

Birds observed during a walk from Narvaez (Tarija) to Villa Charcas (Chuquisaca), Bolivia, in March 1992

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Note: a description of this walk is available for people interested in repeating it.

Summary

The main body of this trip report is a full species list with notes on localities, habitats, abundance and sound recordings. It is preceded by a description of the itinerary and the habitats covered.

Five species not previously recorded for Tarija (according to Remsen & Traylor's checklist, Ref 8) were observed: *Geranoaetus melanoleucus*, *Spizastur melanoleucus*, *Micrastur ruficollis*, *Agriornis andicola* (but see text under that species), and *Sicalis citrina*.

Eleven species not previously recorded for Chuquisaca were observed: *Harpyhaliaetus solitarius*, *Harpagus bidentatus*, *Pulsatrix perspicillata*, *Ciccaba huhula*, *Ciccaba albifrons*, *Nyctibius griseus*, *Aeronauta montivagus*, *Campephilus leucopogon*, *Myadestes ralloides*, *Sporophila caerulescens* and *Catamblyrhynchus diadema*.

Thirty-one other species not previously recorded for Chuquisaca were observed as well, but we already found them on a previous trip in September/October 1991 (see Ref 3).

Several species were found that are listed by ICBP as Near-threatened (Ref 1): *Tigrisoma fasciatum*, *Harpyhaliaetus solitarius*, *Spizastur melanoleucus*, *Penelope dabbenei*, and *Amazona tucumana*.

Sound recordings of 78 species were made.

Table of Contents

Summary	1
Table of Contents	1
List of Updates	2
Introduction	2
Itinerary and Habitats	3
Species List	8
References	27

List of Updates

24-10-92:

- an additional record for *Sarcoramphus papa* King Vulture was added.
- the record for *Glaucidium jardinii* Andean Pygmy-Owl does not constitute a southward range extension.
- the sound recording of *Trogon personatus* Masked Trogon was found to be correct by comparing it with later (identical) sound recordings from Dpto. Cochabamba.
- the identification of *Campephilus melanoleucus* Crimson-crested Woodpecker turned out to be incorrect. Reinspection of the sound recordings of the drums shows that they were made by *Dryocopus lineatus* Lineated Woodpecker.
- an unidentified song taped at Cañon Verde was found to be that of *Batara cinerea* Giant Antshrike.
- the identification of *Phyllomyias sclateri* Sclater's Tyrannulet was found to be correct, I found it later to be common in the reserve of Tariquia (Dpto. Tarija).
- calls taped near the Rio Tueras were found to be those of *Contopus fumigatus* Greater Pewee, not of *Contopus cinereus* Tropical Pewee.
- unidentified calls below Cerro Campanarios were found to be those of *Turdus nigriceps* Slaty Thrush.
- after listening to the tapes again, records for the following species were added: *Scytalopus (magellanicus) zimmeri* White-browed Tapaculo, *Phyllomyias sclateri* Sclater's Tyrannulet, *Myiarchus tuberculifer* Dusky-capped Flycatcher, *Geothlypis aequinoctialis* Masked Yellowthroat.

14-05-93:

- After making more recordings of both species in other locations, I now felt confident enough to classify the taped *Ciccaba* songs into those of *C. huhula* Black-banded Owl (the lower-elevation "chaqueño forest" recordings) and *C. albifrons* Rufous-banded Owl (the higher-elevation "cloud forest" recording). Of course, this was only to be expected. Also, several calls of owls turned out not to be of *Pulsatrix perspicillata*, but of *Ciccaba huhula* and *C. albifrons*. This error was caused by an error on the ARA tape. See the texts under those three species.
- an unidentified trill below Cerro Campanarios was found to be produced by *Batara cinerea* Giant Antshrike.
- a song taped at El Tunal, previously thought to be of *Geothlypis aequinoctialis* Masked Yellowthroat, I now ascribe to *Cyanocompsa brissonii* Ultramarine Grosbeak.

22-08-93:

- I found out that a very tame *Accipiter bicolor* Bicolored Hawk near El Palmar was actually a *Harpagus bidentatus* Double-toothed Hawk! This is a new bird for Chuquisaca.

September 1993:

- Parrot flight calls taped above Cañon Verde on March 15 turned out to be those of *Ara militaris* Military Macaw.
- I discovered that mystery calls recorded just before dusk above Puca Pampa were alarm calls of *Melanopareia maximiliani* Olive-crowned Crescentchest.
- A mystery song taped at El Tunal turned out to be that of *Coryphospingus cucullatus* Red-crested Finch.

April 1995:

- The observations of *Tigrisoma fasciatum* were qualified as uncertain.

Introduction

After a month-long trip in the same area together with Jon Fjeldså in September/October 1991, we thought that it would be useful to do a second and more thorough examination of several localities. I wanted to do more birdwatching in Bolivia anyway, so I made this second visit to the area alone in March 1992.

Because the most interesting part of our first trip went through the mountainous area west of El Palmar, I decided not to repeat the second part of the trip (which went from El Palmar north to Azurduy), but to approach El Palmar from San Josecito in the south (which is closer), and then walk to the west. It turned out that there was no transport to San Josecito because the road was so bad, so I had to start walking earlier near the village of Narvaez, covering a part of the departamento Tarija along the way.

The stretch San Josecito - El Palmar turned out to be quite interesting for birds, because it went through unbroken, hilly forest for almost the whole distance.

Itinerary and Habitats



On the morning of March 11 I walked a few kilometers on the main road Tarija - Entreríos, west of Narvaez, up to the village of Canaletas ($21^{\circ}27'S, 64^{\circ}20'W$), from an altitude of about 2250m down to 2000m. The area was very green, with lush meadows, shrubby hillsides and an occasional orchard along the road.

I started walking on the afternoon of March 11 near the village of Narvaez, where the road to San Josecito forks off from the main road Tarija-Entreríos. From here I followed the road to San Josecito, and reached the Rio Pilaya on March 13. The road begins at about 1700m altitude, and stays at about that level until El Tunal, where the road starts descending to the river (900m). The road winds through deciduous forests, but level areas have been cleared. Until El Tunal the terrain is quite humid, probably because of the mountain range rising up nearby to the west. Between El Tunal and the river the terrain is sandy and dry, with some open and dry forest.

I camped:

- on a meadow surrounded by forest, at some distance south of Huayco at 1750m on March 11 ($21^{\circ}21'S, 64^{\circ}16'W$).
- on a meadow with shrubs and nearby forest near El Tunal at 1600m on March 12 ($21^{\circ}15'20"S, 64^{\circ}14'W$).
- on a level, sandy, shrubby plain on the southern bank of the Rio Pilaya at 900m on March 13 ($21^{\circ}09'S, 64^{\circ}14'W$).

The Rio Pilaya was crossed on a long footbridge. After the Rio Pilaya there are no roads until shortly before Villa Charcas. Between the Rio Pilaya and El Palmar the trail leads over densely forested hills with clear streams and a few clearings. The altitude varies from 800 to 1500 meters. These deciduous forests are largely undisturbed, and have little undergrowth. In ravines the forest is more humid, with strangler figs and creepers.

I camped:

- inside level, dry forest with little undergrowth north of Cañon Verde at 1150 on March 14 ($21^{\circ}06'40"S, 64^{\circ}14'20'W$).
- on the banks of the Rio Yahuayhua, on the edge of a clearing surrounded by forest, at 1000m on March 15 ($21^{\circ}02'S, 64^{\circ}13'W$).
- in a small clearing in forest near the Rio Tueras at 950m on March 16 ($20^{\circ}57'S, 64^{\circ}15'W$).

The area around the village of El Palmar (1100m-1200m) consists of well-watered pastureland with scattered farms.

I camped:

- on a pasture with scattered shrubs and trees on the eastern bank of the Rio Nuevo, near unbroken forest, at 1100m on March 17 ($20^{\circ}53'50"S, 64^{\circ}17'30'W$).
- at the foot of grassy slopes east of El Palmar, at 1200m on March 18 ($20^{\circ}51'S, 64^{\circ}19'W$).

From El Palmar the trail climbs up Cerro Bufete (2300m), leading through forest which is more humid than the foothill forests seen so far.

From Cerro Bufete to Cerro Campanarios the trail follows a ridge with mainly grassy and shrubby habitats with much bamboo. The altitude varies from 2100m to 2600m. **Note:** Cerro Campanarios is called Cerro Lagunillas in the article (Ref 3), this seems to be caused by an inconsistency between the 1:50.000 and 1:250.000 maps.

Below Cerro Campanarios the trail enters humid and mossy forest. The trail winds through this forest at altitudes between 2000 and 2300 meters. On the climb up Cerro Campamentito (2900m) this forest grades into lighter *Alnus* forest, with scattered meadows.

I camped:

- in forest on the eastern slope of Cerro Bufete at 1500m on March 19 (20°50'S, 64°20'W).
- on the grassy plateau on top of Cerro Bufete at 2300m on March 20 (20°51'S, 64°22'W).
- 2 nights in humid "cloud" forest on the northeastern slope of Cerro Campanarios at 2000m on March 21 and 22 (20°48'S, 64°29'W).

After Cerro Campamentito the trail enters the rain shadow area. Several valleys are traversed at altitudes between 2200m and 3200m, with grassy slopes lower down, and stony and drier slopes higher up. Quebracho-type forest is found near valley bottoms, small *Podocarpus* forests in ravines higher up, and patches of *Alnus* even higher.

