Brasil: Pantanal. 24 October – 2 November 2022

Carlos Pedrós-Alió Tres Cantos, Spain E-mail <u>cpedros@cnb.csic.es</u>

I had a work trip to Brazil and added one week of holidays at Pantanal (Mato Grosso do Sul State). I stayed six nights at Fazenda Barranco Alto (http://fazendabarrancoalto.com/en/home-en/) near Aquidauana. Once you make the effort to travel this far away, it is worth staying at least five nights. It is not cheap. I paid 360 € per night. This included lodging, all meals, two half day tours with competent guides and some extras like beer and caipirinhas. The flight from Campinas (near São Paulo) to Campo Grande cost 376 € and the 4x4 drive to and back between Campo Grande and Barranco Alto 320 € each way. Altogether around 3200 €. As mentioned not cheap.



Fig. 1. Fazenda Barranco Alto at the shores of Río Negro and with the *salinas* and *baias* of Nhecolândia to the North. A few *corixos* (side arms) and sand banks can be seen in the river.

The geography

The area north of Río Negro is typical of Nhecolândia: an immense surface plucked by thousands of round lagoons (fig. 1). The land separating one lagoon from the next is usually sufficiently elevated so that it is never flooded and, therefore, it is covered by *cerrado* forest. When substantial, these areas are called *cordilleiras* and if they are isolated bumps, they are *capoes*. The characteristic of this forest is that it has to tolerate several months of dryness. It is fairly diverse in tree species and the undergrowth tends to be rather intricate, thus the name *cerrado* (closed). It is paradoxical that the areas right next to the forest are periodically flooded. Its either no water or too much water. The lagoons are of two types (figs. 18 and 24). Some are saline (*salinas*), very rich in sodium carbonate and with a very basic pH, around 9. In effect they are soda lakes and do not have fish or aquatic plants, only cyanobacteria. They have many insects however. The others are freshwater (*baias*) and usually have a lot of aquatic vegetation. Some of these are dry and show only dry aquatic plants, others keep permanent water.

I found the co-existence of soda and freshwater lakes intriguing. It appears that the bottom of the soda lakes is at a slightly lower elevation than that of freshwater lakes and they are surrounded by slightly more elevated *cordilleiras*. Thus, they do not receive freshwater when the whole area is flooded. They only receive rainfall and, when the dry season comes, the water evaporates leaving the salts. In the *baias*, on the other hand, he flooding replaces the contents with abundant freshwater. Minor differences in elevation of perhaps one meter are enough to determine the fate of a lagoon, either *salina* or *baia*.

General comments

I was only at one of the several lodges in the South of the Pantanal, in Nhecolândia and on the north shores of Río Negro. Moreover, I was there only seven days. Thus, I can only speak for this region and these few days, not for the whole Pantanal throughout the seasons. At any rate, people and guides tend to get stupendous when praising the Pantanal. "The Serengeti of America", "The numbers (of animals) ... can challenge credulity, with the smallest lakes often so crowded with fur, feather and scale that you'll be pushed to spot an uninhabited metre of water."

All of this is not true. The diversity of species is higher in the Mata Atlantica or in the Amazon that in the Pantanal. Thus, the latter is comparatively species poor. Even though I was birdwatching with local guides I only saw between 40 and 60 species per 3-4 hours tour. This is what I used to see in the Delta del Llobregat (a wetland near Barcelona). Even though there were no heronries or *nhidais* in our area, these usually have only five or six species and less than 100 individuals at best. The most abundant species in the Pantanal are the widespread aquatic ones, such as herons, storks, cormorants, etc. Moreover, several lagoons had no birds and those with most birds had maybe 50 White Herons, 50 Stilts and a few Jabirus, Spoonbills and a few other waders. So, in terms of birds the place was very good but not the absolutely exception some guides would make you believe. And in terms of mammals, it cannot be compared with the Serengeti or any other African park south of the Equator. Neither in number of species nor in number of individuals.

Having said this, the place is fantastic. And it is true that it is one of the best places in South America to actually see mammals and that many of the birds are spectacular, for example the parakeets. I did not see any hummingbirds but a lot of woodpeckers and parakeets. And I saw mammals that I had missed in other places, such a Costa Rica, Colombia or northern Argentina. In summary, the place deserves a visit and I thoroughly enjoyed it and was completely satisfied with the animals I saw.

In terms of guidebooks, I did not particularly like the Lowen guide (see references). It is too general and only illustrates a few animals. Not very useful. It has short sections on many of the Pantanal lodges. These are supposed to provide detailed info about them. But for Barranco Alto it was mostly wrong. For example, it says a Tamandua likes to climb the mango tree by the lodge. The owners have never seen this. At Barranco Alto I found two very good guides. The Boschetti guide is very small and convenient to carry in the field. It has almost all the animals you will see and very useful imagery about the wetland terminology. It shows 42 mammals (I saw 12) and 190 birds (I saw 133), plus some butterflies, other invertebrates, reptiles, amphibians and a few plants. It is definitely excellent to carry it at all times. For mammals there was Hannibal that included records on over 150 species, as well as general information about the Pantanal. For birds, Gwyne is the best (even though taxonomy has changed somehow since it was published in 2010). Two different checklists indicate 398 and 405 species of birds for Barranco Alto (I saw 157).



Fig. 2. Sunset by one of the lagoons was one of the nice traditions at Barranco Alto.

1. DAILY LOG

Monday 24.

Transition day from São Carlos, where I had spent the previous week working at the Universidade Federal de São Carlos, to Campo Grande. I packed and got ready to leave. Hugo (my host) picked me up at 12:30 and we drove towards Campinas. We stopped at "Rancho Portugués" in Cordeirópolis specialized in Portuguese *bacalhau* dishes. We tasted two, both excellent. Then Hugo left me at the Viracopos airport (Campinas). Before letting me go he made sure I had two very important items against ticks (according to him). The first was a kind of talcum powder with sulfur. I was supposed to use this in my groin, ankles and around the waist, anywhere where clothes pressed against the skin. This would presumably discourage ticks from colonizing my body. And the second was a soap called Enxofre, also with sulfur. I was supposed to use it when showering to get rid of any ticks that had passed the talcum barrier. I used both but I believe I did not get any ticks anyway.

I flew to Campo Grande (about 1 hour and 15 minutes) and took a taxi to Hotel Orla Morena, convenient and reasonably prized (http://orla-morena-park.campogrande-hotels.com/en/). I had been told to take only soft bags to Pantanal, so I rearranged my stuff, left the unnecessary things in the suitcase at the hotel, and placed the useful things in a bag.



Fig. 3. Ominous clouds over the lagoons.

Tuesday 25.

Vava picked me up at Orla Morena at 6:30. He also collected Mauro and Paolo, two Italians traveling in Brazil looking for animals. Mauro was a very sociable person and he spoke English and Spanish. Paolo only spoke Italian and he was usually quite silent since he could not follow the conversations. Mauro periodically did a summary of the conversations but, of course, that did not allow Paolo to participate very actively. They were both nice. Vava's English was very basic, so communications during the trip were basically between Mauro and me. Vava had a Mitsubishi Tritón Savana. It looked very new. He said it was only two months old. Hugo had told me that the only vehicles capable of negotiating the Pantanal were some models from Mitsubishi and Toyota.

