Muscisaxicola albilora</i>	1
" <i>maculirostris</i>	1
" <i>rotivertex occipitalis</i>	2
<i>Ochthoeca oenantheoides</i>	1
<i>Pseudocolaptes auratus</i>	1
<i>Ampelis rubro-cristata</i>	1
<i>Cistothorus platensis minimus</i>	2
<i>Troglodytes musculus puna</i>	2
<i>Catamenia analis subinsignis</i>	5
<i>Idiopsar brachyurus</i>	1
<i>Phrygilus fruticeti peruvianus</i>	4
" <i>guyi atriceps</i>	1
" <i>p. plebejus</i>	1
" <i>unicolor inca</i>	1
<i>Peospiza hypochandriaca</i>	2
<i>Saltator aurantiirostris bolivianus</i>	1
<i>Sicalis mexiventris (?)</i>	1
<i>Spinus xanthogastrus stejnegeri</i>	8
<i>Certhia cinerea</i>	2
<i>Diglossa carolinensis</i>	2
" <i>s. sittaoides</i>	3
<i>Oreomanes fraseri</i> ?	1
<i>Thlypopsis ruficeps</i>	1
(40 species) (23 observed)	108

*Orechelidon murina cyanodorsalis* (type Tanco valley)  
*Say's gray tailed Hawk* (2)  
*Micropus*

Species observed at Tanapaca.

<i>Zenaidura macroura</i> (common)	<i>Nothoprocta ornata</i> (rare above)
<i>Symnypelia cecilia gymnops</i> (common)	<i>Rhynchotus rufescens maculicollis</i> rare
<i>Melospiza melanocephala</i> (quite rare)	<i>Turdus fuscator</i> (very common)
<i>Columbiga picui</i> (not abundant)	<i>Mimus dorsalis</i> (rare)
<i>Columba albilinea</i> (5 seen upper Tanco)	<i>Ochthoeca l. leucophrys</i> (fairly common)
" <i>albipennis</i> (about 12 seen)	<i>Spizitornis parulus</i> (rare)
<i>Leptoptila verreauxi decipiens</i> (2)	<i>Lesbia phaeon</i> (rather rare) (3)
<i>Colibri icolata</i> (very common)	<i>Myioborus melanocephalus</i> (1)
" <i>cyaneotis</i> (rather rare)	<i>Merophasia cyanoptera</i> (1)
<i>Nonotrichia capensis peruvianus</i> (very common)	<i>Condor</i> (common)



Eggs & nests - Bolivia, 1938

38 $\frac{4}{2}$  Oreotrochilus s. estellae 38 $\frac{4}{2}$  Jan 26, 1938

Nest fastened to rock face of a cliff, in a crevice under slight overhang, above Lake Solata, Potasi, alt. 15500 ft. ♀ flushed & shot.

Nest preserved. Eggs almost fresh. 16.2 x 10.1  
16.7 x 10.6

38 $\frac{5}{2}$  Upucerthia a. andecolae, 38 $\frac{5}{2}$  Potasi.

Jan 25, 1938

Taken in the valley below the Mine Mill (alt. about 13000 ft) nest placed at enlarged end of hole 2 feet deep in earth bank on side of ravine. ♀ flushed & shot, but not preserved.

Hole about 2 $\frac{1}{2}$ " dia, end enlarged to about 8" wide by 5" high.

Nest large & bulky, made of dried grass, lined with finer "puma" grass & with about 25 feathers fastened in lining. Eggs nearly fresh.

38 $\frac{6}{3}$  Phrygilus gayi atriceps 38 $\frac{6}{3}$  Uyuni, Jan. 30.

Nest placed in a hole in earth bank along side a normally dry watercourse, in a valley on the hill east of town. Hole about 10" deep, 6" wide & 4" high.

Nest composed almost entirely of pale brown rootlets, rather flat, about 6" across by 2 $\frac{1}{2}$ " high. Cavity 1 $\frac{1}{2}$ " deep by 3 $\frac{1}{2}$ " across. cavity lined with sheep llama hair & wool. ♀ flushed, shot & skinned. Eggs blue heavily speckled with sooty brown, in ring around large end & sparsely & finely over rest of surface. Eggs incubated about 5 to 6 days.

38  $\frac{7}{2}$  (Cinnamon Throated Plover), *Oreophilus ruficollis*  
Uyuni, Bolivia, Jan. 31, 1938. Eggs fresh.

Eggs placed in slight excavation in sand, on  
a nearly level pampa. A few small bushes  
scattered about & small stones. ♀ flushed but  
not secured. Set probably incomplete.

46.5 x 30.3  
45.3 x 30.6

*A. tricolor* 34 x 27.3

33.6 x 26.7

36.2 x 25.3

34.1 x 27.5

*Chrysomitris*

25 km. east of Pochilto (8200 ft). Jan. 9  
later  $\frac{1}{2}$  Jan. 12, 38.

Nests & eggs, Bolivia, 1937-8.

38-1/1 Pospiza erythropygia (16556-♂) ♀ occupied  
Padilla, D. Chuquisaca, Dec. 31, 1937. One fresh egg.  
Nest placed in hole 1' in trunk 4 1/2 ft from ground  
in a deep ravine shaded by overhanging trees, on  
mountain side at about 7500 ft. Nest preserved.

Myiophobus fasciatus flaviceps,  
nest contained 2 new, both incubated, suspended to save.  
Eggs cream color, one with broken smooth, around  
lump of <sup>small</sup> chestnut substance & a speck, also a few  
lilac spots. Thin egg with spotting one larger end,  
not in true spherical size; 28 x 14 and 29 x 14 mm.  
Nest hung from old air, leafy fork at top of  
low branching tree, on mountain side, open branch  
with scattered trees, alt about 7500 ft. Nest preserved.

38-1/3 Synallaxis superciliosa 25 K.M. East Padilla, Jan. 9, 1938  
♀ flushed, but not shot, observed closely. Nest of twigs as usual, in  
a small tree 10 ft from ground, in center of 4 branching limbs.  
about size of hummingbird's nest cavity, a pair of thick & soft leaves.  
Entrance 1 1/2" dia, hole (6" long) 3 fresh eggs, in deep narrow  
valley in ravine, wooded along creek.

19.6 x 14.3  
19.4 x 14.2  
19.4 x 13.9  
(T.E.) ♂ 167

17009 ✓ Elaenia flavogaster (?)

brown | b, plum. (tan, t. line) | b

\*\* 17010 ✓ Ciccaba ————— in ♀ 224  
yellow | pal. olive, cere & mand. dark olive | drab.

17011 ✓ Nothoprocta pentlandi (cf. Padilla) ♀ —

brown | brown horn, tawny | plum. (tan) | yellow  
(Bert's birds)

17012 ✓ Pseudocolaptes acutipennis ♂ 122

brown | dr. tip of mand. yellow | b

- 3-3  
 17013 ✓ *Diglossa sittoides* ♀ (T.E) ♂ 125  
 brown, fluff at base below | dark brown
- 17014 ✓ *Anthus rufescens* (OSE) ♀ 163  
 brown, fluff below, blackish
- 17015 ✓ *Lochmias nematura obscurata* (TSE) ♂ 173  
 brown, fluff below, blackish
- 17016 ✓ " " " ♀ 163
- 17017 ✓ *Phrygilus unicolor tucumanus* ♂ 154  
 brown, fluff at base below | brown brown, two black
- 17018 ✓ *Scolecophagus ruficollis* (OSE) ♀ 330  
 brown, fluff at base below | dull dirty olive
- \*\* 17019 *Ceranoaetus m. melanoleucus* (black chest) ♀ 649  
 white, buffy band (solid dark) brown | pale buffy black | yellow | <sup>unc</sup> ~~yellow~~
- 17020 ✓ *Vultur gryphus* im ♀ 1110  
 brown | blackish at base, rest white | dirty black | head dirty black  
 skin on crop, dull soiled yellow.

35 K.M. East of Padilla, Jan. 10.

Fine clear day, also yesterday in P.M. I was working  
 valley, & saw on Mt. side, found almost nothing, but  
 when I saw same.

- 17021 ✓ *Lesbia sparganora* (T.E) ♂ 190  
 b/b.
- 17022 ✓ " " (T.E) ♂ 190
- 17023 ✓ *Vestipedes glaucopoides* juv ♂ 105  
 b/b
- 17024 ✓ *Melanoporiaea maximitiani* — ? (T.E) ♂ 155  
 brown, fluff at base below | brown brown, two black
- 17025 ✓ *Thamnophilus ruficapillus cochab.* — ♀ 175  
 red-brown, fluff at base below | b/b
- 17026 ✓ *Diglossa sittoides* ♀ 119  
 brown, fluff at base below | dark brown brown
- 17027 ✓ *Elaenia flavogaster* (?) (M) ♂ 195  
 brown, fluff below, blackish

4-4

Palmar, Rio San Mateo, Yungas de Cochabamba

In the Dept. of Cochabamba, the term "Yungas" applies to the foothills, from about 1000 ft up to approximately 3000 ft. It is the region where yuca, plantains, coca, coffee & such products are raised. The Yungas of Cochabamba are much more humid than those of La Paz, at least the region of the Rivers Mapiasi, Corico, upper Beria etc. Here (in Cochabamba) the winter months (June, July & August) are very rainy, not dry like in La Paz Yungas. A month was spent at Palmar, & during that time there were not more than about 9 days with sun & then usually only till noon or 2 P.M.