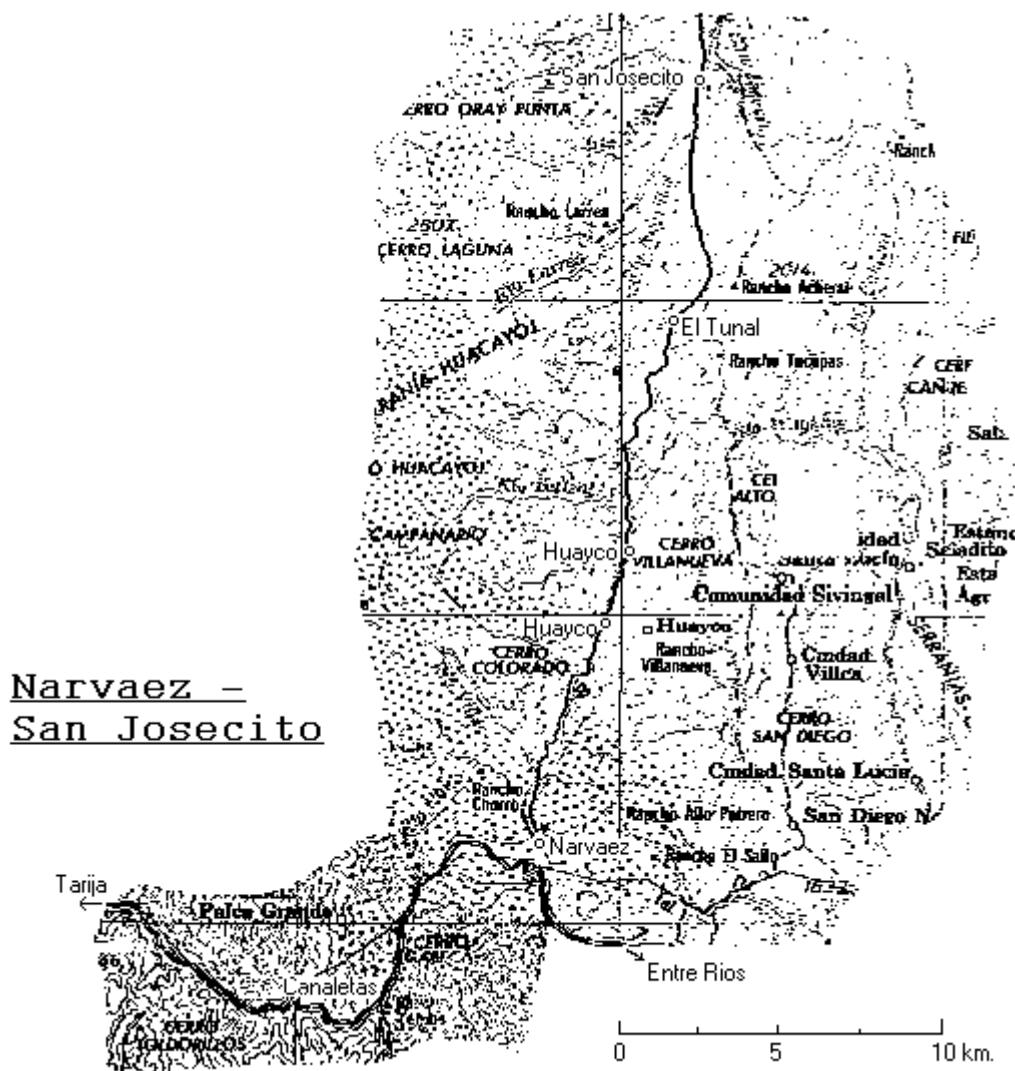
The trail ends in Portillo, which is at the end of a road. This road stays between 3000m and 3500m while leading to Villa Charcas.

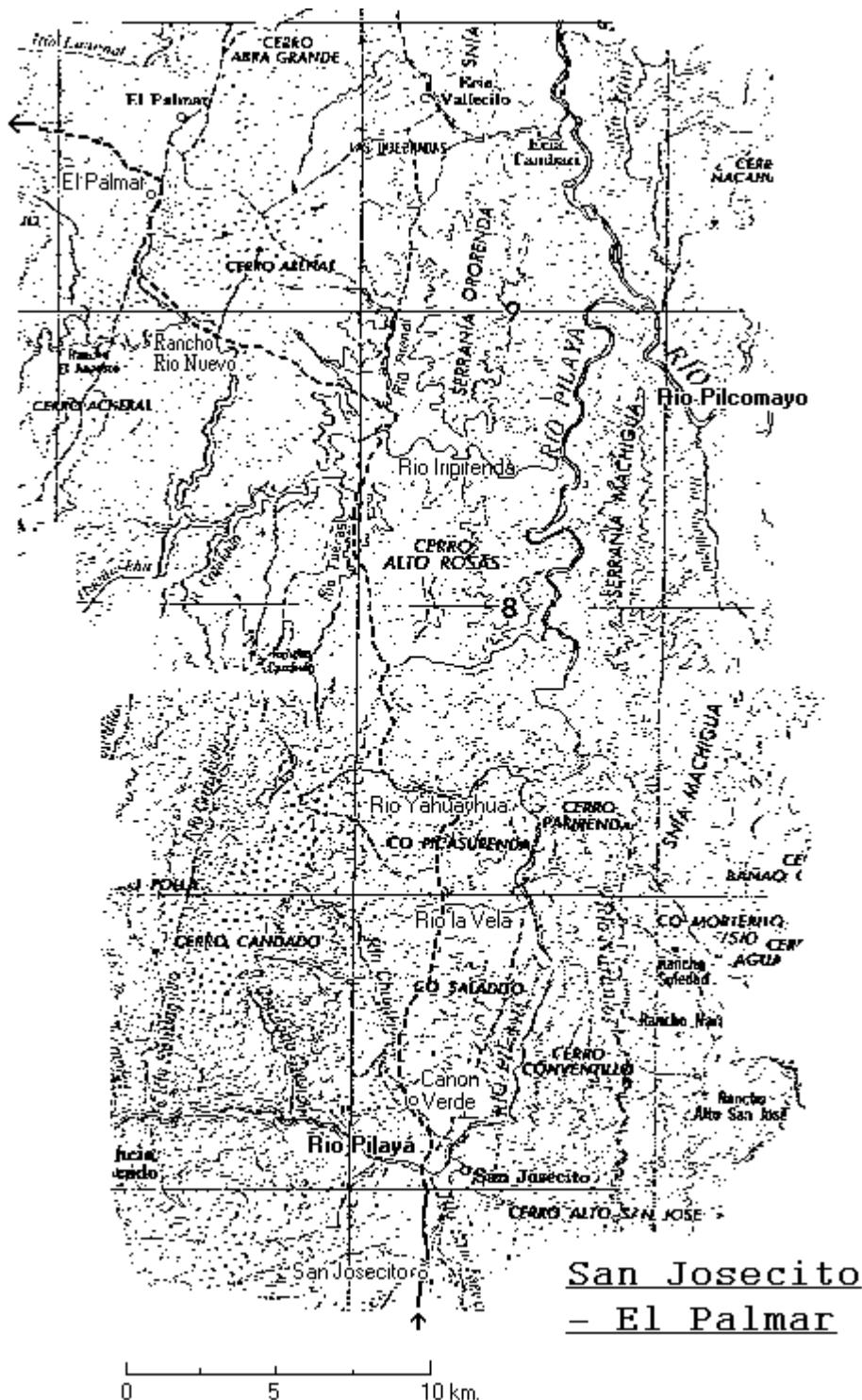
Villa Charcas is situated in the center of a wide green valley which is completely cultivated, and is surrounded by utterly dry and stony hills.

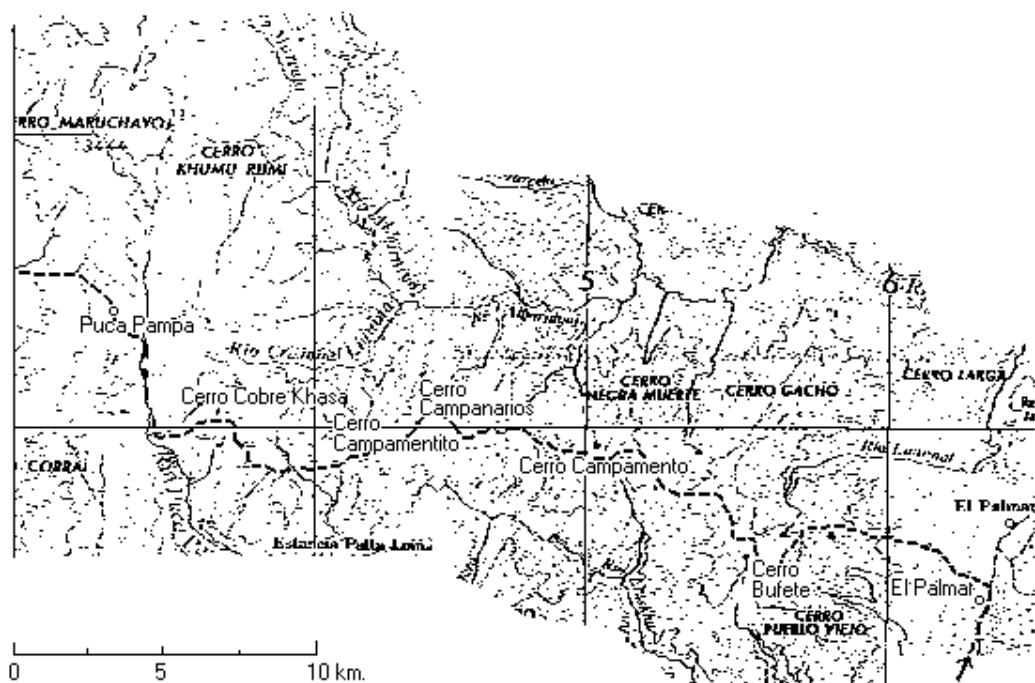
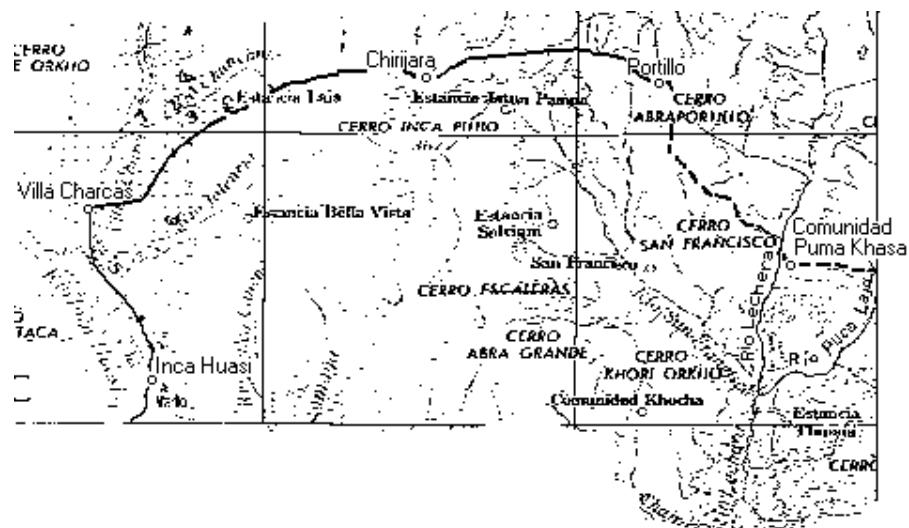
I camped:

- 2 nights in open and low *Podocarpus* forest on the southwestern slope of Cerro Campamentito at 2700m on March 23 and 24 (20°48'20"S, 64°32'W).
- a short distance after Puca Pampa, in a shrubby ravine between dry slopes with bunchgrass, at 2900m on March 25 (20°45'20"S, 64°36'20" W).
- on the banks of the Rio Lechera, in an inhabited area, very green with high grass, shrubs, scattered trees, at 2250m on March 26 (20°44'30"S, 6°40'W).
- on the soccer field of Chirijara at 3150m on March 27.

See (Ref. 3) for a more extensive description of the habitats.







El Palmar - Villa Charcas

Species List

The order of the checklist of Remsen & Taylor is followed.

- ◆ This sign means that a sound recording was made.
- ♣ This sign means that the checklist does not mention the species for the departamento.

1. *Crypturellus tataupa* Tataupa Tinamou.

In the lower regions up to El Palmar a very common species. I have never seen it during this trip, but every morning I heard several calling in almost every habitat except open grassland. I even heard it in orchards in the middle of the meadows of El Palmar.

- ◆ Two sound recordings of its calls were made.

2. *Rhynchotus rufescens* Red-winged Tinamou.

Only one seen on this trip: on a grassy ridge on top of Cerro Campamento, at an altitude of 2550m.