The road form Campo Grande to Aquidauana was a good rodovía, although it was a one lane undivided highway. It took over one hour for 140 km. Then, there was a reddish track in fairly good state. It was elevated so that it did not get flooded. We could speed along this one for about one more hour. Then the nightmare begun. The track was not maintained and it had deep ruts, holes, and many puddles. In many places there were two or three alternative routes depending on where the water was. It was mud or sand, so a normal vehicle would be stranded right away. In addition to this, the track passed several fazendas and each fazenda had several fences to manage the cattle. The result was that one had to cross around 40 gates. For every one, one had to go down, open the gate, wait for the truck to pass, close the gate, and get on the truck again. At least this provided some distraction from the monotony.

We stopped a couple of times because Mauro detected Giant Anteaters. We also saw several Pampas Deer and Hyacinth Macaws. This was an excellent beginning. We made it to Fazenda Barranco Alto in six hours and arrived just in time for lunch.

Birds: 15 species (2 lifers: Hyacinth Macaw, Plumbeous Ibis).

Other: Giant Anteater*, Pampas Deer*, Yacaré.

Lunch. Meals were at a long table, everybody together. Camilla (the owner and manager of the farm) and Claudia (the manager of the tourist part of the business) accompanied us for breakfast and lunch, but they retired to their homes for dinner. All the meals were varied, abundant and tasty. The main courses were usually Brazilian, and there were always salads and the inevitable rice and beans. The schedule was nicely organized: a morning tour between 6:30 and 10:30 (more or less), time for a shower, lunch at 12, time for a siesta, 15:30 to 19 or so for evening tour (the last part in the dark with a torch), caipirinha, dinner around 19:30. This avoided being out in the wild during the hottest hours of the day.

Birds: 15 species (2 lifers: Bare-faced Curassow, Purplish Jay).



Fig. 4. Four usual suspects at the lodge: Chaco Chachalaca, Crab-eating Fox, Rufous Hornero and Bare-faced Curassow.

In the afternoon (16:00), Claudia took a Swiss couple and me for the forest tour. She was driving an old fashioned but very robust Jeep. Uri was seating next to her, and Christine and I occupied the back seat, that was elevated, so we had excellent views. I knew the 1700 species of plants of the Pantanal were too many to assimilate. So, I begun by asking about the palms. Claudia mentioned three in the forest plus a fourth one on the river banks. It turned out they were fairly easy to recognize: Bocaiúva (*Acrocomia sclerocarpa*) tall and with pinnated leaves, Acurí (*Scheelea phalerata*) a short palm with pinnated leaves, and Carandá (*Copernicia alba*) a tall palm with palmate leaves (fig. 11).

The forest tours follow tracks between the forest limit and the lagoons. One enters a forest fragment and emerges yet in another lagoon. We saw dozens of White-backed Stilts and White Herons, and a few representatives of other species. The jeep proceeded slowly but it could go off the tracks and ignore the bushes in its path if convenient. In this way we approached a Manduvi tree (*Sterculia apetala*, fig. 21). This is an imposing tree with palmate leaves and fairly large fruits with a thick cover. The one we were seeing had a huge Jabiru nest (empty) and several Monk Parakeet nests hanging from it. The tree had lost a couple of branches and the resulting hollows had been occupied by Hyacinth Macaws. Nothing is wasted from this tree. We only saw the Monk Parakeets in the tree, but nearby we caught a pair of Hyacinth Macaws eating palm nuts (fig. 5). Their bills are very strong and thus able to crack the tough fruits of the palms. They seem to prefer nuts of Acurí and Bocaiúva.



Fig. 5. Hyacinth Macaw in a palm, Purplish Jay at the lodge, Yellow-headed Caracara and Toco Toucan.

We proceeded around several more lagoons and we reached a dry one. The lake bed was covered by tall grass and, half-hidden, Claudia discovered a Giant Anteater (fig. 6). We left the Jeep and slowly approached the animal. We stopped about 30 m from it. It did not pay any attention to us and kept exploring the ground. It was in the shade, but I could take some reasonable pictures. This was one of my main targets. I was happy!

The sun was setting (at 17:45) and we drove to yet another lagoon. We stopped the car and enjoyed a gorgeous sunset with a beer. This was one of the traditions of the place: a beer at sunset (fig. 2). It was very nice because, during the tours, one's attention is focused on the animals. This stop allowed to take in the landscape, to pay attention to the cicadas, to enjoy the pastel colors in the horizon. Plus, the beer was small and all beers in Brazil have only 2% alcohol. So, no major damage was done. The rest of the trip, until approximately 19:00, was nocturnal with a torch. In this one we only saw Pauraques, but other days were more productive. We reached the lodge for another tradition of the place: a caipirinha while doing the bird list of the day. Then we had dinner together with the other customers: the Swiss couple (Urs and Christine), Mauro and Paolo, and me. They were all extremely nice and we had a great time swapping stories about our afternoon tours.

Birds 23 species (4 lifers: Large-billed Tern, Scaled Dove, Red-and-green Macaw, Blue-crowned Parakeet)

Other: Pampas Deer, Giant Anteater, Capibara, Wild pigs, Yacaré.



Fig. 6. Above: Giant Anteater. Below: Fruit and leaves of the Ximbuva (Enterolobium contortisiliqum)





Fig. 7. Black Skimmers (*Rhynchops niger*) and Greater Thornbird (*Phacellodomus ruber*), both on the banks of Río Negro.



Fig. 8. Turquois fronted Amazon (Amazona aestiva).



Fig. 9. Lineated Woodpecker and Plumbeous Ibises at nest.



Fig. 10. Stephan with a Danaus erippus and the footprint of the jaguar.



Fig. 11. The four palms at Barranco Alto: Bocaiúva, Carandá, Acurí and Tucum.

Wednesday 26

First day of regular schedule. I got up at 4:30 in order to be ready for breakfast at 5:30.

Morning tour

A bit after 6 I met Fernando by the boats. He was going to be my private birding guide for the next two days. He was born in the area, a true *pantaneiro* with a solid knowledge of the area and the

birds. The river tour is quite comfortable (fig. 24). You seat in the bow and Fernando drives the boat at the stern. He would stop any time there was something interesting and pointed out the birds.

The Río Negro is perhaps 50 m wide and flows very slowly, since the slope in the Pantanal is minimal (fig. 24). It is a black water river as its name implies. We saw many yacarés resting on the shores with their mouths open (fig. 23) and we also saw many eyes protruding from the water. Every few hundred meters we would encounter a family of Capibaras and a Black-collared Hawk at attention (figs. 12, 16). Another common bird that was new to me was the Pied Plover. It was hot, but the breeze made the trip quite pleasant. Shores passed slowly revealing a few birds here and there. In total we saw 48 species of birds. The most interesting were an Orange-Backed Troupial singing its monotonous three note song at the top of a tree and a Greater Thornbird (fig. 7). This we saw very closely. It was inspecting a hole in a steep cliff (potential nest I guess) and flying back to a low branch. To the hole again and back to the branch. It kept going back a forward, not being able to decide one way or another. Its couple was singing nearby but we did not see it. The best sighting however, was the Giant Otter. We saw a very vocal one swimming in front of us. Fernando tried to follow it once it was on shore and he managed to bring us close to two of them walking through the bushes.

Birds: 48 species (lifers: Pied Plover, Greater Thornbird, Orange-backed Troupial).

Other: Giant Otter*, Capibara, Yacaré.



Fig. 12. Yacaré and capibara, the two most common animals in the river.

Lunch time.

Camilla suggested that I change rooms from 3 to 1. Her idea was that the window of 1 faced vegetation and a prairie down to some forest. Hummingbirds were supposed to frequent the flowers so she thought I would appreciate the change. I did not see any hummingbirds. But the new room proved very attractive to frogs. There are two types, a small one and a big one. I only saw the small ones, the Snouted treefrog (*Scinax fuscovarius*). They seem to enter through the water pipes and they like to hang around the shower and the toilet. In fact, in Brazil they are called "Perereca de banheiro" (bathroom frog). They were harmless but I did not feel comfortable taking a shower in

the company of frogs. Camilla kindly went through the room periodically to collect the frogs. After a variable delay, however, new frogs appeared in the room.

