

JAC
Salvini 1990

Journal

Joseph A. Cook

(1) Friday 15 June
1990

Up early this morning and we headed out to the airport to find Syd ~~who~~ who is flying on through to Buenos Aires, Argentina. He, Justine Anderson and Ron Pine will join our field crew later but are headed down to the SAREM/ASM mammal meetings which are being held in BA. Syd gave me \$7K so that I can look for a vehicle.

(Later in the ~~afternoon~~ we met with Arturo Moscoso, director of CDF-UTD, at the museum and we were to meet later at the Tapecuna)

Teresa Centurion
49726 Casa
42682 Museo

17:30
Office of
CERCONA
outside 3rd Anillo

Met w/ Hugo Hurtado - biologist for Parque Nacional Nell Koenig Mercado, Ing Ruiz (director) had already left. Hurtado showed us several maps (vegetation) of the park and we talked about our upcoming trip out to the park. Ing. Serabia is in charge of technical data for the park. He is responsible for maps etc.

After this meeting we (Lodge, Eduardo, and I) went to the museum to see Teresa Centurion the director. She noted the museum has a small grant from NY Botanical to buy a computer.

JAC
1990

Saturday
16 June

11 am

Spent the night in our room at the zool. We took the nitrogen tanks to Oxigeno which is ~ $\frac{1}{2}$ Km N on the road to Vira-Vira from the 3rd anillo (close to zool). We then drove into town to the LAB office and sent a package to La Ray for Roberto Ria's mother. Bought several items at the grocery store and stopped in at the museo.

When we return from Buenos Aires we will have to move quickly to get to the field by 24 June when we plan to head to Huanchaca.

Met with Nestor Ruiz, the director of Parque Noel Kempff Mercado, and discussed the possibilities for research in the park and we spoke about the convenio between MSB and the park. We also went to the playa de antos where they sell used vehicles and we looked at several. We will need to purchase one for this field season.

Nestor thinks there has been a large influx of mammals and birds into the park from Brasil. The Landsat photos of land use show very well the deforestation that has taken place across the Rio Verde in Brasil. He noted that a species of wood have been exploited in the vicinity of the park by several large assaderos. He says the German Government is donating \$2 million

2000-02-28

We agreed to spend a week beginning
24 June to travel to the Park to look it
over. We will plan on leaving early on Sunday
the 24th so that we can drive to the park
in one day. It is 600 Km from Santa
Cruz to the main park HQ at Los Frailes.

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1990

Sunday
17 June

Up at 07:00. in the room at the zoo. Otto came by at 07:30 and we left for the airport at 08:00. There we met Fernando Terceros and Henry Cuellar, two students from Univ. Gabriel René Moreno and the Museo "Del Neumoff Mercado" and they will accompany us to Buenos Aires. We are travelling to the joint meeting of ASM and SAREM (Sociedad Argentina para el Estudio de los Mammiferos).

I am presenting a part of my dissertation and Jorge is presenting (with Rosanne Humphrey and myself) some of the C. boliviensis chromosome work. We will meet Syd, Justine, Ron Pize, Bruce Hayward, and others there.

It is a long flight from Santa Cruz to Buenos Aires (≈ 2 hr) and we arrived in the early afternoon. Eduardo's wife, Maribe, was there to meet us along with a friend from Chile.

It took us more than an hour to get to downtown on the bus which cost \$2 per person. The taxis are much more expensive. We ran into Marvel Campbell & Rosanne Humphrey two former UNAM students who are working with Mike Mares and they showed us a cheap hotel within walking distance of the SAREM-ASM meeting.

17-22 June Buenos Aires meeting

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1990

23 June

BOLIVIA: Santa Cruz de la Sierra. Up at 5:45 at the zoo. Drove out to Uru-Uru to pick up Terry and Scott on the scheduled 6:30^{am} flight. They were late arriving at 08:30 am. We returned to the zoo and dropped their stuff and then went with Otto to the playa de "used" autos. We looked at several vehicles, the one we wanted was \$15K more than we had to spend. Terry and Otto were to take the vehicle to a mechanic to have it checked out while Jorge, Scott and I went to buy groceries. We decided on a 1978 Toyota 4x4 truck that ended up costing \$5,000. We had looked at it one week before and they had lowered the price \$400. W

Returned to the zoo and spent the evening ~~in~~ picking for our trip to Huanchaca.

24 June
Sunday

Up at 3:50 am and began putting the gear on the vehicles. The truck we had brought yesterday quickly became overloaded and we ended up putting several footlockers on another truck driven by Mike Bennett an English ~~geologist~~ geologist. He had a new Toyota truck (owned by his company CONSUR) and was accompanied by Jim McName, a Canadian geologist.