"Suroazos" were of frequent occurrence, lasting from 24 to 72 hours, when the temperature dropped to as low as 50°F. The nights were always at least 60°F, while the highest temperature noted (at midday) in the shade was 77°F. Humidity is extremely high the air usually being saturated with moisture so that it is very difficult to dry clothing etc, except in direct rays of sun. Everything mildews rapidly, except when temperature drops to below 60°

The road from Cochabamba runs out through Sacaba & up over a range of barren mountains (cumbre at about 11500 ft) then drop down to Aguirri (= Cuchacauch) at 11000 ft. 3 miles down the valley lies Colonia at 10650 ft. From Colonia the valley continues on down, entering the Esperita Santo. From Aguirri the auto road climbs up over a second range, crossing

at 14200 ft, then drops down into the San Mateo. Ducachaca (valley of the malaga) lies between Coloma valley & San Mateo, all three meeting below to form Rio Chapare. The eastern slopes of the range here (like all of Bolivia & Peru) are extremely steep, dropping precipitately down into deep V shaped valleys. The settlement of Palmar is the first point where valley widens at all, & lies at about 3500 ft, between the Rio San Mateo & Chaguinayo (= Salt River - in Quichua), the two meeting below settlement, where valley is narrow & with high steep sides. The settlement of Palmar consists of perhaps a dozen scattered houses, mostly mere huts, whose owners raise coca, a few plantains & yuca & lead a miserable malaria-ridden existence. 5 Km. below Palmar the highway crosses the Rio San Mateo & follows the hills around to the Rio Ibiriza which joins the Mateo about 15 Km. below the bridge. This road will eventually reach the Rio Mamore, but at this time ends at the Ibiriza, where work is carried on.

at the bridge over the San Mateo is a small construction camp of the Dept. Fiscal which is building an auto road down the left bank of the San Mateo, which will eventually reach Todos Santos on the Chapare. At present it is only a mule trail for about 8 Km., where men are working.

We lived at the Bridge Camp, in an old construction shack beside bridge, under which our tent was pitched & where we slept, but worked out in open.

The forest here is very dense, with many very tall trees, much undergrowth in most parts, & everything covered with moss, lichens & epiphytes. In the summer the rain is heavy & temperature high (damp & hot), with much fog all the year round, which fills the whole valley. We collected up the valley all over the Palmar (proper) flats & on up the side of the mountain, down which the road zig-zags from about timber line, but only collected up to about 4500 ft. We also worked down left bank of San Mateo for about 4 miles & back in hills to left, where they dropped down low & access could be had to them.

Much work was also done along the main road over towards the Ibiriqui, both above & below road.

Birds, on the whole, were very scarce, except for a few common species, & one might tramp for a hour through the dark, gloom forest, without seeing or hearing a single bird, except perhaps for the call note of a Scliffornis or Microcerculus which are solitary. At rare intervals a wandering band of birds would be encountered consisting of anywhere from a half dozen to 40 or 50 birds, of many different species, & then one must work fast. However these bands were seldom found under favorable conditions for collecting them, being either extremely high up in lofty trees or else on some steep slope or over impenetrable undergrowth. Many birds were lost, falling into places so choked with vegetation & fallen debris that it was hopeless to even look for them.

In Palmar proper there is little or no virgin timber left standing, the land being either under cultivation or in second growth scrub of varying heights & density. By cutting trails through the taller of this second growth & utilizing paths leading to little fields, we were able to do fairly well at times there, but the species present were almost wholly different from those found in the virgin forest.

In spite of the scarcity of birds, the number of species present is amazingly high. 127 species were collected & 14 others observed. During the first 10 days work we took about 90 species & only 160 specimens.

Much time was lost due to rainy weather, so that in 4 weeks collecting only 420 specimens were collected. The work was exceedingly difficult. The undergrowth always wet, & we were often caught long distances from camp in an icy downpour of rain.

At times we were forced to put on wet clothing in the morning to go out shooting, & our shoes were only dried out 3 times in 4 weeks.

To aggravate my own troubles, I injured my back 5 days after arriving, by a fall on a prostrate tree trunk, & it only began to get better about the time we left for Toda Santa.



Toda Santa (1000 ft alt.)

There is now being built an auto road from Palmar to Toda Santa, by way of San Antonio (at junction of Rio ~~Esperito~~ Espirito Santo & San Mateo) but for the present the trip must be made with mules. The road follows down the San Mateo to just below a small branch (Rio San Rafael)

where the hills end & the land is completely flat on down to San Antonio. The Espirito Santo is crossed by big cause, the mules swimming. There is an old road, made by the militares, from San Antonio to ~~Esperito~~ Toda Santa, but except for the last 15 K.M. is all abandoned & overgrown with jungle. We followed the river

beaches down to point opposite K.M. 15, then cut across to old highway, 3 miles.

The road when completed will be only 33 miles from K.M. 114 (Palmar) to Toda Santa, but at times we found it was so bad that 2 1/2 days were consumed. We had to follow down the San Mateo, along the beaches, sleeping the first night just below the junction of the San Mateo & Ibiriqu. We crossed the river at San Antonio (only one Indian hut there now) at 11 AM. & slept again on beach down Chapare (The Espirito Santo & San Mateo form the Chapare) & arrived at Toda Santa at 3 P.M. We had good weather all the way, no rain.

There are <sup>low</sup> hills down both sides of Chapare below San Antonio for about 1/3 the way down, then completely flat, without sign of any stones & at Toda Santa very little gravel in the river bed. There are many small clearings & patches of second growth all along both sides of

road from K.R. 15, in to Toda Santos, but  
back of them is heavy virgin forest, in which  
one may get about without a great deal of cutting  
except in spots. There are many wild plantains,  
especially near the river & undergrowth is  
abundant. There is a large lagoon back of  
the village about a mile, with heavy jungle  
all round it (on old river course), in some  
parts swampy. The village is not large, but  
scattered about somewhat. ~~Between~~ village a small  
creek runs along one side of village, along  
which is a dense growth of slender willow-  
like trees, also many willows. Between this  
creek & the river is a long strip of forest  
land known as "La Isla". At one time there  
were many cultivations on it, but now  
mostly reduced to tall second growth. One may  
still see many mango & orange trees in  
this area. On east side of village (S.E.) between it  
& river is the flying field, large & well  
built, but covered with grass, on which the  
animals of the village graze. At times we  
were there, there was a weekly plane service  
from Cochabamba, on Monday, the weather  
permitting (Lloyd Aeres).

Birds are abundant here, both in species &  
individuals, & we really spent far too little  
time collecting in the region. Most of our  
shooting was done on "La Isla" & back  
towards Toda Santos Vieja (in opposite direction)  
& down the river. Several trips were made to  
opposite side of river, to south, where there is an  
old trail cutting across to the Rio Ichito &  
Chumbe. Quite a number of species were taken

over there which were not seen on the Toda Santa side. The whole settlement is a Colonization project started some years ago by the Govt., but more or less left to itself afterwards. There are perhaps 700 people in the whole Toda Santa region, plantains, rice & yuca are chief articles of cultivation; although one may see patches of coffee, cacao, oranges, sweet limes, mangoes etc.

We obtained living quarters in a private house, a large, barn-like affair, where a man lived alone. We secured meals at another private home on the plaza (Sr. Sinares, a Colombian from Pasto). There is a small "hotel", but very poor & cramped quarters.

There are quite a number of Italians here, some very decent people. Principal merchant is Italian (Sr. Botega) another Greek merchant (Papodopolis) On the whole the people were very friendly & many helped us in small ways. It is a sort of colony, & its Governor is a "Delegado Militar", a Lieut. Roca. Toda Santa is the head of small steamer or steam launch, navigation. A small steam launch, towing a lighter alongside, makes about 3 trips monthly between Toda Santa & the mouth of the Rio Chapare (where it joins the Chimari), & where it is met by a larger, stern wheel, double decked steamer, which continues on down to Trinidad.

After 12 days collecting here we packed up & caught the launch down to the mouth where we worked 15 days.

## Boca del Rio Chaparé (alt. 825 ft)

The quarters on the launch were wretched & very cramped & price charged outrageous.

80 bolivians each, plus extra for baggage.