3. *Phalacrocorax brasiliensis* Olivaceous Cormorant.

Two on the Rio Iripirenda.

- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

4. (*Tigrisoma fasciatum*) Fasciated Tiger-heron).

Not absolutely certain, as juveniles of this species are hard to separate from juveniles of *Tigisoma lineatum* Rufescent Tiger-Heron. It was identified on the basis of habitat.

- One walked along the stream when I was bathing in the Rio Tueras at 950m, but it was already too dark to see if it was an adult or juvenile.
- One juvenile on the Rio Arenal at 850m.
- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

5. *Syrrhina sibilatrix* Whistling Heron.

Several between Huayco and El Tunal.

6. *Theristicus caudatus* Buff-necked Ibis.

Rather common on the grasslands of El Palmar. On level plains I saw one group of 7 and one group of 8. On the slopes east of El Palmar there were pairs and single birds, so possibly they breed here.

- ◆ A sound recording of the flight-call was made.

7. *Coragyps atratus* Black Vulture.

Rather common up to El Palmar.

- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

8. *Cathartes aura* Turkey Vulture.

Common everywhere.

9. *Vultur gryphus* Andean Condor.

- One was seen soaring low over a forested slope near the Rio Pilaya at an altitude of 1000m, on March 14.
- An adult and a juvenile were seen on a steep cliff below the plateau of Cerro Bufete at 2200m, possibly they nest here.
- Regularly seen in the deep valleys between Cerro Campamentito and Portillo.

10. *Sarcoramphus papa* King Vulture.

- 5 were soaring together with a large flock of Black and Turkey Vultures in the morning of March 14, just south of the Rio Pilaya.
- 1 was seen near the Rio Tueras.
- 1 was seen above the eastern slope of Cerro Bufete, at 2000m.
- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

11. *Elanoides forficatus* Swallow-tailed Kite.

- Several seen, including a group of 7, between Huayco and El Tunal.
- Two drank from the Rio Pilaya while on the wing.
- A group of about 15 birds was very noisy above the eastern slope of Cerro Bufete, at about 2000m.. Several of them also repeatedly dived at a perched juvenile Solitary Eagle *Harpyhaliaetus solitarius*, calling loudly.
- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

12. *Harpagus bidentatus* Double-toothed Hawk.

A bird was seen perched in a small dead tree, in a meadow with scattered shrubs, near forest, near the Rio Nuevo. The bird allowed a very close approach. The next morning I saw it again inside the forest, perched high up in a tree (but under the crown).

Originally I misidentified this bird as an aberrant *Accipiter bicolor* Bicolored Hawk, never having seen a *Harpagus* sp. before, and thinking that *H. bidentatus* was an exclusive Amazonian bird. Also, I did not see the line down the center of the throat, but this was probably because I did not see the bird well from the front. I did see the thighs, though, and these were whitish, thus excluding *H. diodon* and *A. bicolor*. The lazy and tame behavior also strongly points to a *Harpagus* sp. In contrast to what is stated in the Colombia guide of Hilty & Brown, the eyes were yellow, not red. This has possibly to do with subspecific differences.

- ♣ The checklist does not mention this species for Chuquisaca.

13. *Accipiter striatus* Sharp-shinned Hawk.

Judging from its size, a bird of probably this species was seen in the *Podocarpus* forest on the southwestern slope of Cerro Campamentito at 2700m.

14. *Buteogallus meridionalis* Savanna Hawk.

There were several along the Rio Pilaya and 2 near El Palmar.

15. *Geranoaetus melanoleucus* Black-chested Buzzard-Eagle.

- I saw 2 near Canaletas.
- Rather common between Puca Pampa and Chirijara.
- ♣ The checklist does not mention this species for Tarija.

16. *Harpyhaliaetus solitarius* Solitary Eagle.

A juvenile was perched in a dead tree on the forested eastern slope of Cerro Bufete, at an altitude of about 1900m, on March 19. Although I was standing below the tree, only a few meters away, it refused to fly away. It called often. I did not see the parents.

- ♦ I taped its piercing calls, which were very similar to the adult call.
- ♣ The checklist does not mention this species for Chuquisaca.

17. *Buteo magnirostris* Roadside Hawk.

A common bird up to El Palmar.

- ♦ Sound recorded.

18. *Buteo polyosoma/poecilochrous* Red-backed/Puna Hawk.

- 1 near Canaletas.
- 2 were seen between Cerro Campamentito and Cerro Cobre Khasa.
- 1 near Puca Pampa.

19. *Spizastur melanoleucus* Black-and-white Hawk-Eagle.

One adult was seen about 2-3 km. south of El Tunal in forested and hilly habitat. I saw it very well while it was perched on top of a tree. The next morning I saw it gliding over a forested slope close to El Tunal.

- ♣ The checklist does not mention this species for Tarija.

20. *Phalcoboenus megalopterus* Mountain Caracara.

Several were seen between Portillo and Villa Charcas.

21. *Polyborus plancus* Crested Caracara.

Common in open areas up to El Palmar.

22. *Micrastur ruficollis* Barred Forest-Falcon.

- A pair was calling a few kms north of Narvaez, at 1700m.
- A bird was calling near Cañon Verde, at 1150m, in rather dry forest.
- A bird was calling on the eastern slope of Cerro Bufete, at 1500m.
- Two birds were calling in mossy forest on the northeastern slope of Cerro Campanarios at 2000m.

All birds called only just after dawn. With the exception of a bird north of Narvaez, which showed itself well after I had driven it to a frenzy by playbacking it, I never saw any bird of this species. This must be a common bird, considering that I heard it at almost any camping spot located inside forest. It apparently lives in a wide range of forest types.

- ♦ I made several sound recordings, both of the continuous barking call and of the cackling calls (see Hilty&Brown).
- ♣ The checklist does not mention this species for Tarija, nor for Chuquisaca, but note that we also sound recorded it on our previous September/October trip in Chuquisaca.

23. *Falco sparverius* American Kestrel.

Rather common in open areas up to El Palmar.

24. *Falco femoralis* Aplomado Falcon.

One seen between Portillo and Chirijara at an altitude of 3200m.

25. *Penelope dabbenei* Red-faced Guan.

- Very common in all the mossy forest from Cerro Campanarios to Cerro Campamentito. I once encountered a group of about 25 birds, another group had about 10 birds, but usually the birds were in pairs. I did not hear any whing-whirring displays, and also no calling (except alarm calls at my approach), with the exception of one bird which produced a repeated guttural sound around dawn near Cerro Campanarios.
- One bird was heard in the *Podocarpus* forest southwest of Cerro Campamentito.
- ♦ I made a sound recording of a group of about 25 birds sitting up in the trees around me, all scolding loudly at me. I also have a sound recording of a pair calling at my approach, and then flying away. Both recordings were made near Cerro Campanarios.

26. *Penelope obscura* Dusky-legged Guan.

A bird briefly heard and seen between Narvaez and Huayco at 1750m was possibly this species.

27. *Aramides cajanea* Gray-necked Wood-Rail.

A few times heard and seen, at altitudes between 950m and 1700m.

- ♦ I taped its song near El Tunal and near El Palmar.

28. *Cariama cristata* Red-legged Seriema.

These birds were common on those grassy slopes east of El Palmar which had many boulders and stones. The birds were hard to find because their colour blended so well with the boulders, but revealed their presence by occasional alarm calls and their occasional morning songs. However, most of the time they were silent.

- ♦ I taped alarm calls and song.

29. *Vanellus chilensis* Southern Lapwing.

Several times seen, up to 1600m.

- ♦ I taped alarm calls.

30. *Vanellus resplendens* Andean Lapwing.

Common on the fields around Villa Charcas at roughly 3100m, and around Culpina at 2950m.

31. *Pluvialis dominica* Lesser Golden-Plover.

I saw a group of 7 on a partly inundated field close to Villa Charcas.

32. *Actitis macularia* Spotted Sandpiper.

One on the banks of the Rio Pilaya.

33. *Columba fasciata* Band-tailed Pigeon.

- I saw one flock of about 15 birds in the morning of March 24 over the *Podocarpus* forest on the southwestern slope of Cerro Campamentito at 2700m. In the late afternoon I saw another flock of about 40 over the same forest, for some time joined by a flock of Alder Parrot *Amazona tucumana*!
- Two birds were flying close to the small *Podocarpus* forests on the ridge between the Rio Puca Laja and the Rio Lechera at 2700m.
- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

34. *Columbina talpacoti* Ruddy Ground-Dove.

Several seen from Narvaez up to El Palmar.

◆ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

35. *Columbina picui* Picui Ground-Dove.

Rather common from Narvaez up to El Palmar.

36. *Metriopelia melanoptera* Black-winged Ground-Dove.

• Three near the high ridge between the Rio Lechera and Portillo (at 3000m-3100m).

• Several seen from the truck between Culpina and Camargo (at about 3100m).

37. *Leptotila verreauxi* White-tipped Dove.

Several between Huayco and Cañon Verde.

◆ A singing bird was taped in the background of the recording of another bird.

38. *Leptotila megalura* Large-tailed Dove.

Common in all forested areas from Cañon Verde up to the last more or less forested area on the valley floor near the Rio Lechera, from dry foothill forests to humid mossy "cloud"-forest to dry *Podocarpus* "rainshadow" forest. I only identified the birds by their song.

◆ I taped the song in rather dry forest near Cañon Verde at 1150m. I also taped a singing bird in humid mossy forest below Cerro Campanarios at 2000m.

39. *Geotrygon frenata* White-throated Quail-Dove.

A bird walked on the trail about 3 kms east of Cerro Campanarios, at 2200m. I saw another one about 1 km beyond, at about the same altitude. In the same area I heard 1 or 2 birds singing.

◆ The checklist does not mention this species for Chuquisaca, but note that we also heard it on our previous September/October trip.

40. *Ara militaris* Military Macaw.

• Flight calls were taped above Cañon Verde.

• At least 7 flew over the forest near the Rio Tueras in the morning.

• At least 4 birds were seen near the Rio Nuevo, evening and morning.

• One pair flew low over the forest on the eastern slope of Cerro Bufete at 1500m, in the morning.

41. *Ara auricollis* Golden-collared Macaw.

Regularly seen from Cañon Verde up to El Palmar.

42. *Aratinga acuticaudata* Blue-crowned Parakeet.

Common on the floor of the valley of the Rio Lechera at 2250m.

43. *Aratinga mitrata* Mitred Parakeet.

• Rather common from Narvaez up to El Tunal, at 1600m - 1700m, flocks of up to 25 birds.

• About 20 in a mixed flock with Scaly-headed Parrot *Pionus maximiliani* near the Rio Yahuayhua at 1000m.

• Several seen near El Palmar at 1200m.

• Occasional flocks of about 10 birds in the dry valleys from Cerro Campamentito until the Rio Lechera. 5 pairs nested in vertical cliffs above Puca Pampa at about 2850m.

◆ I taped birds calling from near their nests near Puca Pampa in the early morning of March 26.

44. *Pyrrhura molinae* Green-cheeked Parakeet.

Common in most forested areas, from Narvaez up to the Rio Lechera. It occurs in most types of forest, from dry foothill forest to humid "cloud" forest, but I did not see it in *Podocarpus* forest.