Comsur 4-5140

Compania Minera del Sur American
Av Monseñor Rivero No 376
Edificio Navalto 2nd Piso
Casilla Q112.

The crew to Huanchaca: Terry Yates, Scott Gardner, Jorge Salazar
Bravo, Mike Bennett, Jim McNamee, Otto Carlos Jordan, Mariano Zalles,
Jose Carlos Herrera, Rosa Leny Cullar, Rose Mary Woods, -

and 3 folks from the park. Hugo Hurtado (Geologist),
Kiko (driver) and Alessandro ^{Yates} (guide). also cousin of Nestor Riz.

We left town finally at 6:00 am and the truck
was too heavily loaded. The rear axle was constantly
thumping as we hit bump after bump. Finally we
unloaded more gear off of it and into Comsur's
vehicle. We headed towards San Ramon via Estacion

El Pailon (Cotoca Rd.). We arrived at San Ramon
about 12:00 hr after having picked up ^{a roadkilled} fox and
touanqua. We arrived at San Javier at 12:49 ad
then picked up a Euphacoetus ♀ km before San Andres.
We hit Concepcion at 14:15, San Silvestre at 15:30
and then broken down (bad coil) 20 km W of
Santa Rosa de la Roca. We were towed by the
geologists into town (Santa Rosa de la Roca) where we

had dinner while the vehicle was being worked on.

Earlier in the afternoon our front drive line had
also broken.

45140
Jim McNamee 29619 -

JAC

A

25 June
1990

Monday

SANOS ROST de la Roca - Rained a little during the night, but it really started pouring ~ 7:30 am. Hugo looked grim throughout the morning as the rain continued to fall. Unloaded our equipment out of the truck and set up the lab in a small house next to the ^{Farsante} ~~Restaurante~~ which is owned by Irving Pedraza we ate breakfast at the restaurant - typical Bolivian roadside wayside. The rain did not let up until early afternoon. The park (Huanchaca) workers decided to wait until tomorrow to make the trip into the park. The roads are very muddy.

Our vehicle is not running due to the coil / points problem. Couldn't get it started all day. Mike Bennet (the geologist) drove us down to town where we picked up the mayor who took us out ^{at 13³⁰} 50E (2 km) to his yucca field where he said there were lots of *Tucus* (cacti). We had a hard time finding the mounds due to the rain which continued till 16:00 hr. We put in a few sets and caught one before we left the field walking for camp. Mike Bennett met us with the truck and gave us a ride back. He and his geologist buddy Jim had been drinking all afternoon. The park workers, including our biologist counterpart Hugo had spent the afternoon partying. The weather