Afternoon. Forest with Fernando

The most interesting place we explored was one of the lagoons. We stopped and scanned it. I saw the usual White Herons and White-backed Stilts, present in almost all lagoons. There were also Lesser Yellow-legs and a Collared Plover. Then my scan reached the far left of the lagoon and there was a large, dark thing. It was a Tapir! (fig. 13). "Fernando, you did not tell me" I said. "I was waiting for you to discover it" he answered laughing. In the El Rey National Park on Northwestern Argentina, we had seen the tracks of this animal crossing a stream. In Colombia the possibility to see one was thrilling. But here it was, slowly walking out of the water, crossing in front of us and disappearing in the forest. The poor thing had an injured proboscis, may be due to the bite of a Jaguar. The red tissue was hanging pitifully. I wonder how will it manage without this essential sensitive part of its anatomy.

Then, Fernando walked me to a certain spot in the beach and asked "what do you see". I looked but did not see anything. "Look carefully" he insisted. All of a sudden, I realized I was looking to an egg in a nest. I was almost stepping on it. This shows that even in the bare ground a Plover nest is hard to see. On the way back to the car, I saw a funny looking wader and I took pictures of it. I thought maybe it was some kind of sandpiper but it did not quite fit any one. Later, carefully checking "hbw alive" it became evident that it was a Buff-breasted Sandpiper. The drawing in the Gwynne guide was totally misleading. The bird had the characteristic white ring of feathers around the eye and no superciliary, but the breast was very lightly colored, not the intense buff in the drawings. Later, Stephan confirmed the ID. The rest of the trip produced more of the common birds and during the night part of it we only saw Pauraques, but I could take a picture of one of them.

Birds: 32 species (lifers: Common Piping Guan, Buff-breasted Sandpiper, Red-shouldered Macaw, Swainson's Flycatcher, Crested Oropendola).

Other: Tapir*, Pampas Deer, Capibara, Yacaré.



Fig. 13. Lowland tapir.

Thursday 27

Morning. Forest with Fernando

The weather forecast predicted rains for the rest of the week. The sky was certainly overcast and we could see rainfall in the distance (fig. 3). But there were only a few drops and the sun came towards noon. It did not rain again until Monday. The weather forecast was fortunately pretty poor. We began the tour by watching a Lineated Woodpecker flying past us. Then, Fernando showed me a nest of this species in one of the poles of one of the gates. A male was looking around from within the nest (fig. 9). Thanks to the overcast sky it was relatively cool and many mammals were moving around. We encountered two groups of White-lipped Peccaries (fig. 14), a small group of Coatis, many Pampas Deer (fig. 19), several Wild pigs, and a couple of Gray Brockets (fig. 17). One of the Brockets suddenly emerged from the aquatic vegetation in one of the lagoons. Fernando saw an Agouti. Strangely, I did not get to see a single Agouti in Pantanal contrasting with Vila Fatima, where they were being fed in the gardens.

The best birding was again in one of the lagoons. We stopped and examined the shores carefully. I saw a Blackish Rail, not so common in the area. Unfortunately, Fernando did not see it as it disappeared quickly among the reeds, but I saw very well the fully grey underparts and the size was also smaller than the more common Wood-rails. We walked around the lagoon and we saw a spectacular Donacobius singing, and a pair of Unicolored Blackbirds.

We ended the tour under a nest of Plumbeous Ibis (fig. 9). Both parents were there and a pair of Red-and-green Macaws were engaged in what looked like a nuptial parade in the same dead tree. They were raucous and moving and jumping all the time and eventually left. Then, the Ibises started their own chorus. Very nice.

Birds: 54 species (lifers: Blackish Rail, White-rumped Monjita, Black-capped Donacobius, Thrushlike Wren, Unicolored Blackbird)

Other: White-lipped Peccari*, Coati, Wild pig, Agouti (Fernando), Gray Brocket, Pampas Deer.





Fig. 14. White-lipped Peccaries squeezing under a fence.

Lodge.

The lodge is built around a terrace with a very large mango tree. Mangoes grow, ripen and fall down with loud crashes. There was a rich fauna trying to use this resource. Chachalacas and Curassows were always there. Purplish Jays populated the canopy, a pair of Horneros had their nest in one of the beams, Scaly Doves repeated their monotonous call from the trees, and several birds appeared over and over (figs. 4, 5). For example, Red-billed Scythebills, Narrow-billed Woodcreepers or Campo Flickers. There was also a Crab-eating Fox named Gloria that would try to bite the mangoes. One evening a gang of perhaps 10 or 15 White-lipped Peccaries went through the premises trying to bite the fruits. I realized how difficult it is to eat a mango without hands. The birds can peck at it and collect small morsels, but the Peccaries only have their mouth and it is not big enough to take the whole mango in. It was pathetic to see them struggling. It was funny that Vava, when he came to pick me up, also collected mangoes with a special home-made contraption. Everybody loves mangoes.

Birds: 10 species (lifer: Red-billed Scythebill)

Other: Crab-eating Fox (Gloria)

Afternoon. Rio Negro with Fernando

This time we sailed upriver. The shores looked like downriver, two 10 m walls of greenery with a few sand beaches here and there. Due to the minimal slope, the rivers flood surrounding areas very often and there are abandoned water courses which eventually become separated from the main course. Pantaneiros have a whole collection of names for these. If they have permanent water they are "corixos", temporary streams connecting baias to the river are "vazantes". Permanently wet swamps are "brejos" and savannas that may be flooded are "campos". In addition, there are side arms, like the one next to Fazenda Barranco Alto o the Baía de Ramon further down the river.

Next to one of these side arms, Fernando played the call of the Green-and-rufous Kingfisher with his cell phone. It eventually emerged from some trees and flew back and forth over the river a couple of times. This is one of the least common kingfishers in Pantanal, so it was worth the effort. Most of the tour only produced the common birds, but as it was getting dark, Fernando spotted three Capped Herons perched under a tree hanging over the river. They reminded me of the Boat-billed Herons I had seen in Costa Rica in a very similar situation. This was another species that I had wanted to see for a long time but had missed in Argentina, Brazil and Colombia. They seem to be crepuscular, but not nocturnal.

The last lifer of the day was the Band-tailed Nighthawk. We saw several flying over the river. Their strategy is obviously completely different from that of the Pauraque. I would see them in all afternoon tours in the river and Pauraques during all the afternoon tours in the forest.

Birds: 35 species (lifers: Capped Heron, Band-tailed Nighthawk, Green-and-rufous Kingfisher). Other: Capibara, Yacaré.



Fig. 15. The extremely abundant capibaras.

Friday 28

Morning. Forest with Stephan

The next two days I was going to be guided by Stephan. He had a very different style. Fernando was cheerful and good at spotting the birds without telling me anything in advance. Stephan was very calm and he would always announce the strategy he was going to follow. For example: "I have heard such bird, let's have a look". Then we would walk around carefully listening for a while. Sometimes this produced the bird other times it did not produce anything. Camilla told me that some customers found this type of guiding boring. I found it fascinating, learning the different tactics. Plus, he was an encyclopedia of natural history, not only about the animals, but also about the plants and the geography. Moreover, before guiding me, he asked to see the list of birds I had already seen, so as to tailor the search to those I hand not seen yet.