◆ I taped its flight calls near Cerro Campanarios.

45. *Bolborhynchus aymara* Gray-hooded Parakeet.

• Several near Canaletas.

• Several near the Rio Puca Pampa.

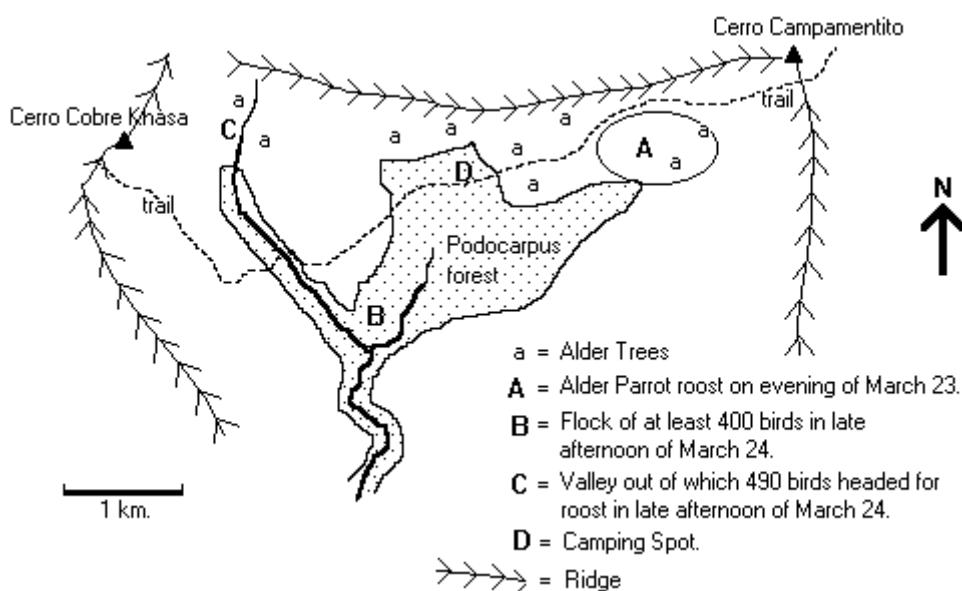
• Probably several in the valley of the Rio Lechera.

46. *Pionus maximiliani* Scaly-headed Parrot.

Often very common from shortly before El Tunal up to El Palmar.

47. *Amazona tucumana* Alder Parrot.

- A scattered flock of about 50 *Amazona* sp. seen from the bus between Canaletas and Narvaez, when crossing a forested ridge at about 2200m, were probably this species.
- Two flocks of about 25 *Amazona* sp. between Narvaez and Huayco at about 1750m must have been this species, because Turquoise-fronted Parrot *Amazona aestiva* does not fly in flocks.



- On the late afternoon of March 23 I came upon a big roost of this species. This was while descending from near the summit of Cerro Campamentito, where the trail gradually descends to the west but has many level stretches as it stays close to the ridge crest. The slopes here are covered with grass, shrub and patches of small *Alnus* trees, the altitude is about 2800m. At that moment I was walking in fog, drizzly rain and strong wind. This weather was caused by clouds which "fell" from the humid eastern and northern slopes over the ridge down into the much drier valley on the other side, where they quickly evaporated (the next day I was well able to see this happening from lower down in the valley). I walked for about 20 minutes with Alder Parrots screeching constantly on the (south-facing) slopes below me. I saw several flocks of up to 60 birds, which seemed to be just flying around, not really going somewhere. On one occasion I saw several birds perched in small *Alnus* trees. I walked into the roost at 17.00h (It became pretty dark at 18.30h at that time of the year).

I camped about 2 kms. further and stayed there for 2 nights, so that I would be able to count the birds the following evening. Unfortunately the clouds started coming over the ridge again after about 16.00h, so that it was useless for me to go to the roost itself. But I was able to see what happened elsewhere in the valley:

- at 16.30h a flock of (very roughly) 400 birds wheeled in circles lower down in the valley. They were so far down that I could barely see them without binoculars, still their noise was very audible.
- at 16.45h a flock of about 50 birds appeared out of the side valley which leads up to a pass northeast of, and close to, Cerro Cobre Khasa. This flock did not fly to the big flock lower down in the valley, but headed straight into the clouds in the direction of the roosting place where I had found them the previous evening.
- between 16.50h and 17.05h 2 scattered flocks totalling about 440 birds appeared out of this same side valley. These birds did not fly to the roosting place of the previous evening, but headed lower down to the part of the forest which was below the clouds.
- until about 18.00h scattered flocks kept flying around above the forest. At times they would alight in the forest. I had the impression that most birds had moved higher up at that time, maybe to those higher *Alnus* slopes inside the clouds.

Because I was only able to see the birds which came in from the northwest, it is quite possible that there were many more birds than the approximately 900 which I counted.

On two occasions I saw these parrots mixing with other species:

- once a flock of parrots was flying together with a flock of about 40 Band-tailed Pigeons *Columba fasciata*.
- once a small flock of 10 *Aratinga mitrata* Mitred Parakeets was flying more or less together with a large flock of amazons.

The following morning, on March 25, there were still many birds flying around. Among them a group of about 100 birds flying lower down in the valley. Later in the day I saw a flock of 50 birds flying through the side valley east of Cerro Cobre Khasa, towards the pass.

• Along the ridge between the Rio Puca Laja and the Rio Lechera at 2600-2700m, on the Rio Lechera side, I saw flocks of 25, 10 and later at 16.15h a flock of 90-100 birds flying in a northern direction (this may well have been the shortest route to the roost on Cerro Campamentito).

◆ I made sound recordings of the birds on the roost on the late afternoon of March 23.

48. *Amazona aestiva* Turquoise-fronted Parrot.

• Pairs and small groups, totalling at least 60 birds, were flying high over El Palmar in a southerly direction, before dusk on March 18. Return flights started already very early after dawn on the following morning.

◆ I made sound recordings of their flight calls.

49. *Piaya cayana* Squirrel Cuckoo.

Rather common from El Tunal until the eastern slope of Cerro Bufete. Often heard and several times seen.

◆ I taped its call in the background of the recording of another species.

50. *Crotophaga ani* Smooth-billed Ani.

A little party of at least 5 birds was seen near El Palmar at 1200m.

51. *Guira guira* Guira Cuckoo.

Common on the grasslands around El Palmar.

◆ I made a sound recording of its alarm calls.

52. *Otus choliba* Tropical Screech-Owl.

• One was singing near El Tunal in the night of March 12, at 1600m.

• One was singing and calling near the Rio Tueras on March 16, at 1150m.

◆ The bird near the Rio Tueras was taped.

53. *Otus hoyi* Montane-forest Screech-Owl.

Several sound recordings made. They are identical to the recordings on the ARA Owls tape (Ref. 4), which were made in Salta, Argentina.

• I made several recordings of its song in humid "cloud" forest on the northeastern slope of Cerro Campanarios, at 2000m, on March 21 and 22. On one occasion two birds were more or less duetting, whereby one bird sang short phrases and the other one the normal, longer song.

• I made a recording of a singing bird in the open *Podocarpus* forest on the southwestern slope of Cerro Campamentito, at 2700m, on March 24.

The song is a rather slow trill, rising in volume at the start, then somewhat rising in speed and pitch and becoming slightly hoarser, and at the end slightly falling back in speed and pitch again.

◆ I never saw it, I only made sound recordings.

♣ The checklist does not mention this species for Chuquisaca (and not even for Bolivia), but note that we also heard it on our previous September/October trip. These records constitute a northward extension of its known distribution.

54. *Pulsatrix perspicillata* Spectacled Owl.

• A singing bird was taped near Cañon Verde, inside rather dry forest at 1150m, on March 14.

• A singing bird was taped in humid "cloud" forest below Cerro Campanarios at 2000m. However, it is only a single far away song, is faintly audible, and I am not certain of it. This is far above the altitudinal range of both *Pulsatrix* species as stated in "Birds of Colombia" (Ref. 5).

◆ A sound recording was made.

♣ The checklist does not mention this species for Chuquisaca.

55. *Glaucidium jardinii* Andean Pygmy-Owl.

I heard a singing bird near my tent in humid "cloud" forest on the northeastern slope of Cerro Campanarios, at 2000m, on March 22. The song was the same as the song on the ARA Owls tape (Ref. 4), taped by Paul Schwartz in 1970 in Venezuela. Unfortunately I made no sound recording, as it only called once or twice.

♣ The checklist does not mention this species for Chuquisaca, but note that we also heard it on our previous September/October trip.

56. *Glaucidium brasiliense* Ferruginous Pygmy-Owl.

◆ I taped a singing bird near El Palmar, at 1100m.

57. *Speotyto cunicularia* Burrowing Owl.

I saw two small parties on the boulder-covered slopes east of El Palmar.

♣ The checklist does not mention this species for Chuquisaca, but note that I saw it near Culpina in August.

58. *Ciccaba huhula* Black-banded Owl.

See the text under the next species.

- A bird was singing near Cañon Verde in dry forest at 1150m on March 14. Another bird, probably the female, was calling at the same time with single calls nearby.

Slow descending series of about 8 identical not-too-short 'WOOW' notes were heard throughout the same night, at long intervals of up to 15 minutes. Each note was rising in pitch. I made recordings of the last 3 notes of two calls. I have a tape of a singing *C. huhula* near Vallegrande in Dpto. Santa Cruz, where the same bird, or another nearby bird, produces an identical call (Ref 6). This same call is found on the ARA Owls tape (Ref. 4), taped by Ben B. Coffey near Tingo Maria in Peru in 1971, but on a recording of a singing pair of Band-bellied Owls *Pulsatrix melanota*! I am 99% certain that this call is not made by *P. melanota*, but by *C. huhula*!

- A bird was singing near the Rio Tueras at 950m on March 16, inside dry forest. The same call as near Cañon Verde (ie the slow series) was also heard.

◆ Sound recordings of songs and of parts of calls were made.

♣ The checklist does not mention this species for Chuquisaca

59. *Ciccaba albifrons* Rufous-banded Owl.

My impression is that the songs of this species and *C. huhula* can be separated by the last loud note: the last note of the *albifrons* song being higher-pitched, shorter and louder. The songs on the ARA tape (Ref. 4) are a good example. I also have several recordings of *albifrons* songs from 2500m-2700m in the Yungas of Cochabamba. On my tapes of *huhula* songs, the last note is variable, but usually lower pitched, less loud and less accented. I have recordings from 1050m and 1450m near Vallegrande, Dpto. Santa Cruz, and a recording made by Ted Parker at 800m in Amboró, also Dpto. Santa Cruz.

"Series" calls can be identified in the same way: the calls of *albifrons* consist of higher-pitched and shorter notes, and are faster. I have recordings of parts of these calls from the Yungas of Cochabamba, at 2500-2700m. For the "series" calls of *huhula*, see the text under that species.

- A singing bird was taped in humid "cloud" forest below Cerro Campanarios, at 2000m, on March 22. Another bird was calling at the same time with loud single calls nearby. Also, loud "series" calls were heard.