Compañía Minera del Sur SA.
Comsúr

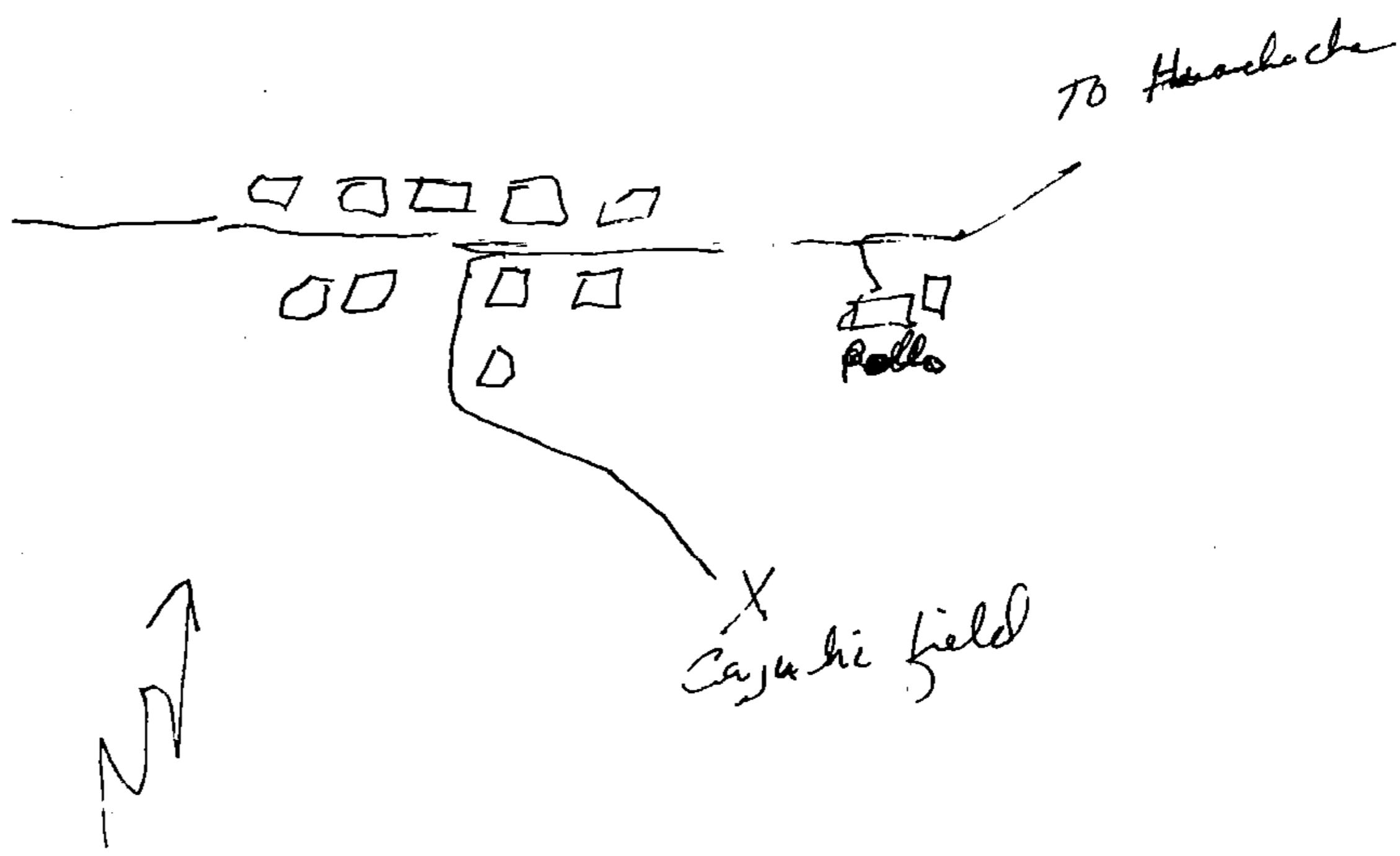
→ Mike Bennett ←

Jefe de Exploracion
Proyecto Santa Cruz

Av. Monseñor Rivero No. 376
Edificio Navarro 2^{do} Piso
Casilla 2112

Teléfonos 4-5140, 2-9619
Telex 4319 K4K Bu.
Fax (591) (33) 34873

Santa Cruz BOLIVIA



TPL
1990

lifted in late afternoon and we got about 1000 shrimps and 2 bat nets near a Ficus tree that was in fruit. We caught 13 bats in all including several Artibeus lituratus, and Chiroderma bilobatum, and Vampyressa bellieri.

Caught another two
at 22:00 H.
SA 21005.
It was dead.

Spent the evening prepping animals and showing our Bolivian colleagues some of the intricacies of museum preparation. We worked until 4:35 in the morning. It was a long night.

(○) Tuesday
26 June

Up at 7:30. Overcast in the a.m. and cool. The park workers took off at 8:30 with Jorge and Jose Carlos and Rosemary. The geologists & Otto Carlos, Jofre and Rosalenny Cuellar left about 45 minutes later. Tim Bennett called his office in La Paz and they are to send us a new coil, set of points, and condenser by bus for our vehicle.

Jerry, Scott and I walked down to the trico field. We caught a large ♂ Chirurgus boliviensis (NK 21020) in the same burrow that we caught the female yesterday (NK 21006). Set a few more traps and returned to camp. The owner of the Pollo Farsante had come up with a new coil for our truck so we now have 2 lousy coils, ~~and~~ 1 brand new one, and

Walter Roca Pardo

Pando = Reinanzo.

Walter Roca Amey.