We began with several parakeets by the first gate. We saw Monk Parakeets and heard Yellow-chevroned Parakeets in the same trees. And we saw very nicely the Turquois-fronted Amazons (fig. 8) holding palm nuts with the claws and eating them. During the morning we saw quite a few parakeets such as Blue-and-yellow Macaw, Hyacinth Macaw, Red-and-green Macaw, Golden-collared Macaw, Scaly-headed Parrot, and Yellow-faced Parrot. Nine species of parrots altogether!



Fig. 16. Red-winged Tinamou, Seriema, Black-collared Hawk, and Greater Rhea.

As mentioned, Stephan was very didactic with the trees. We saw a Pequi (*Caryocar brasiliense*, Caryocaraceae, fig. 22), the Jatobá (*Hymenaea stigonocarpa*, Fabaceae, fig. 27), Cumbaru (*Dypterix alata*, Fabaceae, fig. 26) and the Manduvi (*Sterculia apetala*, Malvaceae, fig. 21). All of them have large fruits that are eaten by macaws, peccaries, agutis and many other animals. An interesting example of the intricacies of trophic relationships is that of Toucans and Hyacinth Macaws. The former eat the eggs of the latter. However, they also spread out the seeds of the Manduvi tree, thus providing potential nesting places for the macaw. Is this relationship one of predation, or mutualism?

Other common plants of the cerrado forest were the strangler fig trees (*Ficus clussifolia*), Embaúba (*Cecropia pachystachya*, Cecropiaceae, Moraceae, fig. 25), Taruma (*Vitex cymosa*, Verbenaceae) and the Bocaiúva and Acurí palms. A plant that covered forest and track edges was the Bromeliad

Caraguatá (*Bromelia balansae*) with a nice red color in the central leaves, but very spiny and dangerous. I was surprised and happy that with Stephan's help, I could recognize so many plants.

While walking under a Cumbaru tree, Stephan heard a Trogon calling its monotonous high-pitched note. Immediately a male appeared in a branch right above us. Other birds we saw in the forest were woodpeckers: Red-stained, Little, Campo Flicker, and a spectacular Crimson-crested woodpecker. Another bird we heard all the time but did not see was the Undulated Tinamou with its characteristic four low pitched notes ending in an interrogation. And a very nice present was the Great Rufous Woodcreeper. The three Dendrocolaptidae I saw in the Pantanal were very different from each other but all very attractive: The Great Rufous, the Narrow-Billed and the Scythebill.

Then, we moved to an almost dry *baia*. There was dry vegetation and there was a nest in some reeds. A spinetail appeared next to it, and kept moving around. We thought it was a Yellow-



chinned but we could not quite see the yellow chin. Stephan played the song of this species on his cell phone and the bird responded immediately. Thus, there was no doubt we were seeing a Yellow-chinned Spinetail. In the same lagoon we also saw the only seedeater of the trip, a Rusty-collared Seedeater, apparently the most common in the area.

A butterfly landed on Stephan's hand (fig. 10). It was orange and black, relatively large and very pretty. I did not recognize it at the time, but later I realized it was a Monarch butterfly. Monarchs are supposed to live only in the northern hemisphere so I was intrigued. I discovered in internet that there is a southern Monarch that is a different species (*Danaus erippus*) from the northern one (*Danaus plexippus*). A lot is known about the spectacular migrations of the latter but very little about its southern relative. Stephan said he would try to find out whether it was also migratory or not.

Fig. 17. Coatí and Brown brocket.

Among the many water birds, we saw a White-faced Ibis, the least common in the area. I had only seen this bird twice before, in Iberá (Argentina) and in Bear River (Utah) more than 20 years ago and my recollection was fading. I did not remember how richly iridescent it was.

Birds: 64 species (lifers: Blue-and-Yellow Macaw, Golden-collared Macaw, Yellow-faced Parrot, Red-stained Woodpecker, Crimson-crested Woodpecker, Great Rufous Woodcreeper, Yellow-chinned Spinetail, Rusty-collared Seedeater.

Other: Agouti (Stephan), Black-and-white Tegu.

Lodge.

Birds: 7 species (lifer: Solitary Cacique).

Other: Crab-eating Fox.

Afternoon. Forest with Stephan

The first stop was to find a Pearly-vented Tody-tyrant that Stephan had heard. We could follow it singing for quite a while and, as soon as it disappeared, we saw a Rufous Casiornis. We then took a walk around. It was very hot and we tried to stay in the shade while exploring the forest limits. We

found another interesting tree, Angico (*Anadenanthera colubrina*, Fabaceae, fig. 32), a tree with a peculiar bark and a very dark wood used for tanning. Then we explored several lagoons.



Fig. 18. A lagoon without vegetation, probably a *salina*, and another one with vegetation (*baia*) with the usual number of White Herons, Egrets, and Spoonbills.



Fig. 19. Pampas deer.

The sun was getting low and light was brilliant. We enjoyed the landscape for a while and also found yet another tree: Ximbuva (*Enterolobium contortisiliqum*, Fabaceae, fig. 6). As its name implies, the fruit looks contorted like a kidney. We found an open landscape in front of another lagoon and enjoyed the sunset with the usual beer.

The night tour was fairly interesting. We saw six Crab-eating Foxes, a Crab-eating Racoon, two Wild Pigs, a Capibara, a few Pampas Deer and many yacares with their eyes shining under our torch in addition to the usual Pauraques.

Birds: 51 species (lifers: Rufous Cassiornis)

Other: Pampas Deer, Capibara, Wild pigs, Crab-eating Racoon, Crab-eating Fox (6).

Saturday 29

Morning. Rio Negro with Stephan

Today I forgot to put the memory card in my camera. Therefore, none of the pictures I thought I was taking was registered! At any rate, we started the river tour as usual, slowly drifting downstream. I had this impression of going down the river surrounded by walls of greenery and



nothing else. But with Stephan, the forest became alive with the calls and songs of many birds. We heard the Curassow, the Undulated Tinamou, the Orange-backed Troupial, the Motmot, the Blue-crowned Trogon, the Whitelored Spinetail, and the Fawn-breasted Wren. I was happy because I could recognize all of these. Unfortunately, the Chachalacas were the most raucous and would not stop "singing".

Stephan displayed several strategies to find the birds. The simplest was to dock the boat and do a little excursion on shore. We found a Greyheaded Tanager this way. But the risk of ticks and the harassment by mosquitoes prevented further search. Then we found a few Purplish Jays making a racket. This suggested they were bullying some predator. By carefully watching their movements and the direction of their screaming we could guess where the predator was. Unfortunately, it was behind the river levees and we did not succeed at seeing it. We also checked the Capibara families to see if they were relaxed or attentively looking all in one direction, an attitude that, again, would suggest the presence of a predator.

Fig. 22. Vanilla orchid.

We found a spot in the river banks with a large concentration of butterflies. This is one of the most typical pictures of the Pantanal. We had the yellow Cloudless Sulphur (*Phoebis sennae marcellina*) and the pale green Statira Sulphur (*Aprhissa statira*) plus a single Gulf Fritillary (*Agraulis vanillae*). As mentioned, my supposed pictures did not register, but Stephan took a picture of me taking pictures of them (fig. 31).



Fig. 21. Left: Pequi (*Caryocar brasiliense*, Caryocaraceae). Right: Manduvi (*Sterculia apetala*, Malvaceae). Note large Jabiru nest with attending Monk Parakeet nests under it. The holes left by dead branches on the right side of the tree were used by Hyacinth Macaws as nests.