◆ A sound recording was made.

♣ The checklist does not mention this species for Chuquisaca, but note that we also heard it in the same location on our September/October trip. This would constitute a southward extension of its known distribution.

60. *Nyctibius griseus* Common Potoo.

A bird was singing near Cañon Verde inside dry forest at 1150m. Unfortunately I made no sound recording, because it stopped singing when I came too close.

♣ The checklist does not mention this species for Chuquisaca.

61. *Hydropsalis brasiliiana* Scissor-tailed Nightjar.

A nightjar with a long straight tail was seen briefly over a grassy and shrubby slope near El Tunal at 1600m, on March 12. It may have been this species.

62. *Chaetura andrei* Ashy-tailed Swift.

A large flock of at least 25 birds was seen near the Rio Nuevo, southeast of El Palmar at 1100m, on March 18.

63. *Aeronautes montivagus* White-tipped Swift.

- A dispersed flock of at least 25 birds swirled over the slopes of Cerro Bufete at 2500m on the morning of March 21.
- A single bird was seen well while silently flying back and forth over a grassy slope at about 2600m in the valley of the Rio Lechera, on March 27.

◆ Sound recordings of the flock on Cerro Bufete were made.

♣ The checklist does not mention this species for Chuquisaca. These records constitute a southward extension of its known distribution.

64. *Aeronautes andecolus* Andean Swift.

Calling birds were often present above the town of Camargo at 2400m, on March 29.

65. *Phaethornis pretrei* Planalto Hermit.

- Regularly seen, and its call regularly heard, from the Rio Yahuayhua until the eastern slope of Cerro Bufete. On two occasions I heard it singing. It probably occurred before the Rio Yahuayhua, but then I didn't know its call.

◆ I taped its song in shrubby habitat on the banks of the Rio Yahuayhua at 1000m, on March 15. After playback it showed itself well.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

66. *Colibri coruscans* Sparkling Violetear.

Several seen from the eastern slope of Cerro Campamentito until near Puca Pampa, at altitudes between 2600m and 2900m.

- ◆ I taped its calls.

67. *Colibri serrirostris* White-vented Violetear.

A juvenile of probably this species was seen near San Josecito at about 950m, on March 13. Description: "a rather large hummer; below generally white, with several blackish roundish spots on the breast; flanks seemed somewhat brownish; has blue on the undertail".

- ♣ The checklist does not mention this species for Tarija.

68. *Chlorostilbon aureoventris* Glittering-bellied Emerald.

Regularly seen from Narvaez until El Palmar, at altitudes between 1000m and 1700m.

69. *Thalurania furcata* Fork-tailed Woodnymph.

A male was seen near Cañon Verde, at about 1000m.

70. *Amazilia chionogaster* White-bellied Hummingbird.

- A common bird in open shrubby areas in the foothills, eg around San Josecito at 900m and near the Rio Nuevo at 1100m.

- Very common on a meadow full of flowers on the northeastern slope of Cerro Campamentito at 2600m, on march 23, together with many other hummers.

- ◆ I taped its song near the Rio Nuevo

71. *Adelomyia melanogenys* Speckled Hummingbird.

Quite common from Cerro Bufete to Cerro Campamentito. I possibly heard it singing on the eastern slope of Cerro Bufete at 1800m. A bird of rather humid forest and shrub, as it did not seem to occur in the drier forest southwest of Cerro Campamentito.

72. *Eriocnemis glaucopoides* Blue-capped Puffleg.

Many seen and heard from Cerro Campanarios to the *Podocarpus* forest on the southwestern slope of Cerro Campamentito, at altitudes between 2000m and 2700m.

73. *Sappho sparganura* Red-tailed Comet.

A generally very common bird in open areas from Cerro Bufete to Chirijara.

- ◆ I made three sound recordings:

- flight calls and wingsound
- its short song of sputtering notes
- a song-like succession of sharp 'tst' notes, high 'tie' whistles and brief rattles.

74. *Microstilbon burmeisteri* Slender-tailed Woodstar.

- At least 1, but probably 3, females were seen together with many other hummers on a meadow full of flowers on the northeastern slope of Cerro Campamentito at 2600m, on march 23. All were visiting flowers.

- Several females and a splendid male were seen close to the Rio Lechera, on a slope with tall grass and many herbs, at 2300m-2400m. The male was up in the air, probably chasing insects. The females were visiting flowers, although I saw one female flying about 2 - 3 meters above the ground.

- ◆ I taped its wingbeat.

75. (*Calliphlox amethystina*) Amethyst Woodstar).

Two female woodstars of possibly this species were seen south of San Josecito, one along a stream and the other nearby, in shrubby and rather dry habitat at about 1100m. Both were chasing insects up in the air, before an approaching thunderstorm. The birds had conspicuous white flank patches, but so does Slender-tailed Woodstar.

I think that these birds were possibly this species because of the low altitude and the habitat, not because of any fieldmarks I saw.

- ♣ The checklist does not mention this species for Tarija.

76. *Trogon personatus* Masked Trogon.

Two birds were calling in humid "cloud" forest on the northeastern slope of Cerro Campanarios at 2000m on March 22.

- ◆ Sound recorded.

- ♣ The checklist does not mention this species for Chuquisaca, but note that we saw it southeast of Azurduy (which is to the north of El Palmar) on our previous September/October trip. This record constitutes a southward extension of its known distribution.

77. *Trogon curucui* Blue-crowned Trogon.

I heard several between Cañon Verde and El Palmar. It is probably common. Near Cañon Verde a bird came close after playback.

♦ I sound recorded its song.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

78. *Momotus momota* Blue-crowned Motmot.

I heard its tremulous dawn-song in dry forest near Cañon Verde at 1150m, and also in forest southeast of El Palmar at 1100m.

♦ Recordings of its dawn-song were made.

79. *Chloroceryle amazona* Amazon Kingfisher.

One was seen near Canaletas at about 2000m.

80. *Chloroceryle americana* Green Kingfisher.

One was seen near Huayco at about 1700m.

♣ The checklist does not mention this species for Chuquisaca.

81. *Nystalus maculatus* Spot-backed Puffbird.

I heard several birds calling between Huayco and the Rio Pilaya.

82. *Ramphastos toco* Toco Toucan.

A rather common bird from Cañon Verde to the eastern slope of Cerro Bufete (where I sound recorded it at 1500m). Near the Rio Nuevo I saw a flock of 16 birds.

♦ I made several sound recordings of it rasping calls.

83. *Picumnus cirratus* White-barred Piculet.

Rather common between Narvaez and Cañon Verde. All of them were of the subspecies Ocellated Piculet *Picumnus cirratus dorbignianus*.

84. *Veniliornis frontalis* Dot-fronted Woodpecker.

• I saw a pair between El Tunal and San Josecito at about 1300m in dry Quebracho-type forest. One bird was drumming, producing very fast drums.

• I saw 2 near the Rio Lechera at 2300m, in rather open country in large leguminous trees which were taming with other birds as well.

85. *Piculus rubiginosus* Golden-olive Woodpecker.

• I saw one between El Tunal and the Rio Pilaya, but I did not write down the elevation.

• I saw a male on the eastern slope of Cerro Bufete at about 1500m.

86. *Colaptes rupicola* Andean Flicker.

I saw several from near the Rio Puca Pampa until Villa Charcas, at altitudes from 2650m upwards.

87. *Dryocopus lineatus* Lineated Woodpecker.

A bird of probably this species was seen, and its drums sound recorded, near Cañon Verde in dry forest at 1150m. I initially identified it as *Campephilus melanoleucus* Crimson-crested Woodpecker, but later inspection of sound recordings of drums at this location show that they were made by a *Dryocopus* sp.

♦ Its drums were taped.

88. *Campephilus leucopogon* Cream-backed Woodpecker.

• I saw a bird between Narvaez and Huayco, at about 1750m.

• I saw two birds near Cañon Verde, in dry forest at 1150m. In the same location I also saw Crimson-crested Woodpecker *Campephilus melanoleucus*.

See the Note under the previous species.

♣ The checklist does not mention this species for Chuquisaca.

89. *Sittasomus griseicapillus* Olivaceous Woodcreeper.

A common bird from the Rio Pilaya until the eastern slope of Cerro Bufete. The bird was probably common south of the Rio Pilaya as well, but then I didn't know the call. One of the characteristic sounds of the foothill forests, in March anyway.

♦ I taped it several times, when calling in the background of recordings of other species.

90. *Xiphocolaptes major* Great Rufous Woodcreeper.

Seen a few times between Cañon Verde and El Palmar, and heard at dusk and dawn at 3 campsites out of 4 on this stretch. This bird seems to be absolutely silent during the day, and upon approach of a person it usually slips silently to the other side of the tree. Only very early at dawn and very late at dusk its loud call is heard one or at most a few times. It is probably a common bird.

◆ I taped parts of its call near Cañon Verde, on March 14.

91. *Lepidocolaptes angustirostris* Narrow-billed Woodcreeper.

A rather common bird from El Tunal to El Palmar.

92. *Geositta tenuirostris* Slender-billed Miner.

A party of about 10 birds was present on a field near Villa Charcas.

93. *Upucerthia andaecola* Rock Earthcreeper.

Often seen and heard between Puca Pampa and Chirijara.

94. *Cinclodes atacamensis* White-winged Cinclodes.

- I saw several near Canaletas.
- At least 1 was present on the Rio Puca Pampa.
- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

95. *Furnarius rufus* Rufous Hornero.

Several were present near El Palmar.

96. *Leptasthenura fuliginiceps* Brown-capped Tit-Spinetail.

- A common bird on Cerro Campamentito, from above the treeline (at about 2750m) on its northeastern slope until the *Podocarpus* forest on its southwestern slope at 2700m.
- One seen above Puca Pampa at 2900m.
- ◆ I made recordings of continuous song-like calls made by several birds, on March 24.

97. *Synallaxis azarae* Azara's Spinetail.

- Calling birds at El Tunal (1600m) and near the Rio Pilaya (900m) might have been this species, but may also have been Sooty-fronted Spinetail *Synallaxis frontalis*.
- A calling bird was seen and taped between the Rio Yahuayhua and the Rio Tueras at 1500m.
- The bird was common from the eastern slope of Cerro Bufete to the *Podocarpus* forest on the southwestern slope of Cerro Campamentito, in all habitats except grassland.
- ◆ I made several sound recordings of its loud calls.

98. *Synallaxis frontalis* Sooty-fronted Spinetail.

I saw one near the Rio Nuevo at 1100m. Its alarm call was identical to the alarm call of Pale-breasted Spinetail *Synallaxis albescens*.

99. *Synallaxis albescens* Pale-breasted Spinetail.

I saw 3 in scrub on the southern bank of the Rio Pilaya.

◆ I made a sound recording of the alarm calls of one bird.

100. *Poecilurus scutatus* Ochre-cheeked Spinetail.

Rather common in the foothill forests, from the Rio Pilaya (and probably before) to the lower reaches of the eastern slope of Cerro Bufete.

◆ A sound recording was made close to the Rio Pilaya.

101. *Cranioleuca pyrrhophia* Stripe-crowned Spinetail.