2
460

570

85

149

1265

- 800 Terry gave me

\$465 Sgd awes me 3 July 90

Marcelo J. Hig

(Kub) Nicholas

Anna Katrina

wife - Cristina Casas

JAC
1990

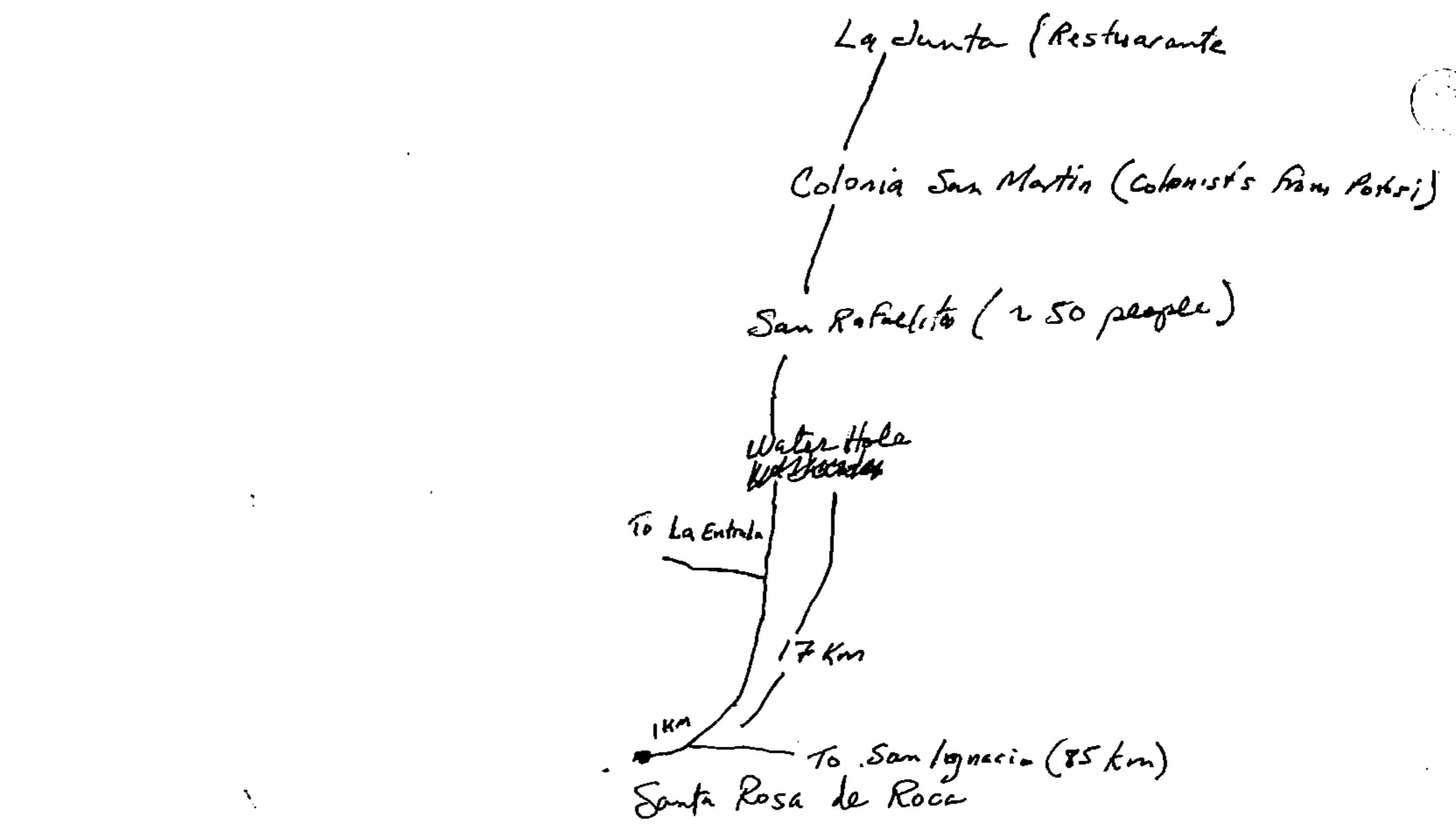
06 June
Continued

another new one on the way. We processed the Oligoryzomys and C. boliviensis and then returned to the 2 km SSE Santa Rosa de la Roca site and set 3 bat nets. 2 through the forest across the road and 1 through a banana grove. The forest or woods surrounding the yucca and banana fields is thick (heavy shrub understory) with bamboo and algarrobillo trees. This is the tree that is interspersed in the grassland area. The moon was ~ $\frac{1}{4}$ and set ~ 20:30. We caught Glossophaga and Carallia. Took the nets down at 11:00 and returned to our lab at Rito Farsante.

27 June
Wednesday

Checked the two traps first thing and they were empty. We met some young fellas (Miguel, Ramelio, etc.) who led us to a field ~ 150 m north of where we'd been trapping and we put in a total of 7 sets. The activity seemed higher here, but we still are not finding many fresh burrows. The recent heavy rains may have something to do with this. We finished setting traps at 11 and returned to the lab to work up the critters.

Afternoon check of the traps resulted in 2 traps. We thought the group ^{that} we had sent to the park would return this afternoon, but they did not.



782.0 Santa Rosa de la Roca

783 left turn

797.7 left road "Entrada", stay right

798 Era barbara

800 San Rafaelito (~50 people)

02.4 Madrejito (37 minutes)

838.7 Dasyprocta

47.0 Colonia San Martin colonists from Potosi

858.8 La Junta

65.2 Fox La Florida - turnoff right, 3 Km away (400 people, + airstrip)

923 Moira - large sawmill camp, parabolic TV, etc

976 Rio Paragua

007 Los Fierros

JRC
1990

()
28 June
Thursday-

Up at 5 a.m. Pulled our two traps which were empty; so we took a total of 5 Ctenomys brevicaudus from this large field. The last two were ~ 150 m from the first three taken. We returned to the Pollo Falso and processed the 5 bats from last night as well as the two tucoos which had been yesterday stressed.