As mentioned, another Stephan specialty was the plants, in this case, mostly aquatic plants. The most obvious were the *Eichhornia* floating mats, called camalotes. I learnt that there are several species. Here at the Pantanal the two common ones are *E. crassipes* and *E. azurea* (fig. 22). The latter has fimbriated margins of the petals and this is the one I saw. Other floating plants were the fern Orella de onça (*Salvinia auriculata*, Salviniacea) with a pubescence that repels water, and the Alface d'água (*Pistia stratioides*, Araceae) with elegantly striped leaves. In the river banks I saw Cipó (*Paragonia pyramidata*, Bignoniaceae), Santa Luzia (*Commelina* cf. *nudiflora*, Commelinaceae), Cipó-de-arraia (*Cissus spinosa*, Vitaceae), and the fourth palm at Fazenda Barranco Alto: Tucum (*Bactris glaucescens*, Arecaceae). The books by Pott and Pott were very helpful for confirmation of these IDs (they were at the lodge library).

Birds: 44 species (lifers: Pale-legged Hornero, Rusty-backed Spinetail, Fawn-breasted Wren). Other: Capibara, Buffalo (2), Yacaré, Black-and-white Tegu, Cloudless Sulphur, Statira Sulphur, Gulf Fritillary.

<u>Lodge</u>: While we were having lunch, Stephan noticed the racket of the Jays again. We looked under the mango tree and there was a huge Great Black Hawk juvenile on the floor. The Jays were bullying it and persisted when the raptor flew to a nearby branch. Eventually it left and everything went back to normal. That is the Chachalacas, the pair of Curassows pecking the mangoes, the Horneros tending their nest, and the Scaled Doves repeating their call.



Fig. 22. Eichhornia azurea (Pontederiaceae), Paragonia pyramidata (Bignoniaceae), Cissus spinosa (Vitaceae), and Commelina cf. nudiflora (Commelinaceae),

Afternoon. Forest with Stephan

We explored more lagoons and cordilleiras. After five days, many birds were the same. It was nice, however, to recognize many of the songs coming from the forest. We stopped at a salina to look at the waders. There were the usual Lesser Yellowlegs. We also saw a few Wilson's Falaropes. But there was a fairly big wader that was intriguing. It was almost the size of Stilts, with a long slightly curved bill. We slowly approached it under a scorching sun and could take a decent picture. We could confirm it was a Hudsonian Godwit, a rare migrant in Pantanal. This was a bimbo both for Stephan and for me. A Coatí appeared and slowly walked along the shore (fig. 17) and there was also a Wild pig mother with a littlun in the distance.

The other good sighting was a Pale-crested Woodpecker. Unfortunately, the view was brief (but I had a better one later). We enjoyed another gorgeous sunset. I was telling Stephan that in terms of woodpeckers we only needed to see the White Woodpecker. Promptly, a pair flew to some trees in front of us and back with their characteristic calls. Then we turned to the night tour that, today was productive again. In addition to Pauraques, deer and yacares, we found a Giant Anteater. It was slowly walking along the track without paying any attention to us. We followed it for quite a while, until it disappeared. This was the fourth Giant Anteater I saw.

Birds: 56 species (lifers: Hudsonian Godwit, Pale-crested Woodpecker).

Other: Pampas Deer, Capibara, Wild pig, Coati, Giant Ant-eater.

Sunday 30

<u>Lodge</u>. Red-billed Scythebill, Orange-backed Troupial, Streaked Flycatcher.

Morning. Rio Negro with Stephan

Stephan had prepared a special event for this morning. We would canoe downriver for a few kilometers and would have breakfast in one of the sand beaches. Philip and Catherine, a Swiss couple were in one canoe and Stephan and I in another one (fig. 24). Not having an engine running made for a very quiet and peaceful cruising. Again, I could identify many of the sounds coming off the forest and see yacaré's eyes much closer.



Fig. 23. Yacares (Cayman yacare) and Teyú (Salvator merianae).

We stopped at a sand bank for a picnic breakfast. There were Jaguar footprints along the shore (fig. 10). In fact, the Swiss couple had seen a female with two cubs in this place yesterday. The other Swiss couple (Urs and Katherine) had seen the same female actually hunting a capibara last week. This female is well known in the area and has received the name of Luciana. It had some cubs in the past and in July 2022 was seen with her current two cubs. The cubs remain with her mother for about two years. Mauro and Paolo had seen many Jaguars in the northern Pantanal also last week and had seen a male with a collar yesterday. So, I was the only one who had not seen one, only the tracks. It was frustrating.

This place, however, was very good. We saw (not only heard) the White-lored Spinetail. We saw the almost only Antbird of the trip, a beautiful Mato Grosso Antbird. And we also enjoyed a Henna-capped Foliage-gleaner. Three lifers in just a few minutes. The breakfast was splendid, as usual a lot more food that we could eat. Plus, when having coffee, we saw a family of Giant Otters swimming. They were a bit far away, but we could follow them for quite a while.

The rest of the kayaking was pleasant but uneventful. We saw a buffalo laying half buried in the water. We had seen it yesterday with injuries in its head and looking weak. It was not moving so we thought it had died. These buffaloes were imported from Africa, just like the cattle was imported from India. But many of the former escaped and became feral. They seem to do pretty well on their own. Apparently, on the other hand, cows are not able to survive in the wild.





Fig. 24. Río Negro with the cliff that gives the name Barranco Alto to the property and one of the many lagoons with the common assemblage of Herons and Stilts.



Fig. 25. Embaúba (Cecropia pachystachya). Find the hidden Toucan and Ñanday Parakeets.

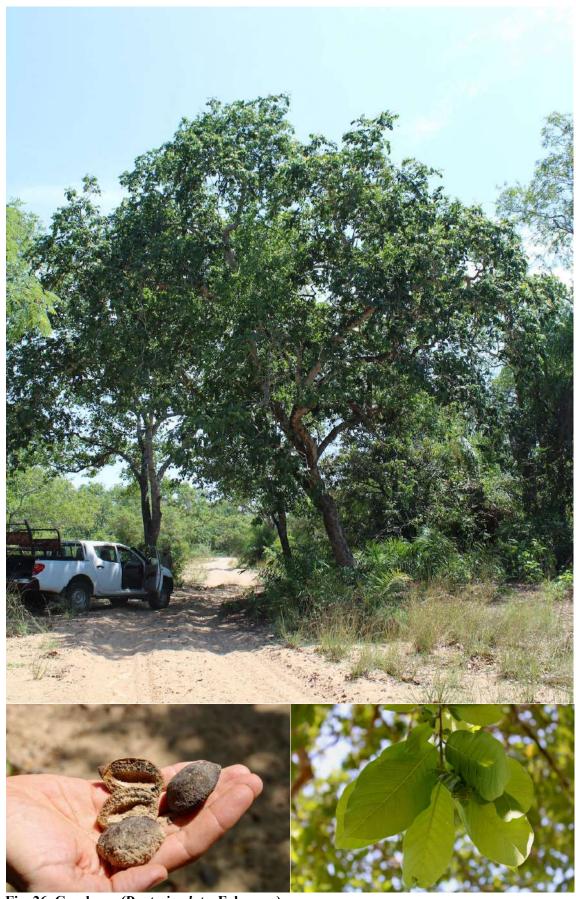


Fig. 26. Cumbaru (Dypterix alata, Fabaceae)



Fig. 27. Jatobá (Hymenaea stigonocarpa, Fabaceae)

We reached a summer house and used the port to come out of the water. Fernando was waiting for us with the truck to take us back to the lodge. When we told him about the dead buffalo, he pulled his machete and urged us to go back immediately and cut its head to put it up at the lodge. Catherine believed him for a while and then she realized it was just another of Fernando's jokes. We saw another gang of peccaries on the way back, squeezing under one of the wire fences. There were more birds including a very close Savanna Hawk. I realized the drawings in guides show it a lot more reddish than it really is. Stephan also showed us a delicate Vanilla Orchid (fig. 20), hanging from a tree. When we were passing by the airstrip near the lodge, we saw a Red-winged Tinamou. This one liked to hang around with the Rheas. People though that the tinamou was confused about its identity.