- Several were seen between Narvaez and Cañon Verde, some were singing.
- Rather common in the open *Podocarpus* forest on the southwestern slope of Cerro Campamentito, often they were singing.

102. *Asthenes dorbignyi* Creamy-breasted Canastero.

Rather common on stony slopes from Puca Pampa onwards.

103. *Asthenes (pudibunda) heterura* Maquis Canastero.

- One bird was seen and heard above Puca Pampa, at 2900m, on March 25.
- One bird was seen and heard while I was descending into the valley of the Rio Puca Laja, at about 2850m, on March 26. The bird was very nervous because of me, calling constantly, while flying back and forth.
- One bird was heard west of Portillo, at about 3000m, on March 27.
- All observations were in similar habitat: dry, stony slopes with bunchgrass, Yuccas, weeds and low scrub. The birds I saw were never on the ground, but always clambering about low in the scrub.
- The birds I saw were much like the drawing in Fjeldså and Krabbe. However, I had the impression that the tail was evenly brown without darker central feathers, but it may well be that I did not see this correctly.
- ◆ I made sound recordings of the first two birds. The calls are high-pitched descending trills, these are also or maybe exclusively used as alarm calls. There is also a high-pitched rising 'tuit' call, similar to Scribble-tailed Canastero *Asthenes maculicauda*, which were probably made by the same bird.
- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip. These records constitute a southward extension of its known distribution.

104. *Phacellodomus rufifrons* Rufous-fronted Thornbird.

One seen near the Rio Lechera at 2300m.

Note: I did not pay much attention to calling thornbirds.

- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

105. *Phacellodomus striaticeps* Streak-fronted Thornbird.

I saw several near the Rio Puca Pampa at about 2650m, but see the note under the previous species.

106. *Syndactyla rufosuperciliata* Buff-browed Foliage-gleaner.

A common bird from Narvaez to the forest on the southwestern slope of Cerro Campamentito, in all kinds of forest from foothill forest to cloud forest to the drier *Podocarpus* forest on C. Campamentito. However, I did not see it further west of Cerro Campamentito, and neither did we on our previous September/October trip.

- ◆ I made several recordings of its calls.

107. *Xenops rutilans* Streaked Xenops.

Regularly seen between El Tunal and the eastern slope of Cerro Bufete, all below 1500m, and always in mixed flocks.

- ◆ I taped the song of what was probably this species.

108. *Lochmias nematura* Sharp-tailed Streamcreeper.

One was seen along the stream which comes down the small valley east of Cerro Cobre Khasa at 2650m, on March 25.

109. *Batara cinerea* Giant Antshrike.

- A bird was singing near Cañon Verde, inside dry forest, at 1150m on March 14.
- Very probably, a calling bird was taped in humid "cloud" forest on the northeastern slope of Cerro Campanarios at 2000m on March 22. The call is a low trill, which slows down while remaining on the same pitch. This call is also produced by *Taraba major* Great Antshrike, but that species is not likely to occur in this habitat.
- ◆ Its song and call were sound recorded.

110. *Thamnophilus caerulescens* Variable Antshrike.

A common bird from Narvaez until the forest on the southwestern slope of Cerro Campamentito, in all kinds of forested and shrubby habitats up to 2700m.

- ◆ I taped its calls several times, and its song once.

111. *Thamnophilus ruficapillus* Rufous-capped Antshrike.

- One was seen between Narvaez and Huayco.
- One was seen between Cerro Bufete and Cerro Campanarios, at 2200m.

112. *Herpsilochmus pileatus* Black-capped Antwren.

Rather common in dry foothill forests, seen and mainly heard from El Tunal to the Rio Tueras.

- ◆ I made recordings of its calls.

113. *Grallaria albicula* White-throated Antpitta.

This species was often heard from the eastern slope of Cerro Bufete to the northeastern slope of Cerro Campamentito at altitudes between 1500m and 2500m. I never heard it in humid high-rising "cloud" forest (which is found from Cerro Campanarios up to halfway up Cerro Campamentito), although I camped one whole day in it.

♦ I made a recording of its song. I used the recording for playback, and although the originator of the song, which was singing very nearby, did not show itself, another bird nearby started singing and showed itself wonderfully.

♣ The checklist does not mention this species for Chuquisaca, but note that we also heard it on our previous September/October trip.

114. *Melanopareia maximiliani* Olive-crowned Crescentchest.

One calling bird was taped above Puca Pampa, at 2900m, on March 25. The next morning I heard another bird calling a few hundred meters further along the trail.

♦ I taped its calls.

115. *Scytalopus (femoralis) boliviensis* White-crowned Tapaculo.

• Two birds were singing in a humid ravine on the upper reaches of the Rio Yahuayhua, at about 1500m.

• Two birds were singing near a stream on the eastern slope of Cerro Bufete, at 1450m - 1500m.

The song is a rapid trill which gradually slows down and ends as a long (and sometimes endless) series of single calls. The start of the song is characteristic: the first few notes descend very rapidly in pitch, and then the trill remains almost stable in pitch, rising only slightly. All birds heard sang very infrequently.

♦ I made a recording of the song (but missed the initial and most characteristic part of it), which ended as an endless series of alarm calls (because of my presence). I used the recording for playback, which worked well.

♣ The checklist does not mention this species for Chuquisaca, but note that we also heard it on our previous September/October trip. These records constitute a southward extension of its known distribution.

116. *Scytalopus (magellanicus) zimmeri* White-browed Tapaculo.

• Two were heard on humid shrubby slopes between Cerro Bufete and Cerro Campamentito at 2300m - 2400m.

• One was heard in the forest on the southwestern slope of Cerro Campamentito at 2700m, in mixed and open *Alnus*/*Podocarpus* forest.

• One was heard along a sidestream of the Rio Puca Pampa at about 2700m, in dry surroundings with only small shrubs along the stream itself.

♦ I taped:

- a loud double note call, very probably made by this species.

- the song, in the background of the recording of another bird.

117. *Phyllomyias sclateri* Sclater's Tyrannulet.

♦ Calls (songs?) were taped:

- near El Tunal in rather open habitat, at 1600m on March 13.

- near Cañon Verde inside dry forest, at 1150m on March 14.

118. *Camptostoma obsoletum* Southern Beardless Tyrannulet.

Several were seen and (more often) heard between Huayco and Cañon Verde.

119. *Phaeomyias murina* Mouse-colored Tyrannulet.

At least 2 birds were seen, heard and taped near El Tunal, in small trees (amongst them *Prosopis*) on a grassy area, at 1600m, on March 13.

♦ A sound recording of its calls was made.

120. *Myiopagis viridicata* Greenish Elaenia.

• At least one was seen near the Rio Pilaya, in muddy forest at 900m.

• One was seen near Cañon Verde, inside dry forest at 1150m.

• One was seen near the Rio Tueras, at about 1050m.

121. *Elaenia albiceps* White-crested Elaenia.

• It was common near Canaletas, at 2000m - 2250m.

• Rather common between Cerro Bufete and Cerro Campamentito.

• Common in the dry *Podocarpus* forest on the southwestern slope of Cerro Campamentito at 2700m, and very common in a small dry *Podocarpus* forest west of the Rio Lechera at about 3000m.

♦ I taped its song SW of Cerro Campamentito, and several different calls in various places. I once taped two birds that stayed close together but uttered different calls.

122. *Elaenia parvirostris* Small-billed Elaenia.

I am not absolutely convinced that the following observations are correct, because I did not hear them calling. All had large white eyerings and a round head without visible white on top.

- One was seen near the Rio Pilaya at 900m.
- Several were seen near the Rio Lechera at 2300m.

123. *Mecocerculus leucophrys* White-throated Tyrannulet.

- One was seen near Canaletas (about 2100m), and it was regularly seen between Narvaez (1750m) and El Tunal (1600m).

- From about halfway up the eastern slope of Cerro Bufete until the forest on the southwestern slope of Cerro Campamentito this species was often the commonest bird. I also saw it on the ridge between the Rio Puca Laja and the Rio Lechera.

- ◆ I taped the calls of a small party of these birds.

124. *Mecocerculus hellmayri* Buff-banded Tyrannulet.

One seen in the humid "cloud" forest on the northeastern slope of Cerro Campanarios at 2000m.

125. *Serpophaga nigricans* Sooty Tyrannulet.

- One seen along the river near Canaletas, at about 2050m.
- One seen between Huayco and El Tunal, at 1600m.

126. *Leptopogon amaurocephalus* Sepia-capped Flycatcher.

At least 3 pairs were seen between the Rio Yahuayhua and the Rio Tueras, always inside rather humid forest, at altitudes above 1400m.

127. *Phylloscartes ventralis* Mottle-cheeked Tyrannulet.

Quite common in foothill forests, from Narvaez to the eastern slope of Cerro Bufete.

128. *Hemitriccus margaritaceiventer* Pearly-vented Tody-Tyrant.

Several seen and heard between El Tunal and Cañon Verde, 1 near the Rio Tueras, and several near the Rio Nuevo, at altitudes up to about 1300m.

- ◆ I taped two different calls:
 - the well-spaced 'tuk' calls. This call is its most characteristic call.
 - a quick descending succession of 5 loud 'kew' notes. I had never heard this call before. The frequency of this call went up after I playbacked it. Maybe it had to do with young nearby?

129. *Todirostrum plumbeiceps* Ochre-faced Tody-Flycatcher.

Frequently heard and sometimes seen between El Tunal and the eastern slope of Cerro Bufete (where I heard it up to about 1800m).

- ◆ I taped two different calls:
 - a bird uttering single churrs,
 - a bird uttering sequences of 5 shorter churrs, each one slightly lower-pitched.

130. *Tolmomyias sulphurescens* Yellow-olive Flycatcher.

A typical bird of the foothill forests, common from El Tunal to the eastern slope of Cerro Bufete (where I heard the last one at 1500m).

- ◆ Its calls were taped.

131. *Myiobius fasciatus* Bran-colored Flycatcher.

Several seen between Huayco and the Rio Pilaya.

132. *Pyrrhomystis cinnamomea* Cinnamon Flycatcher.

I saw one pair at 1800m, and one bird at 2000m, all on the eastern slope of Cerro Bufete and all in mixed flocks.

133. *Contopus fumigatus* Greater Pewee.

- 1 or 2 were seen between El Tunal and the Rio Pilaya, at 1300m.
- 1 bird was calling at dusk near the Rio Tueras.
- Several were seen near the Rio Lechera at 2300m, in some large trees where many other birds were present as well.
- ◆ I made a sound recording of the bird near the Rio Tueras.

134. *Contopus cinereus* Tropical Pewee.

One or two were seen between El Tunal and the Rio Pilaya, at 1300m.

135. *Sayornis nigricans* Black Phoebe.

Rather common along bigger streams in the foothills. Regularly seen between El Tunal and El Palmar. Also heard singing.

136. *Xolmis irupero* White Monjita.

Two birds were present near the Rio Nuevo, at 1100m on March 18.

137. *Agriornis montana* Black-billed Shrike-Tyrant.