Our plan was to take our truck ~~etc~~ down the road towards Huanchaca and then switch vehicles when we ran into the others who should be leaving the park now. We drove down into Santa Rosa de la Roca (~150 m) to buy gasoline and noticed that the clutch was slipping. The mechanic adjusted it a bit, but discovered that there is practically no clutch left. Maybe enough to get back to Santa R. We decided to wait for the others to return. They arrived at 13:30 and we took off for the park at 15:00 h.

We passed the geologists w/ Otto ~ 1/2 h up the road. There is a hazardous water hole ~ 20 km from Santa Rosa de la Roca and then a few other smaller crossings but in general the road was much better than what we'd seen before Santa Rosa de la Roca.

We stopped for a beer at La Junta and I picked up a tapir skull and Scott found the lower jaw of a servid.

()
La Junta, 70 Km
N Santa Rosade la
Roca

JK

28 June 90
Continued

Arrived at the camp, los Fierros, at 20:30.

This camp is still under construction and included barracks, office, kitchen, etc.

There is a ham radio in the office. We went out to check the nets left up by yesterday's crew and we had one Glaucomys. We talked with Ing.

los fierros

Gregorio Cerrogrande who is in charge of most of the park operations. He seemed very knowledgeable and we pored over maps as he discussed the different habitats and the logistics of working in the park.

The serrania is 600 m higher than the surrounding lowlands. They are currently planning to build 2 other camps like this one. These will be Rio Pancerna and Margarita.

29 June Bat nets were left up over night and we caught several small phyllostomids (geoffroyi). Nothing in the 40 shermans. We have only a short time here this morning so we drove around the southwestern corner of the serrania and then walked a short distance towards the north on an abandoned road near several large rusting caterpillars and tractors - thus the name los fierros. The pampas extend a great distance to the south from this vantage point. The pampas begin only a short distance from camp.

los fierros

Maps of the transect from Camiri to Tarabuco

1:250 from Instituto Geografico Militar

Ave. 3 PASOS AL FRENTE

ZONA ESTE (STA. CRUZ)

[TAKE MINIBUS LINEA 14]

Aiquile SE 20-9

Camargo SF 20-1

Bermijo SF 20-10

VILLAZON SF 20-9

CHARAGUA SE 20-14

VALLEGRANDE SE 20-10

SE 20-13

SF 20-2

J Al

29 June
(Continued)

Cedro - taller tree
Combaro - large tree
that is now large
Mata - mahogany
Acornogue - twisted
oak type tree of
the pampas

We returned to camp (tall humid (typical) rainforest) and left at 11:00 AM. We had only just to spend a short time in the park. We had seen several fox and lots of tracks of tapir (ante), cats, anteaters, harina, oso melero, etc. This is really an incredibly out of the way spot with little indication of human influence.

We returned to

Villages that are close to los Fierros

La Florida 23 families

Chirajas - 8 families

El Carmen

Porvenir

Piso Firme

Brazil - across the Rio Itenez and the Rio Verde
foto of humans

Maps of Huanchaca to get.

- ① Mapa de departamentos Corde Cruz 1:1,000,000 April 1984
- ② Reserva Forestal "Bajo Paragua" 1:250
- ③ Mapa Forestal (suelos) PNNTM 1:100

JAC

3 July 90 Finally finished up the bats this a.m. There were 71 in all, either ^{both} Glossophaga and Corollia. We went to the museum after lunch and spent a couple hours talking with the crew, looking at the exhibits, and looking at the specimens. Syd noted the second record of Pteronura from Bolivia (skull only) as well as potentially the first record of Felis colocola. I left a museum poster (about how MSB is set up) by Bill Gannon and a poster on the Ctenomys boliviensis burrow excavation that we conducted in 1988.

Terry, Eduardo, ? I went to look at maps for our upcoming trip south (Camiri-Tarabuco transect). We were missing two maps (they are now \$11/t a piece) and one of these was the last one the Instituto Geográfico Militar had in stock. They asked us to return tomorrow for a copy.

Scott and Jorge had gone to check on the vehicles. The red jeep is apparently in very bad shape. The mechanic said he'd have a list for us in the morning.