Birds: 46 species (lifers: White-lored Spinetail, Henna-capped Foliage-gleaner, Mato Grosso Antbird).

Other: Giant Otter, Capibara, White-lipped Peccari, Pampas Deer.

Lodge.

At lunchtime, Mauro explained his experience last night. There were some scientists placing traps for jaguars nearby. Philip and Catherine had been checking the way these traps were placed. When the jaguar puts its paw on the trap, it triggers an alarm, so the scientists can run to the place and do their measurements before the animal dehydrates or is injured in some way. Then they shot a tranquilizer to put the animal to sleep. Once done, they inject another drug to wake it up. But now with a tracking collar. They had offered us to be there while they were processing the Jaguar. I preferred to sleep so I would be ready this morning for another chance to see a free Jaguar, not a captured one. But Mauro, being a veterinarian, could not think of anything more exciting than touching the animal. He was allowed to control the heartbeat of the Jaguar while the others were extracting blood, weighing it, collecting a few hairs for DNA analysis and putting the collar in place. I could understand that this was the highlight of the trip for Mauro.

This was the last meal for the Swiss couple, the Italian couple, and Stephan at Barranco Alto. A plane came to pick the Swiss couple and Stephan up. Plus, a driver came with a 4x4 to take Mauro and Paolo to Bonito for a few more days of wildlife watching. We said goodbye with some sadness. It was surprising how fast we had liked each other. This is the routine of the place, turnover of customers every few days. It must be tough for Claudia, Camilla, and Fernando, being nice and warm with different people every few days.

Afternoon. Rio Negro with Fernando

I had only two more opportunities to see the Jaguar, today's afternoon and tomorrow's morning tours. Before coming to the Pantanal, I had no high expectations to see it. I had read that Jaguars were seen at Barranco Alto about 15 times per dry season. This means once every 24 days. Since I was going to be there only seven days, chances seemed pretty low. But everybody else had seen them in the last couple of weeks. Why not me? It was clear that I had to take only boat tours since the river banks is where the cats are seen more often and that this was going to be the main target. Fernando said that to see the Jaguar one had to go fast and cover as much of the river as possible. So, we speeded not paying much attention to birds or Capibaras. We went by the buffalo we had seen yesterday (fig. 30) and it turned out to be alive! It was lying in the water and a Yellow-headed Caracara was cleaning his skin of parasites. In fact, the Caracara jumped from the buffalo to a Capibara that was also lying sideways without moving and back. I was psychologically preparing myself for dipping again when Fernando said "Carlos, the Jaguar!" (fig. 28).



Fig. 28. The jaguar.

It was a powerful male. It was resting on the grass by the shore. It was close. We could take nice pictures. We got as close as reasonable. Then it stretched out and lazily walked into the water, it swam a few meters and climbed back to the shore to groom himself. (fig. 29) Later I found out that this male had been seen for the first time on 19 July this year, in the company of a female named Bezinha (babe in Portuguese), daughter of Barbara and likely two years old. People at Barranco Alto keep track of the Jaguars seen in the area, mostly along Río Negro. The spots in the sides form

rosettes and these vary in each individual. They have identified over 30 different Jaguars which suggests that the population is substantial.

Once we were tired of taking pictures, Fernando suggested that we returned to pick Claudia up so she could do proper documentation. Of course, I was so happy that anything seemed OK (fig. 31). We went back and Claudia came onboard with her camera. But when we got to the place the male had disappeared. We let the day go by on the water and returned for dinner. Finally, at one of the trees by the workshops near the lodge, we saw a cute Ferruginous Pygmy Owl.



Fig. 29. Wading jaguar.

Tonight, I was the only customer. So, I was going to have dinner alone. Usually, Claudia and Camilla had lunch with us, but they retired to their homes for dinner. As mentioned, their dedication to the tourists is amazing. But Camilla felt sorry for me and she decided to have dinner together. We had a very nice conversation. I was grateful.

Birds: 28 species (lifer: Ferruginous Pygmy owl).

Other: Jaguar*, Capibara, Agouti (Fernando), Buffalo (2), Yacaré.

Monday 31.

Morning. Rio Negro with Fernando

I decided the chances of seeing one of the mammals I had not seen on land were minimal. The Tamandua, the Lobo Guará or the Bush dog were seen very rarely. So, my best option was to return to the river and look for the Neotropical Otter and, who knows? Perhaps another Jaguar. The forecast predicted rain, so we took our "capas de xuva" and hoped for the best. It was a very quiet tour. The only new bird was the Lesser Kiskadee. We had two episodes of rain. We reached the Baia de Ramon, the farthest point I reached and rain begun to become intense. We returned to the lodge without having seen the otter.

Birds: 38 species (lifers: Lesser Kiskadee).

Other: Capibara, Buffalo, Yacaré.

Lodge.

I had my last lunch with Claudia, Camilla and a German tourist that arrived with another plane. I was surprised by the amounts of money that tourists spend in this kind of trip. A plane flight between Barranco Alto and Campo Grande cost 1571 euros! This lady came by herself, well with her guide who was going back to Campo Grande. But, of course, the guide did not pay. So, she had to pay the whole cost. Likewise, Philippe and Catherine had to pay this amount for just a one hour flight. Mauro said Paolo and him had spent 5000 euros each for this trip. But they were here for 20 days and moved around quite a bit, to northern and southern Pantanal and then to Bonito. Even though I did not have to pay for the plane ticket from Madrid to Sao Paulo, I had to pay 3600 euros for just one week. I don't know, but 5000 euros seem too little.





Fig. 30. Domestic and feral cattle, imported from India and Africa respectively.

Because of the recent elections (yesterday) Bolsonaro voters had blocked many of the roads with their trucks. Vava had to find different detours to avoid them. Finally, the trip was not much longer and I arrived at Hotel Orla Morena all right.

Afternoon. Return to Campo Grande (6 hours)

- 13:20. Leave lodge
- 13:40. Bridge over Rio Negro
- 15:40. End fields with gates. Begins good red track.
- 16:50. Aquidauana
- 17:48. Palmeiras
- 19:20. Hotel Orla Morena

On the way back: Hyacinth Macaw, Pampas Deer, Six-banded Armadillo*.