This bird was occasionally seen on open slopes from Cerro Campamentito onwards, and became common from Portillo onwards. All sightings were above 2700m. At dawn I heard several singing birds on the bare slopes along the road which descends into the valley of Villa Charcas. See the text of the following species.

138. *Agriornis andicola* White-tailed Shrike-Tyrant.

I saw a displaying Shrike-Tyrant with a conspicuous white tail high up in the sky above a slope near Canaletas at about 2050m. The display flight was as described in Fjeldså and Krabbe for this species. The distance between the stalls was quite short. It may have been a Black-billed Shrike-Tyrant *Agriornis montana*, but I have seen that bird quite often and never saw it display like this.

♣ The checklist does not mention this species for Tarija.

139. *Muscisaxicola maculirostris* Spot-billed Ground-Tyrant.

One bird was seen in the valley of the Rio Puca Laja, at 2850m.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

Note: two other species of Ground-Tyrants were seen, probably Rufous-naped GT *M. rufivertex* on Cerro Campamentito at 2800m and Plain-capped GT *M. alpina* west of Portillo at 3200m, but neither of them with sufficient certainty.

140. *Knipolegus signatus* Plumbeous Tyrant.

- One was seen between Huayco and El Tunal, at about 1600m.
- One female was seen on Cerro Bufete, at 2350m.
- One bird was seen on the northeastern slope of Cerro Campamentito, at about 2500m.
- Several were seen in the *Podocarpus* forest on the southwestern slope of Cerro Campamentito, at 2700m.

I think this bird was quite common at higher altitudes, and that I saw only a few because its behaviour is inconspicuous and it did not sing anymore.

141. *Knipolegus aterrimus* White-winged Black-Tyrant.

- Two males were seen near Canaletas at about 2050m, one of them singing while performing those amusing display flights.
- One male was seen near the Rio Puca Pampa at 2700m, and several others in the valley of the Rio Lechera from 2350m to 3000m.

It is strange that I saw only males.

142. *Satrapa icterophrys* Yellow-browed Tyrant.

One was seen near Canaletas at about 2050m, 2 near Narvaez at 1750m, and a pair near El Tunal at 1600m.

143. *Hirundinea ferruginea* Cliff Flycatcher.

One was seen near Puca Pampa at 2700m, and 1 somewhere between the Rio Lechera and Portillo.

144. *Casiornis rufa* Rufous Casiornis.

One was seen between El Tunal and San Josecito at 1300m, and another between the Rio Yahuayhua and the Rio Tueras.

145. *Myiarchus tuberculifer* Dusky-capped Flycatcher.

- I taped a bird near El Tunal at 1600m, on March 13.
 - I saw and sound recorded one pair near Cañon Verde inside dry forest at 1150m, on March 14/15.
 - It was common from the eastern slope of Cerro Bufete (from about 1500 m upwards) to the forest on the southwestern slope of Cerro Campamentito, at altitudes between 1500m and 2700m.
- ♦ I sound recorded this bird on several occasions:
- near Cañon Verde at dusk, a bird was uttering a monotonous and rapid series of 'kee-keew' phrases, with the normal plaintive call interspersed.
 - the following morning a pair was encountered in the same location. It uttered a variety of calls, mostly the two which were heard in a constant series the evening before.
 - on the eastern slope of Cerro Bufete I taped a bird which only uttered the normal plaintive calls. I never heard other calls than this call up to Cerro Campamentito.

146. *Myiarchus tyrannulus* Brown-crested Flycatcher.

I saw several between El Tunal and El Palmar, all in rather open habitat at altitudes up to 1300m.

♦ I taped calls of a pair near the Rio Nuevo.

147. *Pitangus sulphuratus* Great Kiskadee.

Several were seen and heard near the Rio Pilaya at 900m, and one was heard near the Rio Lechera at 2250m.

148. *Myiodynastes maculatus* Streaked Flycatcher.

Several were seen between Narvaez and Cañon Verde.

149. *Empidonax varius* Variegated Flycatcher.

Several were seen between Huayco and El Tunal.

150. *Legatus leucophaius* Piratic Flycatcher.

Probably heard singing several times, eg near Cañon Verde at about 1000m, and near the Rio Nuevo at 1100m. However, I never saw it, and I am not sure of it.

The checklist does not mention this species for Chuquisaca.

151. *Tyrannus melancholicus* Tropical Kingbird.

Common in open areas, from Narvaez to El Palmar, at altitudes up to 1750m.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

152. *Tyrannus savana* Fork-tailed Flycatcher.

Several were seen on the southern bank of the Rio Pilaya at 900m.

153. *Pachyramphus polychopterus* White-winged Becard.

Two birds were seen near Cañon Verde, and a bird was probably heard between the Rio Yahuayhua and the Rio Nuevo.

♦ The call of a male was taped.

154. *Pachyramphus validus* Crested Becard.

A male was seen in a mixed flock on the northeastern slope of Cerro Campamentito at 2250m, on March 23.

155. *Phytotoma rutila* White-tipped Plantcutter.

One was seen west of Culpina at 2950m. on March 28.

156. *Chiroxiphia boliviana* Yungas Manakin.

This bird was very common and very noisy in a narrow altitudinal zone between 1450m and 1600m on the eastern slope of Cerro Bufete.

♦ I made recordings of its loud calls, of single males and of pairs or maybe triplets of males.

157. *Notiochelidon cyanoleuca* Blue-and-white Swallow.

• Several were seen near Canaletas.

• It was regularly seen from Cerro Bufete to Portillo, at altitudes between 2250m and 3000m. Some birds between the Rio Lechera and Portillo at 3150m were possibly Andean Swallows *Hirundo Andecola*.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

158. *Troglodytes aedon* House Wren.

Regularly seen from Narvaez to the Rio Lechera.

159. *Troglodytes solstitialis* Mountain Wren.

Quite common in forests from the humid "cloud" forest on the northeastern slope of Cerro Campanarios at 2000m to the open *Podocarpus* forest on the southwestern slope of Cerro Campamentito at 2700m.

♦ Its calls were taped.

160. *Polioptila dumicola* Masked Gnatcatcher.

One bird was seen between the Rio Pilaya and Cañon Verde.

161. *Myadestes ralloides* Andean Solitaire.

A bird was heard singing close to the river between Cerro Campanarios and Cerro Campamentito at 2000m on March 23. Unfortunately, it stopped singing when I was unpacking the recorder.

♣ The checklist does not mention this species for Chuquisaca. This record constitutes a considerable southward extension of its known distribution, because it is also not recorded from the yungas of Santa Cruz!

162. *Catharus dryas* Spotted Nightingale-Thrush.

A bird was seen and its song taped in humid "cloud" forest on the northeastern slope of Cerro Campanarios at 2000m.

♦ Its song was taped.

163. *Turdus chiguanco* Chiguanco Thrush.

• Several were seen near Canaletas.

• It was rather common in open country from Cerro Bufete to Villa Charcas.

164. *Turdus serranus* Glossy-black Thrush.

Several were seen in humid "cloud" forest on the northeastern slope of Cerro Campanarios at 2000m. I heard no singing birds, as opposed to our previous September/October trip.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw and sound recorded it on our previous September/October trip.

165. *Turdus nigriceps* Slaty Thrush.

♦ Calls were taped in humid "cloud" forest on the northeastern slope of Cerro Campanarios at 2000m.

166. *Turdus rufiventris* Rufous-bellied Thrush.

- Regularly seen between Narvaez and Cañon Verde, at lower elevations it was quite common.
- Several were seen near El Palmar.

167. *Cyanocorax cyanomelas* Purplish jay.

A common bird in all habitats from Narvaez to El Palmar. I also saw and heard a party on the northeastern slope of Cerro Campamentito, at 2300m on March 23.

♦ Its scolding calls were taped.

168. *Cyanocorax chrysops* Plush-crested Jay.

A common bird in all habitats from Narvaez to El Palmar.

♦ One type of alarm call was taped.

169. *Cyclarhis gujanensis* Rufous-browed Peppershrike.

Generally common from Narvaez to Cerro Campanarios, and 1 near the Rio Lechera, at altitudes up to 2250 m. More often heard than seen.

♦ Its loud, melodious, descending call was taped in the background of the recording of another species. I find it strange that this call is not mentioned in one of the field guides, because outside the breeding season this characteristic call is often heard, but the song only rarely.

170. *Vireo olivaceus* Red-eyed Vireo.

• Regularly seen and heard between Narvaez and the Rio Yahuayhua.

• One was heard singing near the Rio Lechera at 2250m, and at least 5 were seen nearby in several large leguminous trees together with many other birds.

♦ Its song was taped in the background of the recording of another species.

171. *Zonotrichia capensis* Rufous-collared Sparrow.

Common in open areas, never seen inside forest. At all altitudes.

172. *Ammodramus humeralis* Grassland Sparrow.

• 2 seen near Narvaez, on a grassy slope with scrub, at 1750m.

• Rather common on the meadows around El Palmar, sometimes singing, at 1200m.

173. *Phrygilus unicolor* Plumbeous Sierra-Finch.

Often seen on grassy slopes from Cerro Bufete westwards.

174. *Phrygilus plebejus* Ash-breasted Sierra-Finch.

Rather common from Portillo westwards, in dry and stony habitats. Singing at dusk and dawn.

175. *Phrygilus alaudinus* Band-tailed Sierra-Finch.

Common from Puca Pampa westwards, in less stony habitats than the previous species, at altitudes above 2600m.

176. *Lophospingus griseocristatus* Gray-crested Finch.

Two seen on the valley floor of the Rio Lechera, at 2250m.

177. *Diuca diuca* Common Diuca-Finch.

One seen along the road about 2 km west of Culpina, in a level area with bare soil and scattered *Prosopis* trees and scattered houses.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip, in the same location. This record constitutes a northward extension of its known distribution.

178. *Poospiza boliviana* Bolivian Warbling-Finch.

One seen near the Rio Lechera, at about 2500m.

179. *Poospiza hypochondria* Rufous-sided Warbling-Finch.

• Several were seen near Canaletas.

• Common between the Rio Puca Pampa and the Rio Lechera.

• One seen near Chirijara.

180. *Poospiza erythrophrys* Rusty-browed Warbling-Finch.

- One was seen between Narvaez and Huayco at 1700m.
- Several were seen in the open *Podocarpus* forest on the southwestern slope of Cerro Campamentito, at 2700m.

181. *Poospiza nigrorufa* Black-and-rufous Warbling-Finch.

- One was seen singing near Canaletas, at about 2050m.
- One was seen near Narvaez at 1750m.
- One was seen singing between Huayco and El Tunal at about 1600m.

182. *Poospiza torquata* Ringed Warbling-Finch.

One was seen singing on the valley floor near the Rio Lechera at 2250m.

183. *Poospiza melanoleuca* Black-capped Warbling-Finch.

Regularly seen in clearings between Huayco and the Rio Iripirenda, at altitudes between 800m and 1600m, usually in small parties, sometimes accompanied by other species.

184. *Sicalis citrina* Stripe-tailed Yellow-Finch.