1990

8 July

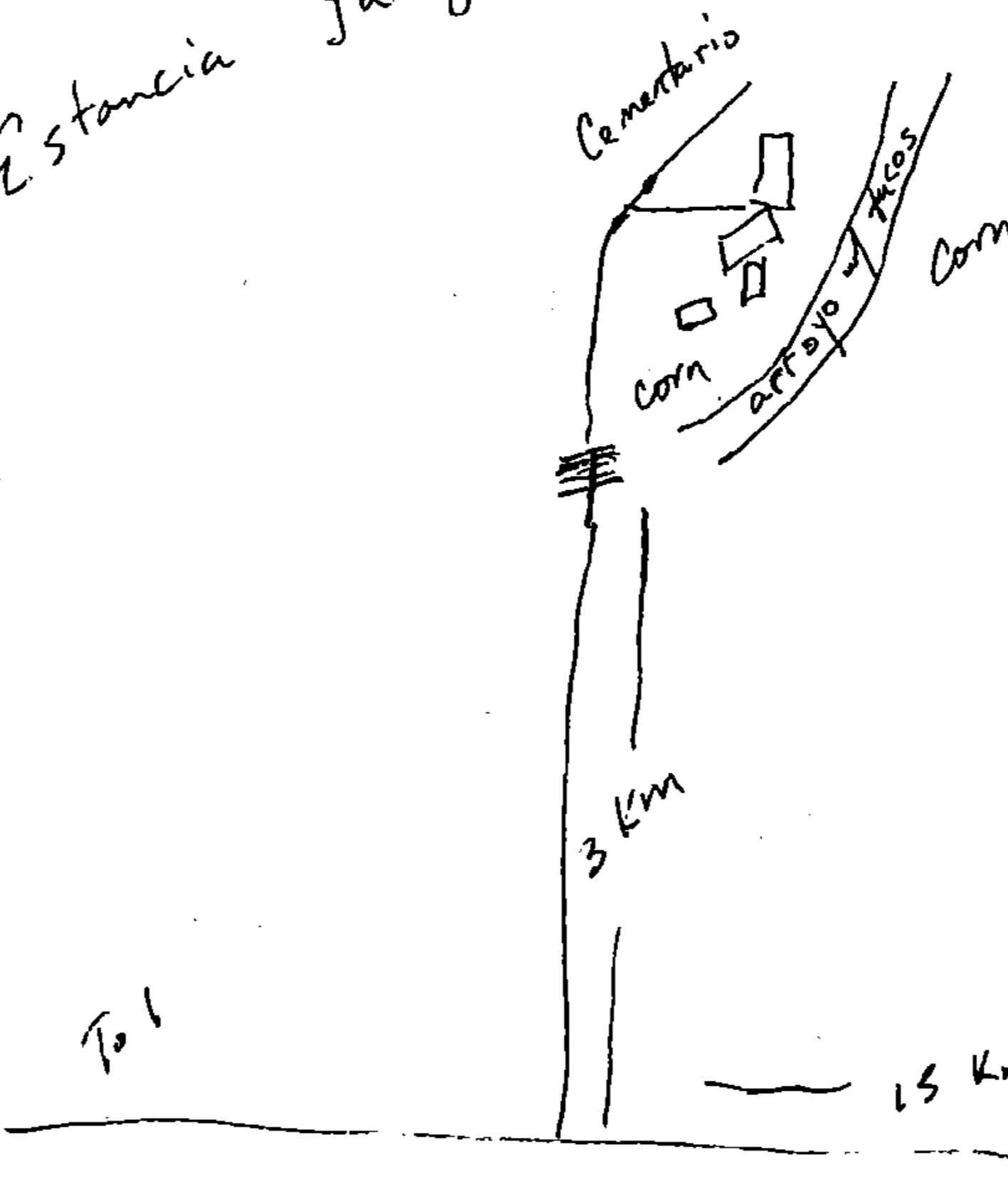
Santa Cruz: Bolivia; Up at 5 a.m. to leave for the South. The various members of the crew arrived from various directions and we got the three vehicles packed by 07:00. Drove to the Hotel International and picked up Syd and Janine, filled the vehicles, and headed south ^{08:00} for Cañiri. The road was typically bony and the going slow. We had lunch at Abago ^(160 km) at 08:00. Today is the final of the Mundial, the 4 year ^{world} final in soccer and everyone was glued to their radios (Germany won 1-0 over Argentina).

We continued ^{on} our way - the red toyota jeep, the blue toyota truck, and the 2 ton zoo truck.

It rained lightly intermittently throughout the day and we had problems with the clutch on the blue truck and finally concluded the master cylinder (hydraulic clutch) needs repair. We drove on grinding gears all along the way. The road enters the foothills and nearly reaches 1000 m at several points. The night fell around 6 and we were still on the road.