References

Guides and checklists

- Boschetti, Riccardo. 2022. Field Guide to Wildlife of the Pantanal. Illustrated Checklist and Geography 2nd ed, Sao José dos Campos, SP.
- Gwynne, J.A., R.S. Ridgely, G. Tudor, M. Argel. 2010. Wildlife Conservation Society Birds of Brazil. The Pantanal and Cerrado of Central Brazil. Comstock Pub. Ass., division of Cornell UP, Ithaca and London.
- Hannibal, W., L. Avelino Duarte, C. Cavalcante Santos. 2019. Non-volant Mammals of the Pantanal and surroundings. Natureza em Foco, Campo Grande MG.
- Lepage, D. 2022. Checklist of the birds of Fazenda Barranco Alto. Avibase The World Bird Database.
- Leuzinger, Lucas. 2011. Aves de Fazenda Barranco Alto. Táxeus/Listas de espécies www.taxeus.com.br.
- Leuzinger, Lucas & Gustavo de Oliveira. Jaguars of Río Negro. An Identification Guide. (http://bit.ly/OncasDoRioNegro)
- Lowen, J. 2010. Pantanal Wildlife. A Visitor's Guide to Brazil's Great Wetland. Bradt Travel Guides Ltd, UK.
- Lynx Edicions. 2020. Mammals of the Southern Cone. Argentina, Chile, Paraguay, Uruguay. Lynx Edicions, Bellaterra, Barcelona.
- Pearson, D.L., L. Beletsky. 2013. Brazil. Amazon and Pantanal. Traveler's Wildlife Guides.
- Pott, Arnildo, Vali J. Pott. 1994. Plantas do Pantanal. EMBRAPA, Brasilia. 1700 species collected along 10 years.
- Pott, Vali Joana, Arnildo Pott. 2000. Plantas Aquaticas do Pantanal. EMBRAPA, Brasilia.
- Ridgely, R.S., Gwynne, J.A., G. Tudor, M. Argel. 2016. Wildlife Conservation Society Birds of Brazil. The Atlantic Forest of Southeast Brazil. Including Sao Paulo and Rio de Janeiro. Comstock Pub. Ass., division of Cornell UP, Ithaca and London.
- Schweizer, J. 2022. Ariranhas no Pantanal. Ecologia e comportamento da *Pteronura brasiliensis*. Sao Paulo, Documento Pantanal. 2nd edition.

Scientific literature

- This reference is the only monograph I have been able to find about the Pantanal
- Por, F.D. 1995. The Pantanal of Mato Grosso (Brazil). World's Largest Wetlands. Monographie Biologicae vol 73. Kluwer Academic Publishers, Dordrecht
- This collection includes mostly recent limnological and remote sensing studies.
- Azevedo, F.C.C. & L.M. Verdade. 2012. Predator-prey interactions: jaguar predation on caiman in a floodplain forest. J. Zoology xx: 1-8. doi:10.1111/j.1469-7998.2011.00867.x
- Barbiero, L., A. Rezende Filho, S.A.C. Furquim, S. Furian, A.Y. Sakamoto, V. Valles, R.C. Graham, M. Fort, R.P.D. Ferreira & J.P. Queiroz Neto. 2008. Soil morphological control on saline and freshwater lake hydrogeochemistry in the Pantanal of Nhecolândia, Brazil. Geoderma 148: 91–106 doi:10.1016/j.geoderma.2008.09.010
- Costa, Maycira P.F. & Kevin H. Telmer. 2006. Utilizing SAR imagery and aquatic vegetation to map fresh and brackish lakes in the Brazilian Pantanal wetland. Remote Sensing of the Environment, 105: 204–213. doi:10.1016/j.rse.2006.06.014
- Guerreiro, Renato L., Ivan Bergier, Michael M. McGlue, Lucas V. Warren, Urbano Gomes Pinto de Abreu, Jônatas Abrahão & Mario L. Assine. 2019. The soda lakes of Nhecolândia: A conservation opportunity for the Pantanal wetlands. Perspectives in Ecology and Conservation, 17: 9–18. doi.org/10.1016/j.pecon.2018.11.002
- Pellegrinetti, Thierry A., Simone R. Cotta, Hugo Sarmento. Juliana S. Costa, Endrews Delbaje, Celia R. Montes, Plinio B. Camargo, Laurent Barbiero, Ary T. Rezende-Filho & Marli F. Fiore. 2022. Bacterial Communities Along Environmental Gradients in Tropical Soda Lakes. Microbial Ecology, 12 pp. doi.org/10.1007/s00248-022-02086-6
- Pereira, Osvaldo J. R., Eder R. Merino, Célia R. Montes, Laurent Barbiero, Ary T. Rezende-Filho, Yves Lucas & Adolpho J. Melfi. 2020. EstimatingWater pH Using Cloud-Based Landsat Images for a New Classification of the Nhecolândia Lakes (Brazilian Pantanal). Remote Sens., 12: 1090 (21 pp.); doi:10.3390/rs12071090
- This second collection includes the papers that George B. Schaller published on the biology of the Pantanal. It is endearing to see how anecdotal most of the information was,
- Prance, Ghillean T. & George B. Schaller. 1982. Preliminary Study of Some Vegetation Types of the Pantanal, Mato Grosso, Brazil. Brittonia, 34(2): 228-251.
- Schaller, G.B. 1983. Mammals and their biomass on a Brazilian ranch. Arquiv. Zool., 31(1): 1-36.
- Schaller, G.B. & Peter Gransden Crawshaw, Jr. 1980. Movement patterns of jaguar. Biotropica, 12(3): 161-168.
- Schaller, G.B. & Peter Gransden Crawshaw, Jr. 1982. Fishing Behavior of Paraguayan Caiman (Caiman crocodilus). Copeia, vol 1982(1): 66-72-
- Schaller, G.B. & Jose Manuel C. Vasconcelos. 1978. A Marsh Deer Census in Brazil. Oryx, xx: 345-351.
- Schaller, G.B. & J. M. C. Vasconcelos. 1978. Jaguar predation on capybara. Z. Säugctierkunde, 43: 296—301.

2. SPECIES LISTS

Birds

Rheidae

Greater Rhea Rhea americana Ema

25-31 October. Very common at Pantanal. Seen every day.

Tinamidae

Red-winged Tinamou *Rhynchotus rufescens* Perdiz 30 October. One near lodge. An individual that always hangs around with Rheas.

H Undulated Tinamou Crypturellus undulatus Jaó

26, 28-29 October. Heard in the forest.

Phalacrocoracidae

Neotropic Cormorant Phalacrocorax olivaceus Biguá

11 October. Seen at Vila Fatima.

21-23 October. A few at Parque ecologico and Itaquerí.

25-31 October. Seen almost every day at Pantanal in very low numbers.

Anhingidae

Anhinga Anhinga anhinga Biguatinga

19 October. One at Parque ecologico.

26, 27, 30, 31 October. Single females seen mostly near the river at Pantanal.

Fregatidae

Magnificent Frigatebird Fregata magnificens Fragata

11-15 October. Flying over Vila Fatima every day.

Ardeidae

Whistling Heron Syrigma sibilatrix Maria faceira

23 October. Three at Itaquerí.

26-30 October. Seen every day in small numbers (less than five) at Pantanal.

*Capped Heron Philherodius pileatus Garça real

27 October. Three hiding under a hanging tree by the river in Pantanal.

Cocoi Heron Ardea cocoi Garça moura

12 October. One flying above Vila Fatima.

23 October. One at Itaquerí.

27-30 October. Isolated individuals flying high at Pantanal.

Great White Egret Ardea alba Garça branca grande

21, 23 October. São Carlos and Itaquerí.

25-31 October. Seen in high numbers (dozens) every day at Pantanal, in lagoons and at the

river.

Little Blue Heron Egretta caerulea Garça azul

28 October. One seen at a lagoon.

Snowy Egret Egretta thula Garça branca pequena

11, 13 October. Vila Fatima.

25-31 October. Seen most days at Pantanal, solitary.

Cattle Egret Bubulcus ibis Garça vaqueira

11 October. In fields driving towards Vila Fatima.

17-21 October. Seen every day from the hotel in São Carlos.

27-29 October. Seen every day at Pantanal.

Striated Heron Butorides striata Socozinho

19, 21 October. Present at Parque Eologico.

26, 27, 29, 31 October. Many seen alone by the river, Pantanal.

Black-crowned Night-Heron Nycticorax nycticorax Socó dorminhoco

19, 21 October. Seen at Parque ecologico and Universidade Federal de São Carlos campus (UFSCar).

Rufescent Tiger-Heron *Tigrisoma lineatum* Socó boi 26-31 October. Seen isolated individuals, mostly near the river at Pantanal.