They furnished food, such as it was, & at night we set up our cot on shore whenever the night caught us, & left next morning at daylight, getting breakfast on the boat about 8:30 Am. We left late in the afternoon & spent the next two days travelling & arrived at about 8 Am. the 3rd day. There is but one house at the "boca", on left side of Chaparé (descending) about 200 yards up from mouth. The house is on property of the Commercial house of Barber, in Cocha Bamba & Trinidad. A man & wife & 2 children live there. It is a wretched, tumble-down affair, with leaking roof, but they made us welcome & gave us good food, at least abundant & wholesome & at reasonable price.

We had jungle everywhere, except a small plantation of "plantains" around house. There were several ~~too~~ faint trails leading off into jungle, one up, one down river & one back inside to a large lagoon.

We also crossed river in canoe & worked between the Chaparé & Chimoré, & also on opposite bank of Chimoré, going up that river for several miles by canoe to shoot. Birds were fairly abundant here, but less abundant both in species & individuals than at Todos Santos. The character of the forest changes materially here. There is less rain, longer dry season & a great many

Caroza Palms in the forest, large areas being  
 consisting of more than half palm trees. Where  
 there palms abound birds are scarce.

Between the two rivers the jungle was low  
 & very tangled, without trails & with only  
 scattered large trees. Nevertheless we worked  
 there twice & secured several species not  
 found elsewhere (see list of species)

Also, on opposite side of Chumore there is  
 a large tract of high, coarse grass, interspersed  
 with ~~small~~ <sup>small</sup> ~~lines~~ <sup>lines</sup> of willow-like trees & wild  
 cane in behind. Here we secured species  
 not taken anywhere else. 4 species of  
 monkeys here & 2 species squirrels. Tapir

very common, also *Penelope jaguari*  
 & *Mitua mitos*, also the big black & white  
 turkey. There are quite a number of Yuracare  
 Indians along the river, between Toden Santos  
 & the mouth, all living on left bank.

On right bank, clear across to the Chumore &  
 Mamore are wild savage Indians who  
 shoot at sight, with arrows. They never  
 come out to ~~the~~ settlements, go naked  
 & live in most primitive fashion. Are small  
 of stature & low in intelligence. The Yuracares  
 are semi-civilized, most speak fair Spanish  
 & are friendly & willing workers & fine canoe  
 men. They fear the savage tribe on other

side & will never willingly camp or  
 make a noonday halt on the right  
 bank of stream. They also use only bow  
 & arrows (no guns) & are fine shots, some  
 very fine, especially at shooting fish in  
 river.

We secured nearly 50 species at the "boca"  
not taken at Toda Santa.

The return trip to T.S. was made in a  
huge dug-out canoe, with Dr. Morán & 7  
Yuracari Indians. He was going up empty  
& our only load was our baggage & us.

Capacity of canoe was 50 hundred weight  
We made trip up in 6 days, having very  
low water. The launch got stuck on upper  
reach & we passed her. She arrived a day later.

There are many large fish in river Chapare  
but more in "Chumore". Very large cat-fish  
& other varieties, also Dorado.

After return to Toda Santa we collected  
3 days more, then packed up & returned  
to Palmar. There we were forced to wait  
6 days for a truck out to Cochabamba, but  
arrived without incident, except a heavy  
rain on way out & very cold on top of  
range. We had fine weather going out  
to Palmar from Toda Santa also.

The whole time spent between T.S. & the  
boca we enjoyed good weather for most  
part, only a few rains, cold ones from  
south as a rule, but we only lost about  
2 days shooting from rain.

The whole region from Palmar down  
is very rich in bird life & should  
be more thoroughly worked. I am  
convinced that we failed to secure many  
species, but even so secured a goodly  
number not recorded from the region  
or Bolivia.

## Tiragua (alt. 10700 ft.)

Tiragua is a good sized village, with a fair little hotel, 70 K.M. from Cochabamba, above Punata, on <sup>west</sup> slopes of the eastern cordillera. There are 2 auto roads leading to it, one by way of Cochacancha, & the other by San Simón & Punata (we took latter)

The whole region is mountainous, but the mountains are rather rolling on west slope, & very bare & rocky in west parts, although there are large areas nearly free from stones which are cultivated, wheat, barley, Habas & potatoes being chief crops. The Indian (Kechua) population around Tiragua is large, their huts scattered every where that water can be found or to which it can be carried by ditches.

All live on land owned by Bolivians, as "colonos", giving  $\frac{1}{2}$  to  $\frac{2}{3}$  of what they raise to the owners of land, & being forced to work a certain number of days every month for owner, free of charge. Their life is a miserable one. They are ignorant & degenerate from excessive use of coca & "chicha" (alcoholic drink made of corn, as a rule). In and around Tiragua are numerous tall Eucalyptus trees, but away from village there are no trees, except low stunted ones in 2 valleys; one on each side of town & which run back up into the mountains. The one to south is small & short & contains little vegetation, but the other, on north side is long & has several branches, all running far up into range. The 1st branch to left runs up to a group of peaks on crest, with alt. of

about 15000 ft., where we made one trip  
collecting & secured some interesting species.  
This valley contains considerable vegetation in  
shape of bushes, shrubbery & low trees, while  
on the slopes in places are numerous low  
"Quinnia" trees. It was in these two valleys  
(mostly in big one) that the rare *Cousopezia*  
*gareppii* was found. In fact most of  
the birds were collected in the valleys,  
although some species out on slopes  
& dry valleys higher up. Most of the  
collecting was done here between about  
11000 & 12500 ft., although some things  
were found much higher. On the trip  
to the Cerro del Juncos (head of creek mentioned  
above) we started at 3<sup>30</sup> P.M. on foot &  
at daylight (6<sup>30</sup>) were up at about 13000 ft.  
& 7 miles from village. We ascended from  
this alt. to summit of pass (14000 ft.) & reached  
the village at 4<sup>30</sup> P.M. with 38 birds, mostly  
species not taken previously at Iragua.

We had several rains while here, in fact  
we had light rain up at Cerro del Juncos for  
a couple of hours. One night it rained hard  
in village, & next day till 10<sup>30</sup>, intermittent  
showers, although the rains are not supposed  
to begin till late November. I suppose the  
proximity to the Yungas is cause, since  
cloudbow blow over summit & rain falls  
for short distance inland. When rain <sup>fell</sup> ~~late~~  
here, there was heavy snow on the Cerro del Juncos.



Tiraque to Ele-Ele.

We left Tiraque in a big four ton truck about 7.30 A.M. intending to stop in Totora and work, a distance of 85 kilometers from here. Tiraque is on the western or Cochabamba side of the range known as the Cordillera de Cochabamba. We travelled up a valley towards the crest of the range, in a southeasterly direction, over completely bare or grassy slopes, reaching the crest about 8.30 and crossing at 12,000 feet. We then continued down a valley to the east, broad, with gentle slopes.

At about 11,000 feet bushes and shrubbery began to appear in the bottom of the valley and small Quinoa trees on the lower slopes, all increasing in size and quantity as we descended. At about 9,500 the Quinoa trees were thick and fairly large, with much other shrubbery and low, gnarled trees. At about 9,000 feet the stream we had been following swung abruptly to the left (northeast) and cut through a deep cleft in the range paralleling the valley on the left side, and then dropped rapidly down into the Yungas, probably being a branch of the Ibirizu. At this point we swung to southeast, climbed over a low range, dropped into another shallow valley (running southwest), crossed it, climbed up over another low divide and dropped down another valley to Totora, which is at an elevation of 9,500 feet, crowded into a narrow valley, with very narrow streets, all very steep, up and down. The whole surrounding slopes for a long distance are barren and almost devoid of life. To secure and birds there one would have to walk tremendous distances, and then probably not get much. Since our truck was continuing on down the valley, eventually going to Samaipata, I resolved on the spur of the moment to not stop at Totora but to continue until I found a suitable place and then stop there. We reached Totora at noon, had lunch and continued at 1 P.M.

From Totora the road climbs up over a shoulder, then starts winding rapidly down into the valley of the Rio Chaluaní (one of the places where d'Orbigny worked). As you descend, vegetation gradually appears, bushes and shrubbery and thorn trees, but all very arid and with very steep slopes right down to the river, which is quite small at this point. We continued on down along the river some some miles. The road becomes narrow and bad, passing under great cliffs with barely room for the truck to pass and over wretched bridges. At one place the top of our load, extending above the sides of the truck, struck the overhanging cliff and

badly smashed a chest, ripped open a duffel bag with cots and bedding and did considerable damage. Leaving the river <sup>at 7:30</sup> we swung to right, climbing up over a ridge rising to 8,500 feet, then down a long wide valley with easy gradient and finally reached a tiny hamlet on the Rio Mizque, called Ele-Ele. It was about 7.30 and dark when we arrived, but the place looked good for collecting. There had been no houses anywhere on the Rio Chaluaní where it would have been possible to stop. The whole country between the two rivers is completely dry and arid, with cacti and thorn scrub, although on the high ridges (8,000 feet upwards) there are a fair number of trees of 30 to 40 feet in height. The valley of the Chaluaní is very narrow, with precipitous slopes, although there is more vegetation and less cacti and thorn scrub than on the Rio Mizque.