Finally found the road we were looking for that led to the Estancia Yopigüina (de Ergon & Nelly Wachter). We arrived after 20:30. The owners were not home and the caretaker (woman) was reluctant to let us come inside their fence. We stood around outside shuddering in the ^{cold} dark night and she finally relented and let us unload all our equipment. We put up tents and retired at 23:00.

Ergon
Nelly de Waether
Estancia Yatigüina



Dominic
Acacia
Bombacina - Tabebuia, Choricea
Some Prosopis

1990

9 July

Up and sent a crew into Camiri to get the truck clutch fixed. We looked around and set out ~ 70 traps up the arroyo which is just to the east of the hacienda. The hacienda is very large w/ lots of out buildings, fruit trees, equipment, and new construction taking place. They obviously have lots of \$\$. The coyuchis (thecos) are fairly active and dense up and down the arroyo. We had caught 3 within a couple hours and 11 by 20:00. There are 15 of us now as follows: Syd & Justine Anderson, Terry Yates, Scott Gardner, Jorge Salazar, Ron Pine, Otto Carlos Jordan, Emma Anna-Pizarro, Fernando Terceros, Rosaleamy Cuellar, Juan Carlos Cenzano, José Carlos Herrera, Edwards Palma, Marcello Zeller, and myself. There is a SWASSO in the process, but it has not rained yet today. It is overcast, windy, and cold. ~~Eight~~ ~~road~~ ~~log~~ from Santa Cruz. Jorge, Edwards, and Rosaleamy set out 353 traps (shermans) around the hacienda. The undisturbed habitat is monte Chiquero Paraguayo alto with Chiropsis, Prosopis, Cactaceae, Acacia fittala and Bromeliaceae. (Chorochuata) predominate and a few orchids, set in very dense and difficult to walk through. Edwards came back from his traps with lots of cuts and scrapes from the vegetation.

We bet on the number of marsupials we'd have by the morning and retired after 23:00 after a solid day of preparing specimens.

gracille = test tube rack

10 July 1990.

7 - Calomys - maybe 2 species
1 - Marmos elegans venusta
1 Gracilinanus dorsomaculatus
13 Otomys

+ bats
1 Lasiurus borealis (now called
Antibates)