• Two birds were performing their pipit-like songs (song B, see below) and display-flights on a grassy and scrubby slope near Narvaez at 1750m, on March 11 (on the same slope I saw *Ammodramus humeralis* Grassland Sparrow as well). Unfortunately they became silent when I was ready unpacking the recorder.

- One bird was heard singing (song A, see below) when I descended to the Rio Puca Laja at about 2700m.
- Many birds were seen, heard and some were taped on grassy slopes in the valley of the Rio Lechera, at altitudes from 2550m to 2900m. Mostly song A (see below) was heard, but sometimes song B, and occasionally a mixture of the two. At least 3 males were singing, and several females were seen, on slopes east of the river, at about 2400m. One bird was heard singing, and at least 10 were seen, on a meadow east of and close to the river at about 2250m. About 8 males were seen and heard singing while I ascended the slopes west of the river, at altitudes from 2450m to 2900m.

All birds were found on stony slopes with high (ie about 50 cm) and green, but not dense, grass and weeds.

During the display flights the white tail-stripes were sometimes well visible.

◆ I made recordings of songs and calls. This species appears to have two different songs:

- song A was only sung from a perch, usually the top of a shrub or weed with a height of 50 cm up to 100 cm. It starts with a drawn-out sucking 'zzzzzzzz', which becomes gradually louder, followed by two clear and drawn-out whistles, and the song is terminated with a short emphatic 'weet'. The second whistle is lower-pitched than the first, and it descends somewhat in pitch.

- song B was normally sung in short display-flights of only a few meters up followed by a pipit-like descent with spread tail. It consists of a short introductory 'zzzz' note, followed by a rapid chatter, slightly slowing down and slightly descending in pitch.

Sometimes the two songs are joined together. Several times I heard song A followed by the chatter of song B, which would more or less fit the description in Hilty & Brown's "Birds of Colombia".

♣ The checklist does not record this species for Chuquisaca nor Tarija, but note that we also saw it in Chuquisaca on our previous September/October trip.

185. *Sicalis olivascens* Greenish Yellow-Finch.

Common along the Rio Puca Pampa and near Puca Pampa.

186. *Sicalis flaveola* Saffron Finch.

- Several seen near Canaletas at about 2050m.
- Occasionally seen in open areas between Narvaez and El Palmar.
- At least 1 was singing near the Rio Lechera at 2250m.

187. *Embernagra platensis* Great Pampa-Finch.

- Common near Canaletas, juveniles were also seen, on March 11.
- Common from the Rio Puca Pampa to Chirijara.

188. *Sporophila caerulescens* Double-collared Seedeater.

- Was very common near Canaletas, at 2050m - 2250m, many were singing.
- Was common in open areas between Narvaez and the Rio Yahuayhua, between Huayco and El Tunal birds were often singing.
- Several were singing near the Rio Lechera, at 2250m.
- ◆ Sound recordings were made of singing birds near the Rio Lechera.
- ♣ The checklist does not mention this species for Chuquisaca.

189. *Catamenia analis* Band-tailed Seedeater.

- Common near Canaletas, at least one was singing.
- Regularly seen from the Rio Puca Pampa to Portillo. Several birds were singing, and I saw an adult feeding a juvenile between the Rio Lechera and Portillo at 3150m.

190. *Catamenia inornata* Plain-colored Seedeater.

One seen between the Rio Lechera and Portillo at 3050m, but probably more were seen because I did not pay much attention to Sierra-Finches and Seedeaters.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

191. *Arremon flavirostris* Saffron-billed Sparrow.

Quite common in foothill forests, seen from El Tunal to the eastern slope of Cerro Bufete, at altitudes up to about 1400m.

192. *Atlapetes fulviceps* Fulvous-headed Brush-Finch.

- Several seen from Cerro Bufete to Cerro Campamentito, in rather humid habitats.
- Common in drier *Podocarpus* and *Alnus* forests, eg the open *Podocarpus* forest on the southwestern slope of Cerro Campamentito and the patches of *Alnus* forest shortly before Portillo.

193. *Atlapetes torquatus* Stripe-headed Brush-Finch.

- Several between Narvaez and El Tunal.
- One between the Rio Yahuayhua and the Rio Tueras, in a humid ravine at 1450m.
- Rather common in humid forest from the eastern slope of Cerro Bufete at 1900m to Cerro Campamentito.

194. *Coryphospingus cucullatus* Red-crested Finch.

- Rather common between El Tunal and the Rio Pilaya, very common near the river.
- At least one in a clearing near the Rio Yahuayhua.
- Rather common around El Palmar.
- ♦ Its song was taped at dawn at El Tunal.

195. *Paroaria coronata* Red-crested Cardinal.

A party of 5 was seen in riverine shrub on the southern bank of the Rio Pilaya.

196. *Pheucticus aureoventris* Black-backed Grosbeak.

One was seen on the northeastern slope of Cerro Campamentito, in rather open but humid forest at about 2200m.

197. *Saltator aurantiirostris* Golden-billed Saltator.

- Very common near Canaletas.
- Several between El Tunal and the Rio Pilaya, with one singing bird on the bank of the Rio Pilaya (900m).
- One was seen between Cerro Bufete and Cerro Campanarios.
- Generally common from Puca Pampa to Chirijara, most common near habitation.
- ♦ The singing bird on the bank of the Rio Pilaya was taped in the background of the recording of another bird.

198. *Cyanocompsa brissonii* Ultramarine Grosbeak.

- An unseen singing bird was taped near El Tunal, at 1600m.
- One pair was seen on the southern bank of the Rio Pilaya, at 900m.
- A male was seen near the Rio Nuevo, at 1100m.
- ♦ The song was taped.

199. *Catamblyrhynchus diadema* Plush-capped Finch.

Two adult birds together were seen on a steep slope with bamboo and some *Polylepis* on the western side of Cerro Bufete at about 2500m.

♣ The checklist does not mention this species for Chuquisaca.

200. *Chlorospingus ophthalmicus* Common Bush-Tanager.

- Common between Narvaez and Huayco, at altitudes from 1700m to 1800m.
- Common from the foot of the eastern slope of Cerro Bufete to the open *Podocarpus* forest on the southwestern slope of Cerro Campamentito, in all habitats, at altitudes from 1250m to 2800m.

201. *Thlypopsis sordida* Orange-headed Tanager.

- Several together were seen on the southern bank of the Rio Pilaya at 900m.
- One or two were seen in a mixed flock in a clearing on the banks of the Rio Yahuayhua.

202. *Thlypopsis ruficeps* Rust-and-yellow Tanager.

- One was seen on a steep slope with bamboo and some *Polylepis* on the western side of Cerro Bufete at about 2500m.
- At least 15 were seen in a mixed flock in the open *Podocarpus* forest on the southwestern slope of Cerro Campamentito at 2700m. Two of them were adults, the others were juveniles with at most a tiny amount of brown on the head.

203. *Piranga flava* Hepatic Tanager.

One male was seen in the valley of the Rio Lechera, in large leguminous trees which were taming with other birds as well, at 2300m.

204. *Thraupis sayaca* Sayaca Tanager.

- Quite common from Narvaez to Cañon Verde.
- Several near the Rio Lechera at 2250m.

205. *Thraupis bonariensis* Blue-and-yellow Tanager.

- Several were seen near Canaletas at 2000m - 2300m.
- An adult and a juvenile were seen near Puca Pampa, at 2900m.
- One was seen near the Rio Lechera, at 2300m.
- ◆ I taped a short, sharp 'kew' call-note.

206. *Anisognathus flavinuchus* Blue-winged Mountain-Tanager.

One was seen in a mixed flock at 1800m on the eastern slope of Cerro Bufete.

- ♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip on the same location.

207. *Pipraeidea melanonota* Fawn-breasted Tanager.

- Several were seen between Huayco and the Rio Pilaya, at altitudes between 1100m and 1600m.
- Several were seen on Cerro Campamentito, both on the humid northeastern side at 2200m - 2500m, and in the open *Podocarpus* forest on the southwestern side at 2700m.

208. *Euphonia chlorotica* Purple-throated Euphonia.

I never identified this species with certainty (not that I did make much of an effort). It was usually common from El Tunal to El Palmar.

- ◆ I taped it in the background of a recording of another species.

209. *Diglossa baritula* Slaty Flowerpiercer.

- One pair was seen on the northeastern slope of Cerro Campamentito, on a meadow full of flowers together with loads of hummingbirds, at 2600m.
- A male and two females were seen in the open *Podocarpus* forest on the southwestern slope of Cerro Campamentito at 2700m. The two females were together on a mistletoe.

210. *Parula pitiayumi* Tropical Parula.

A very common bird from Narvaez until at least 1500m on the eastern slope of Cerro Bufete.

- ◆ I taped its song near Cañon Verde and on Cerro Bufete.

211. *Geothlypis aequinoctialis* Masked Yellowthroat.

- One or two were seen near the Rio Nuevo at 1100m.
- ◆ I made recordings of its song (or calls?).

212. *Myioborus brunniceps* Brown-capped Whitestart.

A rather common bird from Narvaez to the Rio Lechera, in various habitats from shrub and forest in the foothills, to humid shrub on the ridge between Cerro Bufete and Cerro Campanarios, to a shrubby ravine between dry bunchgrass slopes shortly after Puca Pampa. At altitudes from 1100m to 2900m.

213. *Basileuterus bivittata* Two-banded Warbler.

A common bird in the foothill forests, from Huayco until the eastern slope of Cerro Bufete at about 1600m.

- ◆ I made several recordings of its song and calls. These birds sing alternating duets: one bird sings an ascending phrase, whereupon the other bird follows with a descending phrase, and so on. The calls are not sharp like those of the next species, but a more liquid 'wut'.

214. *Basileuterus signatus* Pale-legged Warbler.

A common bird in higher-elevation forests from about 1800m on the eastern slope of Cerro Bufete to the *Podocarpus* forest on the southwestern slope of Cerro Campamentito at 2700m.

- ◆ I made several recordings of its song and calls. The call is a warbling trill which slows down at the end. First it falls in pitch, then rises and falls again. The trill is not as fast as the song of *B. luteoviridis* Citrine Warbler which was taped near La Paz.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

215. *Psarocolius decumanus* Crested Oropendola.

Regularly seen from the Rio Pilaya to El Palmar. A singing bird was heard on at least two occasions. Nests were also seen.

216. *Icterus cayanensis* Epaulet Oriole.

A party was seen on the southern bank of the Rio Pilaya.

217. *Molothrus badius* Bay-winged Cowbird.

- Several were seen near Canaletas.
- Two were seen between El Tunal and the Rio Pilaya.
- Several were seen near the Rio Puca Pampa.

218. *Molothrus bonariensis* Shiny Cowbird.

One pair was seen near Canaletas.

219. *Carduelis magellanica* Hooded Siskin.

- Several were seen near Canaletas.
- Several were seen from Huayco to the Rio Pilaya.
- Several were seen near El Palmar.
- Rather common at higher altitudes from Puca Pampa to Chirijara.

220. *Carduelis atrata* Black Siskin.

Two were seen near the Rio Puca Pampa at 2650m.

♣ The checklist does not mention this species for Chuquisaca, but note that we also saw it on our previous September/October trip.

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