The long valley running down to the Rio Mizque is wide and with much <sup>rich</sup> bech land along the sides. The whole is very dry and arid, soil mostly red or yellow, with lots of sandstone everywhere (no other rock but sandstone). The vegetation consists almost entirely of thorn or spine bearing shrubs and trees and giant cacti of enormous size, many being 2 feet in diameter and 40 feet tall. There are many other species of cacti, slender branching species, barrel cacti, prickly pear and a sort of wild pineapple and a very thorny Bromeliad-like plant on ground in huge patches. Another tree, very abundant, growing to 20 or 25 feet high and wide and bushy, has thick masses of spines on the limbs, spines 5 to 6 inches long and one eighth of an inch in diameter, with very sharp points. These spines replace the leaves of the tree. I never saw any place in all my travels where the Xerophytic vegetation reached such an extreme point as here.

We secured a small house in the hamlet (vacant) and the Alcalde agreed to furnish us meals, so we unloaded our stuff and set up beds. After a hasty, sketchy supper we turned in. Just before reaching the village we had struck an overhanging tree with the top of our load and did more damage, smashing the folding chairs and ripping the bag almost to pieces in which they were packed.

The following day was spent in making repairs on chest, chairs etc, and in arranging our living quarters.

We spent ten days collecting here and in spite of the arid conditions we found birds abundant as to species and individuals. 251 skins were secured, with a total of 75 species collected, of which 43 were new for the year and 13 new to the Collection. They included quite a number of rare things, found only in this arid region. Woodpecker and Parrots were especially numerous both in species and individuals. 6 species of Parrots and 7 of Woodpeckers, the most numerous of the latter being *Trichopicus cactorum*, and of the former, *Thectocercus acuticaudus*.

The whole of the Chaluani and Mizque valleys are famous for a very pernicious form of malaria, but fortunately we escaped without infection. The people in the village of Ele-Ele are very poor and have few resources while there is no place nearer than Totora where supplies can be secured (a distance of 85 kilometers), so that we did not fare too well in the way of food, but there was plenty, if plain. A considerable amount of sugar-cane is raised here, also corn, mostly by irrigation, although the corn crop depends on the short rainy season (December to end of March). Only the flat lands (old flood plains) along the river are cultivated, and this soil is very sandy and dries out quickly. Most of the sugarcane is made into crude brown sugar in large cakes of about 12½ pounds each. Although much is made into molasses, which is sold to a small distillery in Totora, for making alcohol.

Goats are abundant, and furnished the sole meat supply, while potatoes, flour, wheat etc. are brought down from the high interior.

Quite a few cattle range over the whole valley, browsing on whatever they can eat, leaves, dry grass, twigs and small limbs. They all go miles down to the river at mid-day to drink and later in P.M. return to the hills to feed.

We had a very difficult time in getting away from El Ele-Ele. All the trucks passing through (or most all) are fully loaded for Valle Grande or Sta. Cruz, and since we had about 900 lbs of baggage and the three of us, it made quite a load. I had engaged a truck to pick us up on a certain date, when it was coming through from Cochabamba to Samaipata, they agreeing to come light and take us to Samaipata. They arrived late at night the day before they were due, and said they wanted to start early next morning. We broke our necks packing up before daylight, and when all ready, they refused to take us, saying there was too much weight, after having agreed to come with half a load on purpose. So there we stuck for four days, waiting for a passing truck with space to take us. We could not work, since we had to have everything packed up (except cots) to catch any truck that might suddenly appear. Finally on the fourth day, at noon, we got a truck that would take us to Mataral where the road branches off to Valley Grande. It is about 90 kilometer from Ele Ele to Mataral, and about 65 from Mataral to Samaipata, our destination, on the road to Sta. Cruz. We reached Mataral on Thursday evening, found fair little hotel there and made ourselves comfortable, the first time we had not slept in our own cots since leaving Cochabamba.

Then resulted another wait, until finally on Monday afternoon a truck passed with room to take us to

Samaipate.

Ele-Ele to Mataral

At Ele-Ele, the road coming from Totora joins the main highway to Santa Cruz, which starts at Vila Vila (terminus of the Sta. Cruz R.R. and continues by way of Aiquile through Ele-Ele (or rather Perez, for Ele Ele is 1 K.M. above the junction), Puente Taperas, Saipina, Pulquina, Mataral, Pampa Grande, Mairena, to Samaipata.

The road from Totora to Ele-Ele is narrow, badly laid out, with weak bridges and altogether a very bad road, while the other one from Vila Vila through to Samaipata is quite good, as these mountain roads go. From Perez we continued on down the right bank of the Rio Mizque for about 12 kilometers to Puente Taperas, a suspension bridge over the river, at this time out of repair, so we had to ford the stream. A few miles below the bridge we swung to left into the hills, crossed a high ridge and dropped down into the valley of the Rio Chaluaní again, crossed the river to Saipino, a tiny village on opposite bank and just a short distance above the junction of the Rio Chaluaní with the Mizque. The Valley here is very wide, and mountains on either side quite high, but with the same thorny vegetation as in Ele-Ele, except there is more of it (the soil is less arid, slight more fertile). Ele-Ele is a better place to collect than either Saipino or Pulquina or Mataral, since the surrounding mountains are nearer and one has a greater variety of habitat and ecological conditions in a smaller area at Ele-Ele.

From Saipino we continued on down the left bank of the Mizque for some miles, then swung left again (east) across another low range of mountains and down into the valley of the rio Pulquina and crossed it to a small village of the same name. The whole country through here continues exactly the same, although as one goes east, the amount of vegetation increases, but the species remain more or less the same, some decreasing and others increasing. From Pulquina, we continued on across the valley and climbed another low range (about 6,200 feet and then down again through a narrow valley and out onto the large plain (really a valley, but very wide and flat) on which is situated Mataral. On this last range we crossed, between Pulquina and Mataral, up near the top, the thorny scrub largely disappears and other forms of trees and shrubs take their place, but once dropping down again onto the plain of Mataral, we again encounter the same thorny and spinose vegetation, the tree with masses of long spines being particularly abundant here, while there is less Giant cacti (except along the east side of the valley, where it is very abundant. I suspect that originally there was much around.

Mataral, but it has been cut down to use for roof timbers for the native huts, it being one of the few woody which are not so crooked as to be useless for roof timbers. There is a little hotel at Mataral where clean beds and fairly good food may be secured at a reasonable rate. The truck we came on from Ele Ele to Mataral tured off there to Valle Grande, so we were marooned again until a truck could be secured going through to Santa Cruz or Samaipata. We arrived there Thursday evening and were forced to wait until the following Monday noon before a partly empty truck came along going to Santa Cruz. We finally secured one which had come from Sucre with wine and Pisco,

### Mataral to Samaipata.

The road runs east from Mataral across the wide valley, the small stream being at the extreme east side. The vegetation in the valley is very dense, consisting largely of the tree bearing the huge clusters of long spines instead of leaves, although most of the other forms of spiny growth found at Ele-Ele are present, including much giant cacti and other species of cacti. Leaving the valley we climbed over a low range of mountains and dropped down into another broad valley to Pampa Grande, a village somewhat larger than any of the others passed through since leaving Totora. From Pampa Grande we continued more or less east, crossed another low range and down into a fine large valley in which is situated Mairena,

This valley runs north and south, the water flowing north and finally cutting through to the east. The vegetation in this valley is by far the most luxuriant seen yet on this trip. The tree bearing long spines has now quite disappeared, together with many other spiny forms, being replaced largely by acacias and other non-spinous varieties. The soil is much more fertile and apparently the rainfall is much greater here than at any point to the west. The valley heads up in a high range of mountains to the south, apparently lying just to the north of the Rio Grande.

I should have liked to collect in this valley, but there was not sufficient time at our disposal. We continued up the valley from Mairena for some distance (south), then swung east and started climbing up a rather high range of mountains (about 7,000 feet). As we climbed higher up this range the forest increased rapidly in density and size of trees, although of the "dry" type, all trees being devoid of leaves at

this time (late October). From the top of this range we dropped down gradually south east into the large valley of Samaipata.