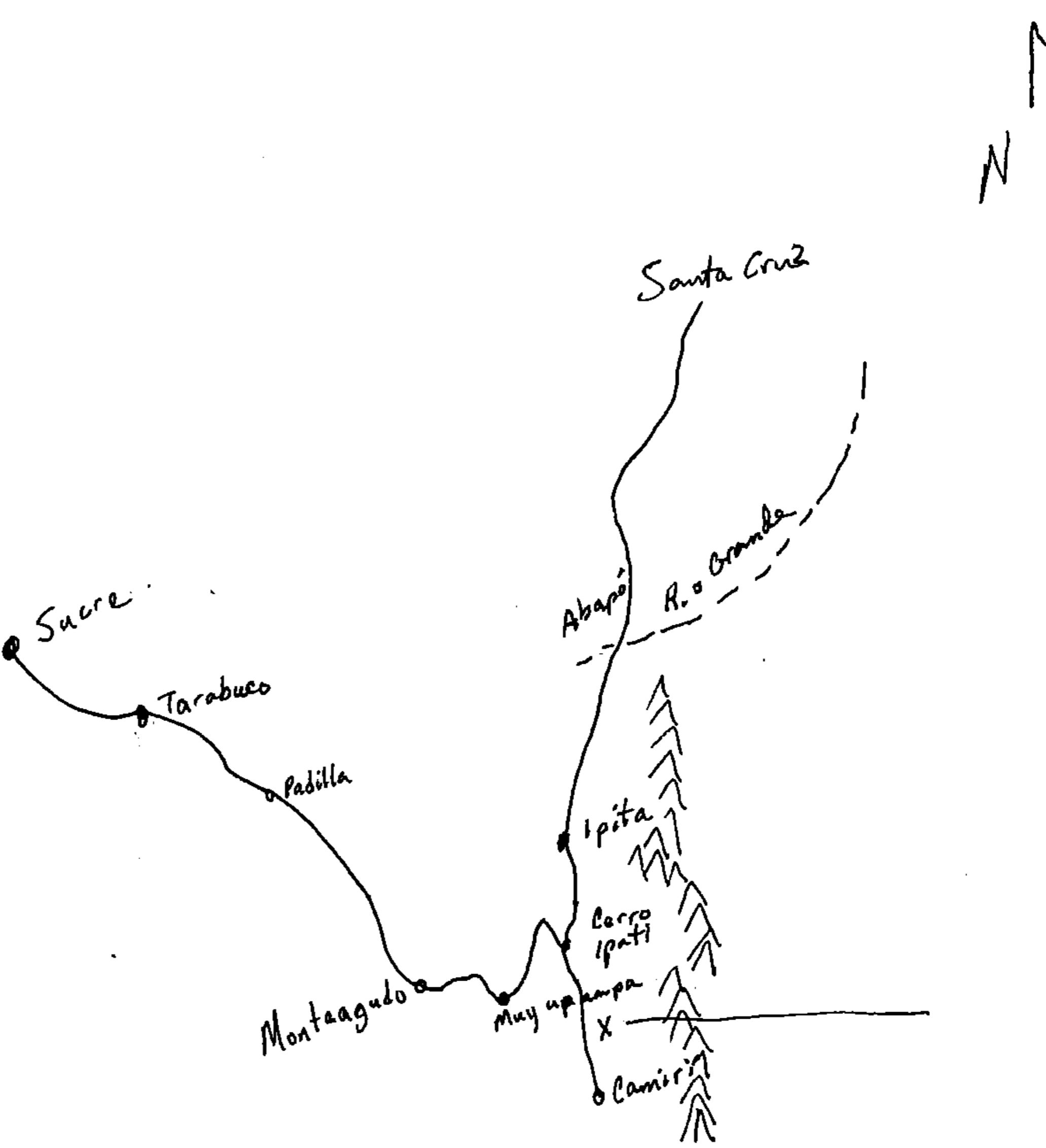
MM

10
July
1990
Tuesday

Up at 7:00. lots of dogs barking and horses passing early in the morning. We checked our cuyuchi traps and pulled out another 13 throughout the day. We switched most of the cuyuchi traps and spent another solid day of prepping specimens. We are getting a very nice series of cuyuchis (25 total) from this locality and still are not sure what species it is or if its a new one. It is ~~very~~ reddish and about the size of Erethizon.

Many of the females are lactating and a few are pregnant. The $\text{♀}/\text{♂}$ ratio is fairly high (19♀:6♂).

Jorge and I are taking reproductive data on the males including preserving the reproductive tracts, putting the sperm into 10% formalin (from the testes and epididymis - separate), karyotyping the other testes and making notes on color of sex organs, size, etc.



JFL
1990

12 July

Up at 6 and we packed the gear to head west into the mountains towards Sucre. This morning we caught no tuco's, but 1 Marmosa, 1 Akodon, and 7 Calomys. We took one load of gear into Ipáti (19km away) and dropped Morello, Juan Carlos, & José Carlos off so that they could catch a chello truck up to Montegudo some 130 km up the road towards Sucre. We have too much gear to carry it all with us on our two vehicles.

We dropped the 3 fellas at 11 at the junction returned to the Estancia and loaded the rest of the gear. We passed by Ipáti and the three fellas on the way to Montegudo. The road climbed quickly up a canyon through several different habitat types including a closed cloud forest type habitat with lots of epiphytic plants. After climbing two steep passes, we dropped down into Montegudo just before dark. Montegudo was surprisingly clean & prosperous. Otto went to the office of the CORDECH ~~officer~~ and returned with who took us out to the regional pig farm (experimental farm run by CORDECH). We were taken to the laboratory and set up our lab and inside and traps in the yard nearby. Several traplines were set out (including several tuco sets) and Scott and I took off in the blue pickup to retrieve

BOLIVIA: Chuquisaca, 2 Km SW of Monteagudo, 1130 m
19°49'5", 63°58'W

Scott fixed the topworn at
Ctenomys sp. at
Monteagudo
1:09 on 13 July 1990.
by me

15 July
1990

Up at 8:00. Checked traps and pulled everything. Three more cujachis and tot another good haul of rats & mice, Akodon, Bobomys, Calomys⁺, Oxymycterus⁽⁺⁾, but no Marmosa. We processed the dead and packed up the rest (or 40) as well as all our other gear. We took part of the gear (a pickup truck load) into Montegudo and dropped Jorge, Juan Carlos and Fernando to shepherd the equipment (by jumping on a chollo truck) into Padilla (~130 Km).

We finally left the pig farm and Montegudo a little after 14:30. The road went up and down through several canyons and climbed as high as 2500 m.

BOLIVIA: Chuquisaca Dept; 11 Km N & 16 Km W of Padilla
2050 m, $19^{\circ}12' S$, $64^{\circ}27' W$

JBC
1990.

the others. We made it 35 km out of town before the clutch gave out completely, so we stopped the truck and the wires leading to the CB fired in front of us. An apparent short circuit. We carefully drove the vehicle back to the pig farm and finished processing the mammals from Cerro Yat.

14-15 July 1990
6 Cajuchis came in at 2:00 am
Up processing till 3:30 am
Kangotyped 4 Cajuchis.

15-16 July
Spent the night at the Residential
Toni to