Samaipata. (5,500 feet)

Once across the crest of this last range the aspect of the country changed completely. The mountains on every side were almost bare of vegetation, other than low shrubbery and bushes on the lower slopes and a little grass higher up. Apparently the whole region has been deforested, since the town is not less than a century old. The valley is wide, runs down to the east and is perhaps about 5 miles long, then narrows abruptly. The surrounding mountains rise to a height of from 6500 to 7500 feet, the highest being the range to the northeast, the "Meson". In the valley there are many farms, and very little heavy woodland, except up at the heads of some of the small tributary valleys. The original woodland has mostly disappeared and the second growth scrub consists largely of acacias and other ~~thorny~~ thorny scrub on the floor of the valley and thick shrubbery on the slopes, mostly of non-spinous type, although thorny forms are intermingled with it most everywhere. There is a thick growth of grass in most of this shrubbery and the hills everywhere form good grazing ground, except that there is almost no water anywhere for a considerable portion of the year, at least three or four months. At the time we were there (October 26 to November 17) water was so scarce in the village that there was barely enough for drinking and cooking purposes, and very dirty and bad tasting. It is a miracle that they do not have epidemics of typhoid and dysintery here during this epoch.

A good many of the species of birds found at Ele-Ele were present in the valley around Samaipata, but the greater portion were found to be different. After several days work in the surrounding valley I found that unless some more productive region could be located, we would clean up everything here in a weeks time, so having heard about forest in another valley to the north, I went over to investigate. Crossing the range to the northeast, or over the "Meson", I found that from the Meson, there was a drop of about 500 feet to a saddle, from which a high range extended north, with a deep valley to the west and another to the east. The western valley sloped to the north for a few miles, then swung west, cut through the range into the Mairana valley, while the valley to the east headed in higher mountains to the north and sloped south, cutting around to the east of the Meson and into the valley running east from Samaipata.

The valley to the west is mostly wooded in the bottom and on the eastern slopes, but the range on the west side is completely bare. The forest in this valley is of the "dry" type, and when cut away is usually replaced by acacias and other spinous forms. A sort of wild pineapple is present in huge patches, very thorny and almost impenetrable. Cattle have ranged through this woodland so that one may get through fairly well most anywhere, except for the wild pineapple. Quite a variety of species were found in this valley, although the fauna is largely that of the Samaipata valley.

However the valley to the east proved to be entirely different. The name of this valley is:

#### Piedras Blancas

From the saddle at the foot of the Meson, a gently sloping valley runs down to the east into the main valley, which runs north to south. The south side of this valley (the Meson range) is practically bare of vegetation, other than grass, but the north side is for the greater portion heavily wooded, with a luxuriant rather humid forest, with trees averaging around sixty feet in height, much taller in the damper portions.

The range running north, which separates the two valleys rises to a height of probably close to 9,000 feet, or more at the head of the Piedra Blanca valley, and is completely forested, with many gentle slopes running down into Piedra Blanca valley. There are some small farms down in the bottom of the valley where it is largely in cultivation or returned to second growth scrub, while the east slopes of the valley are steep and mostly bare of forest.

It was on these forested slopes on the west side of the Piedra Blanca valley that proved to be amazingly rich in its bird fauna. It was very difficult to collect there due to the long distance from Samaipata, and there was no place to stay in the valley, so we had to make trips ranging from 12 to 18 miles daily in order to get the birds there.

We would start from Samaipata at 4 A.M. with flashlights, reach the top of the Meson by good daylight, and work the upper slopes of the valley, getting back to Samaipata usually about 1 P.M. This was very productive but heart breaking labor. The last week we changed our tactics and starting at 4 A.M., with a lunch, would spend the whole day on the trip, covering about 20 miles and securing usually about 50 birds, which were prepared the following day.

The birds of this region seemed to be a mixture of species taken at Incachaca, San Jacinto and Palmar, and I was much surprised to find *Pipile cumanensis*

here between 6,000 and 7,000 feet, together with Penelope s. sclateri, while in the valley of Sama pata we took P. obscura bridgesi. I had never before seen Pipile above 2,000 feet (Rio Coroco)

Many species of Thrushes were present; Turdus rufiventris (lower down), T. albicollis, T. nigriceps, Catharus dryas, and the rare Platycichle flavipes.

Troglodytes solstitialis and Henicorhina leucophrys were present in fair numbers and on the Meson I took Cistothorus platensis. Chamaeza brevicauda was abundant, while a little lower down a fine new species of Grallaria was found and Batara cinerea (new race?) Thamnophilus connectens was abundant (also in valley to west), while on the Meson I found Melanopareia maximiliani.

Trogonurus personatus and Pharomacrus antisiensis and the rare Tanager, Tangara argyrophenges, were not rare. Crypturellus obsoletus and tataupa were abundant in the forest, also tinamus. tao was seen but not secured; Rhynchotus rufescens maculicollis was taken on the high grass lands and a small Nothoprocta or Nothura was seen several times but not secured.

There seemed to be no end to the species to be found in this wonderful forest, and I much doubt whether we secured all the species there, or even saw them.

The reason for the abrupt change in flora and fauna here is perfectly obvious. The mountain range running more or less north and south or southeast through Samaipata forms more or less the watershed between the Mizque basin and the streams running east toward Santa Cruz and the Rio Surutu and others. From here to the eastward the mountains, while still persisting for a considerable distance, are much lower and do not seriously obstruct the rain bearing clouds from the north east, which are large stopped by the high range running through Samaipata. The clouds sweep into this valley from the east and discharge their water here, but usually do not pass over further to the west, except in the season of heavy rains (December to April). The flora seems to be quite different to a large degree. There is more water, with little springs and tiny rivulets high up on the slopes, while in all the other valleys water is almost no existent, except for tiny trickles in the bottoms of the valleys.

I was very anxious to work in one of the valleys about 30 to 35 miles to the eastward, at an altitude of approximately 2500 feet, but lack of time did not permit, while the matter of transportation was very difficult.

This was not so import, since we have all of Steinbach's collections and data on this region, and it was imperative to get out and over to Sucre before the heavy rains set in.



## Sucre to Tomina

The road starts climbing at once from Sucre to the extensive plain around Yamparacay. We left Sucre at about 5<sup>40</sup> & reached Yamparacay about 7<sup>15</sup>. A wretched day, drizzling rain & fog & wind from S.E. Stopped at Yamparacay & got bread & coffee. From here on road started climbing again until the alto just above Tarabuco was reached (alt. = ) We reached Tarabuco (a good sized town mostly of Indians) about 10 Am. & had coffee & light lunch.

Quite cold here & still raining, but shows signs of breaking. Leaving Tarabuco road crossed a wide valley & started climbing again for about 15 K.M., when we crossed a range & began to descend rapidly, passing through a narrow gorge & down into a valley which continued for some distance. Then we left this valley, crossed a divide & dropped into another valley, which we ascended until Zudáñez was reached at noon.

The whole country between Sucre & the gorge, or pass, beyond Tarabuco, is almost bare of vegetation, mostly rocky, with broken mountain ranges & some intervening flat lands, all highly cultivated, also all possible mountain slopes.

The valley below the "gorge" has considerable vegetation bushes & shrubbery & algarroba trees, also Mistle trees, but the whole is arid & rocky. We had lunch in Zudáñez & left there at 1<sup>30</sup>. The road continues climbing for some distance & then we dropped into another valley which we descended for considerable distance until we, then cut across some hills to southeast & finally came down into the Tomina River. This region here after leaving Zudáñez & dropping down some, is rather heavily covered with vegetation, bushes, shrubbery & scattered trees remaining high up the slopes, while down in bottom of valleys are heavy growth of

Algarrobas & other trees, wherever they have not been cut away. We followed up the Tomina valley some distance before reaching the village.

Tomina - 6700 ft.

The village is small now & very poor, with tumble-down houses & shacks, but a huge church, surrounded on 3 sides by huge pillars & balustrade IIIIII. Town is very old & was once of some 7 or 8000 inhabitants & of importance.

We secured a large room in private house (no hotel), in which 2 men already slept, the officer in charge of traffic here & a soldier ~~and~~ servant. Both were down with bad cases of grippe, & Mike with malaria, so we had quite a hospital. Arrived at about 4<sup>30</sup> P.M. & at once unpacked everything, & started working next morning. The hills rise rapidly close to village on west side, while the River runs along east side, from south to north, finally emptying into the Rio Grande. Deep narrow valleys run back winding into hills to west, which rise to perhaps 8000 ft. Further back is a higher, very precipitous range evidently not less than 10000 ft.

On east side of river valley extends some distance back, also to hills rising to about 5000 ft. Beyond these hills, separated by a narrow deep valley, is a much higher range of mts., rising to at least 10000 ft, but not so rocky & precipitous as the western range. A trail runs off around north end of this range to town of Serrano, distant about 21 miles.

The valley & tributary valleys have rather heavy growth of various species of trees, mostly thorny, cacti & thorny shrubbery & low trees & bushes. No giant cacti here, but a smaller branching species, with round branches is common, also much small barrel cacti.

The whole region, valleys, hills & mts. very rocky & arid & almost no land capable of being cultivated.

The first day we worked down valley on west side & up one of the small tributary valleys. Nothing new was found. The species here were all taken either at El-Elé or Samaipata, although I was surprised & delighted to take both Upucerthia harterti & Dyctipecus lignaris puncticeps the first day.

2nd day I crossed river to large broken plain, while Berts again went down valley. Nothing of importance turned up, still the same species from south Cochabamba & west Sta Cruz.

The 3rd day I took Serrano trail, crossed first low range of hills & dropped into a narrow valley heading up on slopes of high range to east. The bottom of these valleys are heavily wooded, with fairly large trees, but the steep slopes have only bushes & shrubbery, with a few scattered trees & the whole extremely rocky, mostly broken, loose sandstone, although some of the rock appears to be harder, more like mica schist.

I followed this little valley far up near its source & was surprised to find up above about 8000 ft. that there ~~was~~ were several different species of trees & shrubbery, very little xerphytic vegetation, & many different species of birds appeared. The following species found only up near head of this & similar creeks to south:

- Glænia strepera, Atlapetes fulviceps, Buarremon fimbriatus,
- Turdus nigricaps, Phacellodroma striatocollis maculipectus,
- Satacra isterophrys, Porospiza erythrophrys, Chlorospingus ophthalmicus argentinus,
- Penelope obscura bridgesi, Penelope sclateri \_\_\_\_\_ ? subsp. nov., Mecocerculus l. leucophrys,
- Pyrhonychia cranaomena, Thamnophilus ruficapellus cochabambae, Myiarchus tuberculifer atucipo.

Apparently this whole region was quite heavily wooded originally (has been settled for at least three centuries) & the higher mountains to east of here ~~had~~

supported a considerable amount of fairly humid forest in their valleys & less steep slopes. At present there remains only small remnants of this forest in some of the deep valleys on the flanks of the mts, where a trickle of water is found all year round, but which disappears lower down.

Hence these species of birds have persisted in a few isolated valleys. Further to south east, nearer to the Rio Azero are still fairly large "islands" of humid, subtropical forest, one of which I visited last year, on upper <sup>Tiocanayo</sup> ~~Tiocanayo~~ river.

Another surprise here was Microstilbon usperatus, taken in a deep valley west of village. The only available records for this species are Buena Vista (Sta Cruz) [Todd & Laubmann] while d'Orbigny gives "Yungas", which is doubtful. I searched long & carefully, but secured but a single fine ♂ with enlarged gonads.

72 species were taken here, & in addition 15 others observed.

Potosi (alt of plaza = 13800ft) <sup>Jan 19</sup> to <sup>Jan 27</sup>

We returned from Padilla directly to Sucre, spent Sat. Sund. & Mond. there, packing specimens & extra equipment for shipment to La Paz & waiting for train to Potosi on Tuesday morning. Only freight trains run on this line, passengers & baggage being transported in bus-like cars, which are much faster than a train, making the trip from Sucre to Potosi in about 6 hours. I arranged to stay at the big mine below the city as it was impossible to work from the hotel in city as base, & we moved down there the following day after lunch & began collecting the next day, Jan. 20th.

First day Bert & I worked west along Railway line. Mike went down into valley below mine mill ("belardo"), while I made a complete circuit of the famous "Cerro Rico" in which mine is located. There are very few birds on this mountain, its whole face being barren & vegetation & torn up by 4 centuries of mining operations. The valley below belardo is partly cultivated, but almost barren & vegetation & birds are also scarce, nothing of particular interest being taken there during the 2 days spent in collecting.

The 2nd day we all went up along east flank of Cerro Rico, (between it & city) to the valley which runs south between it & the Karikari Range. Mike worked in lower part & over to San Sebastian Lake while Bert & I went up <sup>into</sup> the range to about 15000 ft. spending whole day.

This Karikari range of mts lies to east of Potosi & the centre is a group of jagged rocky pinnacles rising to about 16500 ft

Glacial action has scoured out a series of valleys running in all directions from the central peaks, & in all these valleys are 1 to 3 lakes, some natural (glacial) but mostly artificial, made by the Spaniards over 3 centuries ago when they began working the famous Potosi silver mine of the "Cerro Rico", discovered in 1545.

We made 3 trips in all to these valleys & lakes, spending the whole day & skinning the birds the following day. Collecting was all done between about 14500 & 16000 ft, from the bottom of the valley behind Cerro Rico, along the Camargo Highway, upwards. The first day Bert worked in valley containing Ustia Lake & another. Mike in lower San Sebastian & I in upper San Sebastian & another dry valley, where most of the Gophers & "Big eared" mice were taken on that & subsequent days.

On second trip we went in truck to lower end of Chalviri valley, then up that part Lake Chalviri, & Lake Illumani (4610 metres) & up over the divide (at least 16000 ft) into San Sebastian valley & then down it part way & across to left into "Gopher" valley. The 3rd trip was made by Bert & I (Mike sick) & he worked up San Sebastian valley to Top & I up Ustia valley & across into head of San Sebastian, where we met.

On most all lakes visited (8 in all) Grebes were present except in 2. Ducks were scarce on all the lakes, in fact but 2 species were seen, Anas oxyptera flavirostris oxyptera & A. spinicauda the first in fair numbers, but very few of latter. Residents report presence of A. specularoides alticola, in small numbers, but we did not see any.

Grebes (Colymbus occipitalis joninensis) were most abundant of the the Waterfowl, being present on practically all the lakes, from 4 or 6 up to at least 50 or more on Chalviri & San Sebastian.

Fulica gigantea was fairly abundant on Lake San Sebastian, & with from 2 to 6 birds on Chalviri, Lotato & Ilumani.

Search as we would, no trace of Fulica carinata was found. Although there are quite a number of lakes which we did not visit, around on north side of range, & which are difficult of access, I do not believe there are any F. carinata on them. I talked with many persons, foreign residents & natives, & nobody seems to have seen it.

Plegadis nitchei is present in small numbers around the foot of the peaks, at the head of the valleys.

Here also was found both Muscisaxicola albilora & M. flaviventer, both undoubtedly resident & breeding, especially the former which was common in all the valleys of the Karikari range, & 80% of the birds taken were immature, showing that they had been hatched there. 2 ♂♂ were taken with enlarged gonads. M. flaviventer was rare. Three individuals were seen (2 taken) at Lake Ulistra, & I am convinced that it is a resident here.

Tinamotis pentlandi was found up at the head of the valleys. Seven birds in all were seen, but only 1 secured. all were up near 16,000 ft., where there is considerable growth of the small bush on which tender

leaves they seem to feed exclusively.

We had very unusual weather at Potosi. January is usually a rainy month, but we had only a few light showers which in no way interfered with collecting, & the days were mostly clear & warm, & nights not extremely cold, although it was evident that temperature fell below freezing up at head of valleys in Karakori Range.

Uyuni Alt. 12700 ft. Jan. 28 to Feb.

Uyuni lies out on the edge of a vast plain, with a range of low mountains to the east which extend north east over to the high Eastern Cordiller, on the west slope of which is Pulacayo, & the east slope, Potosi, with the highest railway pass in the world between (15800 ft) No rain had fallen during January here except a few showers & everything very dry. All stream beds mostly dry & water scarce. Across the mountain ridge east of town is a large valley in which there is abundant growth of "Tola" on the flats & slopes (small and sparse on slopes) There is a little water here in a stretch of stream bed, about  $\frac{1}{2}$  kilometer long, & birds were quite abundant there.

Otherwise birds were were very scarce both in the hills and out on the pampa. But 21 species of birds were collected at Uyuni, including the hills and the pampa, and four more observed. The pampa running north from Uyuni (including the famous "Salar de Uyuni") was all at some remote time a sea. Great masses of coral rock are everywhere along ~~the~~ what was the shores and shallower portions of this sea. The old shore lines may be easily traced, old beaches and sand dunes, etc.



There are very ~~xxx~~ few species out on the pampa. The most abundant bird of the pampa (and practically confined to it) was Geositta punensis. A few Phrygilus plebejus, Sicalis u. uropygialis; the Cinnamon Throated Plover; Speotyto cunicularia \_\_\_\_\_ subsp.; and Thinocorys rumicivorus bolivianus, the last being also practically confined to the pampa. Over in the valley east of the Pulacayo range T. rumicivorus was scarce, being mostly replaced by T. orbignyi, which was abundant. Back from the pampa in the lower slopes of the foothills, Phrygilus plebejus was very abundant, also Motriopelia aymara, as well as over in the valley. There was some species of Caprimulgidae up in the hills. Delgado flushed one but it escaped and I found a wing feather of one. Undoubtedly there are two species of Tinamou in the hills and mountains there, but none were seen. There were a few Ptilosceles resplendens on the pampa, also the black Carrion Hawk.

Rheas were present also on the pampa within a few miles of the town. A flock of about 12 were seen once and on another occasion a very large old male, but it was not possible to secure any specimens there.

Llica (12100 feet)

Delgado and I made a five day trip across the Salar to the northwest to an Indian village called Llica, which lies at the foot of the western Cordillera of the Andes, within 18 miles of the Chilean frontier.

To reach this place we went about 10 kilometers north of Uyuni along the R.R. going to Oruro, then crossed the Salar in a northwesternly direction. It is 138 kilometers across the Salar. Going over we found a large area out in middle of Salar with from 2 to 3 inches of water over the salt and travelled more than an hour through water, which was thrown all over the car, covering everything with salt. At one time it looked like we would have to return, but we managed to get through. On the return trip there was no water. Many Flamingos were seen going over, but it was raining and late in afternoon and we could not stop to try and secure specimens. On the return trip on large flock was seen but they did not let us get within even rifle range of them. The town of Llica is purely an Aymara Indian village, very old and very quaint, the houses all being built of stone and mud, with thatch roofs. The only wood available there for roof timbers is the wood cut out of the stalks of a peculiar species of giant cactus very abundant there on the rocky mountain slopes.

The whole region is extremely dry, and very little fre

fresh water to be found anywhere. Most of the water used is slightly brackish, and is mostly found in form of springs coming out at the base of the foothills, at the edge of the pampa extending some distance inland from the Salar. At Llica there was a large pampa running back between the mountains, and in front of the village there were numerous large springs of nearly fresh water running out on this pampa for a short distance, then disappearing into the sand. In three of these little brooks, not more than  $\frac{1}{2}$  a kilometer long, were found many small fish, of two or three species (specimens collected) which are undoubtedly relicts from the old salt sea, which evidently had ascended into the small streams from the sea and have remained ever since in these tiny brooks.

The hills and mountains around Llica are mostly very rocky and very dry and bird life extremely scarce.

Most of the birds taken there were shot out on the pampa in front of village and across the pampa, back in a valley about three kilometers near another tiny Indian Hamlet, where some very large springs formed a small brook, the water of which was all used for irrigation by the Indians. In these fields and along the little stream birds were quite abundant but of few species. The most common were Phrygilus plebejus and P. carbonarius (?)

Also Oreotrochilus e. estellae was secured there along the creek, probably 15 to 20 birds being secured or observed. A pair of Asthenes dorbignyi  $\alpha$  \_\_\_\_\_ (?), a pair of Octothoeca onenanthoides, and a pair of Upucerthia dumicola hypoleuca were seen there and one of each secured. Agriornis m. montan also secured there.

A single specimen of Patagona gigas was seen in the giant cacti near this village, but it escaped.

Sicalis olivascens was fairly common around both villages. On the pampa at Llica was secured 5 specimens (out of 6 seen) of the Andean Avocet, also two species of ducks (Anas flavirostris oxyptera and A. specularioides alticola) - Ptilosceles resplendens was fairly abundant, but the most common bird there was the Pectoral Sandpiper, not less than a hundred birds being observed. Charadrius alticola was also present in fair numbers; Lessonia rufa oreas quite common on the wet parts of the pampa, and also Muscisaxicola flavinucha. M. alpina grisea and M. maculirostris were also secured, the former very rare, latter fairly common. Furnariidae were very scarce. A very few Asthenes m. modestus and Geositta punensis were present. Back up on the slopes of the mountains there were practically no bird life at all. A few Leptasthenure were found there (aegithaloides) an occasional Agriornis.

I wanted very much to get back into the high mts. along the Chilean frontier, but it was impossible to secure mules or horses for the trip, also I feared to spend much

time in the region, since it was at a time when heavy rains might begin at any moment (Feb. 6 to 10th.) which would flood the Salar with water and make its crossing impossible, in which case it would have been extremely difficult to get back to Uyuni. The only way would have been a trip of about 80 kilometers south to the Raily running from Uyuni to Antofagasta, Chile, and to secure the necessary animals for packs and saddle for the trip would have almost an impossibility. Very reluctantly I returned to Uyuni by a truck belonging to the municipality, which makes two or three trips a month out whenever the condition of the Salar permits.

Pulacayo (13,400 feet)

After our return from Llica, I made a trip up to Pulacayo, going up in the evening and shooting the next day and returning the same evening to Uyuni. It is only 30 kilometers by aito road, from Uyuni, but considerably further by the railway. The mine (tin) lies northeast of Uyuni, up in the range of low mountains which extends westward from the eastern cordillera as far as Uyuni.

The mine is in a cup shaped valley on the west side of of a group of peaks rising up to about 14,500 feet.

The whole region is very dry, no running water ~~xx~~ and very few small springs anywhere near. The water for the mine, that is for the consumption of the people, is brough nearly 20 kilometers in a pipeline, but the water used in the mill of the mine is pumped from the mine itself. I collected there above the mine, up to the top of the range, and although it was so very dry, I found bird life fairly abundant and secured ten species of birds, taking the following where were not seen around Uyuni: Muscisaxicola albilora; M. flavinucha Phrygilus unicolor, and B. erythronotus.

Sicalis olivascens berlepschi, the type of which came from Pulacayo was fairly common, but Zonotrichia capensis pulacayensis, the type of which also is supposed to have come from Pulacayo, could not be found at all. Neither was it seen anywhere around Uyuni, or Llica, or at Potosi, above the city, although reported by Howes and Delgado from the valley below the city, but no specimens were taken there. Neither was it seen at Chocaya either in 1936 or 1938. I took it at Oploca, where it was common, while the birds from Llallagua and Catavi and Callipampa are presumably this form. I am morally certain that the type of this species did not come from Pulacayo, but it is rather problematical just where it did come from. Oploca birds are typica of it, according to the authors description.

In an old nest of Leptasthenura aegithaloides

found in a hole in the rock, above Pulacayo, I found many feathers belonging to some species of tinamou, two in fact. One feather undoubtedly was from Tinamotes pentlandi and the others most likely from Nothoprocta ornata, but neither of them were seen. They have been hunted too much all round the region of Pulacayo and Uyuni to be able to secure specimens except by mere chance.

### Chocaya (13,000 feet)

Chocaya is 83 kilometers south of Uyuni, on the Railway, and is a large tin mine. The mine itself, where we stayed is up a valley some distance from the R.R., at 13,000 ft. and the mill lower down, but still higher than the R.R. A large valley is present below, along which the R/R. runs. The stream bed is wide but except after heavy rains contains but little if any water. In 1936 when I was there in late June there was more water in the "river" than this year in February. We worked up on top of the plateau above the mine around 14,000 feet and higher, looking especially for Tinamotes, and spent one day down in the valley. I came here this year to check up on the summer species present to get data on migration.

I found quite a number of changes in species present here this year. The following species were taken this year, which were not collected in 1936:

Thinocorys orbignyianus (common on mesa and in valley);  
Psilopsiagon orbigny (a few on mesa and in valley)  
Sicalis olivascens berlepschi (common in valley)  
" luteocephala (1 immature taken in valley)  
Muscisaxicola maculirostris (both mesa and valley)  
" alpina grisea (1 on mesa)

On the other hand the following were not taken or seen, which were collected in 1936:

Tinamotes pentlandi (undoubtedly there, but not found)  
Upucerthia validirostris pallida; Muscisaxicola capistrata  
Muscisaxicola frontalis; Ochthoeca oenanthoides; Phrygilus fruticeti; P. unicolor tucumanus.

There seems to be undoubted proof that both Muscisaxicola capistrata and M. frontalis were here as migrants in June, 1936, while the other species not taken in 1938 were absent from local conditions.

### Cerdas. (12750 feet)

This is a tiny hamlet 21 kilometers north of Chocaya on the Railway, and up on the altiplano 9 kilometers north of where it breaks off into the valley below Chocaya. We made a trip up there especially after Rheas.

The country around Cerdas is not flat, but rolling and somewhat rough in places, but with long wide valleys.

The higher portions have very little puna grass and Tola, but much low tough thorny plants, while in the valleys there is much Tola. We covered a large area of country in search of the Rheas, towards the northeast, but few were seen, about five in all, of which one adult male and one young one were secured. Phrygilus fruticet was common in places here, also quite a number of Upucerthia dumetoria hypoleuca were seen and three secured, and 2 U. andaecola, and 1 Speotyto cunicularia.

Oploca. (10,300 feet)

But two days were spent in Oploca in February (24-25) 1938, due chiefly to the fact that it was Carnival time and there were no servants in the house, so we were forced to go over to the other hacienda, Salo.

Very little was seen or collected during these two days that had not been taken in 1936 (late June and early July). The additions were Micropus sp. Pygochelidon cyanoleuca patagonica; Patagona gigas; Lesbia sparganura; Pseudocolopterys acutipennis; Spizitornis parulus aequatorialis.

The following taken in 1936, were not seen either at Oploca or Finca Salo: Leptasthenura fuliginiceps; Hirundinea bellicosa pallidior; Muscisaxicola capistrata; Muscisaxicola maculirostris.

(Finca Salo)

Five strenuous days were spent at the other hacienda, Finca Salo, with rather surprising results. On the previous visit there in 1936, little time was spent in the field and most of the collecting was done in the valley. This year saddle mules were available for Delgado and myself and we made several trips into the mountains on both sides of the valley, working up to at least 13,000 feet. In the higher altitudes were taken the following, not secured in 1936:

Asthenes sp. (17577); Asthenes modesta hilereti(?); Cnemarchus rufipennis; Muscisaxicola alpina grisea; Xolmis murina; Ochthoeca l. leucophrys; Phrygilus unicolor tucumanus; Oreomanes fraseri; "Big Billed" Spinus (?) (17619). In the valley, at the little marsh was taken a new Swallow (17647), also Sicalis auriventris (common) Patagona gigas was abundant also up in the hills to east, and Orectochilus adela.

I feel that this region was not fully exhausted, and that further work there might yield other species.

Especially work should be done further to the east in the valleys, for example at Coatigaita, and at Cinti and Camargo and in the upper Pilcomayo valley.

The region is not very rich in species, as was proved by our work in 1936, but still I do not think that enough localities were visited, especially the region lying between the road from Tarija to Villa Montes and the road from Camiri to Sucre. It is a difficult region to penetrate, being sparsely settled and with trails very bad and pack animals almost nonexistent. However enough work has been done to give a fairly accurate idea of the bird fauna of the whole region.

### Callipampa (12210 feet)

From Oploca we returned directly to Callipampa, on the evening of March 4th, reaching Callipampa on the morning of the 5th. Callipampa is the Mill Camp for the tin mine of the Compañía Minera de Monserrat, the mine being about 15 kilometers back in the mountains to the east, while the mill is on the R.R. about 9 kilometers south of the town of Poopó, situated at the extreme upper end of the Lake (Poopó), or rather from the Rio Desaguadero, a mile or two above its mouth.

From Callipampa to the Lake is about 4 kilometers but this year, due to continuous drouths for three years, the lake is very low and the water has receded until it is about three miles out beyond normal shore line, perhaps more. This was a big disappointment, since I particularly wanted to secure more Flamingos and other water fowl on the lake, but the state of the water both in lake in River made it very difficult, while birds were unusually scarce, especially on the river and in its delta, due to the fact that cattle had been able to walk over the whole area (on account of low water) and had either eaten or destroyed most of the reed beds ("totora") which ordinarily furnish shelter and much food for the birds.

There were few changes found in the species of birds on the lake and river, except the scarcity of practically all of the resident forms. However there were thousands and thousands of migrant Shorebirds, especially the Lesser Yellowlegs; "Stilt" Sandpiper(?) and two others (see cards). I have never seen shore birds anywhere in such vast numbers as they were here between March 6th and 14th. Flamingos were scarce and extremely difficult to approach, but one fine male was eventually secured.

[132]

Callipampa (con.)

Considerable time and effort was spent on checking the land birds, I spending most of my time in that work, except for one day on the Desaguadero River and one day on the lake. When I was here in 1936 I was just recovering ~~to~~ from a bad injury to my right foot which happened in Catavi, and I could not cover much ground in my shooting trips. This year I covered thoroughly the pampas and mountains to the east.

Very little change was found in the species of land birds present. The only species taken in 1936 which were not taken or seen in 1938 were the following:

Gallinago paraguayae andina; Upucerthia dumetoria hypoleuca; Muscisaxicola capistrata; M. frontalis; Phrygilus erythronotus; Spinus magellanicus bolivianus.

The two Muscisaxicola are undoubtedly migrants from the south, as proved from absence of all localities this year (in the summer). Phrygilus erythronotus may have been overlooked, as it was scarce in 1936.

The additional species secured in 1938 were:

Cinclodes a. atacamensis; Sicalis uropygialis; Metriopelia aymara; Chestnut backed Hawk; Accipiter(?) sp.; Geositta tenuirostris; ~~Petrochelidon xanthonax~~  
Pygochelidon cyanoleuca patagonica; Anthus furcatus brevirostris; Geositta cunicularia titicacae; Ochthoeca oenanthoides; Andean Avocet; Himantopus(?) \_\_\_\_\_?  
Nycticorax nycticorax cyanocephalus; Idiospiza inornata;

Of course in 1936 (June) there were no North American Shorebirds at all on the lake, except a few Lesser Yellowlegs which for some reason had not returned north with the spring migration, injured or sterile birds.

Viloca (Araca Mine) (13,800 feet)

From Callipampa we went to Oruro, where three days were spent, arranging matters to go to Viloca, separating and repacking supplies and specimens and a day spent with Fran. Steinbach, who came up from Cochabamba to meet me in Oruro to exchange some birds from his collection for an old shotgun and some extra supplies which I had.

We reached Oruro on Tuesday night and left Saturday morning for Eucalyptus by train (60 kilometers to north) from where we continued in truck to Viloca, a distance of 142 kilometers, high up in the eastern cordilliers of the Andes, just south west across the valley of the Rio La Paz from the famous peak Illimani.

At one point on the road we crossed a divide at 5200 meters altitude, while the mine camp is at 4700 meters, and mine workings extend much higher.

We lived down at the Mill Camp, which is known as Viloca. it is in a deep valley, ~~wh~~ with mountains rising on either side of it up to at least 16,500 feet. At the head of this valley are large glaciers and snow capped peaks rising to perhaps 18,000 feet. There is a trail running up the valley and crossing the divide at about 17,000 feet, then dropping down on east side of range to the Caracoles mine, a distance of about 7 hours on foot.

There are several of these long, deep valleys radiating from a group of high, snow-capped peaks, all having glaciers ~~x~~ in their upper portions and furnishing water for power and irrigation below. The work here was done in three of these valleys, viz: The Viloca valley, up to the divide; the next valley to the west, which is shorter but broader, and ends abruptly in a jumble of huge pinnacles at its head. However in this valley, between about 14 and 15,000 feet many birds were found, especially *Muscisaxicola* (five species), *Diuca* and *Idiopsar*. *Chalcostigma olivacea* was seen here (a pair) but not secured. The other valley worked was to the east of Viloca, a very long valley, heading up near the divide going to Caracoles. I made but one trip up this valley, going around the mountain on a level about 4 miles to enter it, then worked up to its head (it contains two lakes, one artificial), then by mistake crossed over the divide and down on east side of range to a small mine called Los Nevados, at about 15,000 feet, arriving there at 3 P.M. I found out where I was, secured a bit of food and returned up over the pass, down the same valley about a mile, then climbed abruptly up over another divide and dropped down into a branch of the Viloca valley which led me straight down to the camp, where I arrived at 7 P.M., just dark and very foggy. It was a tremendous days tramp, for three times I climbed up to nearly 17,000 feet. Only 13 birds were secured, the best being a pair of *Chalcostigma olivacea*. I was surprised to find so few species in this region. No Tinamous were seen, although I think I heard one whistle. No *Thinocorys* or *Attagis* and no *Phegornis* were seen. All collecting labelled Viloca was done above 14,000 feet, and only 19 species collected (one new: *Asthenes heterura*).

In addition to the 19 species collected, nine others were observed: (see list). The weather while here (March 23 to 28) was very foggy for the most part, with occasional showers. There were intervals of sun at most any hour of the day. In the evenings the higher altitudes were usually clear (above 14,500 feet) while lower down in the valley (towards Tanapaca) it was usually sunny, or scattered clouds, and no rain.

The mountain slopes around here are mostly covered



Viloca (con.)

with very short grass and minute plants lying close to the ground. There are many large gentle slopes which are almost without rock, and hence there is practically no cover for birds, and in such localities birds seem to be entirely absent, with the exception of an occasional *Muscisaxicola*, *Sicalis uropygialis* or *Geositta*.

The sides of the valleys are all very rocky, covered with masses of boulder which have fallen down from the cliffs above. In many cases the floor of the valleys are completely choked with massed of large fragments of broken rock, from the cliffs and peaks above.

Among these rocks there will be considerable tall clumps of puna grass and a little *Tola*, but the latter has practically been exterminated for a long distance from the camp by the Indians who use it for fuel.

High up the sides of the valleys on the steep slopes will often be found considerable puna grass and another low bush, and here will be found *Asthenes* and *Diuca* and *Phrygilus unicolor*. *Idiopsar* and *Muscisaxicola* are usually amongs the scattered rocks, while *Chalcostigma olivacea* is found high up (15,000 to 16,000 feet amongst huge scattered boulders as a rule, perching on top of huge fragments of rock.

It is a heartbreaking region to work in and good heart, lungs and legs are absolutely essential. The scenery is magnificent, but birds scarce and must be sought over very large areas at ~~much~~ the cost of much labor.