Ciconiidae

Jabiru Jabiru mycteria Tuiuiú

25-29 October. A few pairs seen every day in a lagoon.

Threskiornithidae

*Plumbeous Ibis Theristicus caerulescens Maçarico real

25 October. Seen along entrance road to Pantanal.

27 October. A pair in a nest seen in the forest.

28 October. In the forest.

Buff-necked Ibis Theristicus caudatus Curicaca

25-31 October. Seen every day in pairs.

Green Ibis Mesembrinibis cayennensis Corocoró

26-27 October. Isolated individuals seen by the river.

29-30 October. Heard by the river.

Bare-faced Ibis Phimosus infuscatus Tapicuru

15 October. One at gardens of Vila Fatima

19 October. Present at Parque Ecologico, São Carlos.

25-29 October. A few individuals seen every day.

White-faced Ibis Plegadis chihi Caraúna

28 October. Single individual seen in a lagoon.

Roseate Spoonbill Platalea ajaja Colhereiro

25-30 October. Seen in small numbers (less than 10) every day at Pantanal, in lagoons.

Anhimidae

Southern Screamer Chauna torquata Tachá

27-30 October. A few pairs.

Anatidae

Fulvous Whistling-duck Dendrocygna bicolor Marreca caneleira

21 October. Parque ecologico.

White-faced Whistling-duck Dendrocygna viduata Ireré

18, 19, 21 October. A few pairs at UFSCar and parque ecologico.

25, 27, 28-30 October. A few pairs in lagoons and river.

Black-bellied Whistling-duck Dendrocygna autumnalis Marrecla cabocla

18, 21 October. A few pairs at UFSCar and parque ecologico.

25-31 October. Seen every day in lagoons and river.

Muscovy Duck Cairina moschata Pato do mato

18, 19, 21 October. A few pairs at UFSCar and Parque ecologico.

25-29 October. Seen in lagoons and river.

Brazilian Teal Amazonetta brasiliensis Ananaí

18, 21 October. A few pairs at UFSCar and Parque ecologico.

26-29 October. A few pairs in lagoons and river.

Cathartidae

Lesser Yellow-headed Vulture Cathartes burrovianus Urubú de cabeça amarela

29 October. Seen during the morning river tour.

Turkey Vulture Cathartes aura Urubú de cabeça vermelha

11-31 October. Seen every day in Pantanal, but seldom in Vila Fatima or Sao Carlos.

American Black Vulture Coragyps atratus Urubú preto

11-31 October. Seen every day.

Pandionidae

Osprey Pandion haliaetus Águia pescadora

26, 30, 31 October. Single individuals seen during morning tours in the river.

Accipitridae

Black-collared Hawk Busarellus nigricollis Gavião velho

25-31 October. Always abundant in the reiver.

Snail Kite Rostrhamus sociabilis Gavião caramujeiro

26-30 October. Very common, usually standing on poles or stems around semi dry lagoons.

Also flying towards night roosting place.

*Plumbeous Kite Ictinia plumbea Sobi

18 October. An individual perched on a pole at the cerrado reserve in UFSCar.

26, 29 October. Seen flying above Río Negro.

Crane Hawk Geranospiza caerulescens Gavião pernilongo

18 October. One at the cerrado reserve in UFSCar.

26, 28 October. Single individuals at forest and river respectively.

*Great Black Hawk Buteogallus urubitinga Gaviao preto

18 October. A juvenile at the lodge, mobbed by the Purplish Jays.

*Short-tailed Hawk Buteo brachyurus Gavião de rabo curto

17 October. One flying seen from my hotel is Sao Carlos.

Savanna Hawk Heterospizias meridionalis Gavião caboclo

28 October. Seen at the forest.

30 October. Perched next to the road when driving back from the river.

Roadside Hawk Buteo magnirostris Gavião carijó

17 October. One seen from Hotel in São Carlos. 26-30 October. Fairly common in Pantanal.

White-tailed Hawk Gavião de rabo branco Geranoaetus albicaudatus

23 October. An individual at Serra de Itaquerí.

Falconidae

Crested (Southern) Caracara Caracara plancus Caracará

18-21 October. A few at UFSCar. 23 October. Seen at Serra de Itaquerí.

25, 26, 30 October. A few seen at Pantanal.

Yellow-headed Caracara Milvago chimachima

Carrapateiro

13, 15 October. Seen at Vila Fatima

18 October. Seen at cerrado reserve of UFSCar.

26, 28, 30 October. Seen at Pantanal. The 30th one perched at the lodge.

Chimango Caracara Milvago chimango Chimango

11, 15 October. Seen in Florianopolis.

American Kestrel Falco sparverius Quiriquiri

28 October. Perched on utility wires near lodge.

30 October. Seen near the lodge.

Falção de coleira Aplomado Falcon Falco femoralis

28 October. One perched near lagoon.

Cracidae

*Scaled Chachalaca Ortalis squamata Aracuã escamado

13 October. Seen at Vila Fatima.

Chaco Chachalaca Ortalis canicollis Aracuã do pantanal

25-31 October. Very common and noisy throughout and several eating mangoes at the lodge.

*Rusty-margined Guan Penelope superciliaris Jacupemba

19 October. A pair at the entrance of Parque ecologico.

*Common Piping-guan Pipile pipile Cujubi

26-31 October. Seen alone and in pairs at trees and flying.

*Bare-faced Curassow Crax fasciolata Mutum de penacho

25-31 October. A resident pair at the lodge, several throughout.

Aramidae

Aramus guarauna Carão

27, 29 October. Single individuals near lagoons.

Rallidae

Gray-necked Wood-rail Aramides cajanea Três potes

11, 13, 15 October. Seen in the gardens of Vila Fatima.

29-31 October. Seen all these days in Pantanal.

Saracura do mato Slaty-breasted Wood-rail Aramides saracura

12, 15 October. Seen in the gardens of Vila Fatima.

*Blackish Rail Pardirallus nigricans Saracura Sanã

27 October. One walking among vegetation in a lagoon.

American Purple Gallinule Porphyrula martinica Frango d'água azul

27 October. Present in a lagoon.

Common Gallinule (moorhen) Gallinula galeata Frango d'água comum

19, 21 October. Seen at UFSCar. 27 October. Present in a lagoon.

Cariamidae

Red-legged Seriema Cariama cristata Seriema

23 October. Heard at Serra de Itaquerí.

25-31 October. Seen almost every day in Pantanal.

Jacanidae

Wattled Jacana Jacana Jacana Jaçanã

23 October. Present at Broua reservoir.

26-31 October. Very common near water, both lagoons and the river. Juveniles present.

Recurvirostridae

White-backed Stilt Himantopus melanurus Pernilongo de costas pretas

23 October. Seen at Broua reservoir.

25-31 October. The most abundant bird near water.

Charadriidae

Southern Lapwing Vanellus chilensis Quero-quero

11-15 October. Pairs seen in fields of Florianopolis.

18, 21, 23 October. Very common in pairs in São Carlos.

25-31 October. Seen every day in Pantanal.

*Pied Plover Hoploxypterus cayanus Mexeriqueira

26-31 October. Always present in the river.

Collared Plover Charadrius collaris Batuíra de coleira

26-29 October. Several seen near water. One nest with one egg seen on the 27.

Scolopacidae

*Hudsonian Godwit Limosa haemastica Maçarico de bico virado

29 October. One in a lagoon with Coati. It was a bimbo for Stephan also.

Greater Yellowlegs Tringa melanoleuca Maçarico tititiu

26-29 October. Present in lagoon shores.

Lesser Yellowlegs Tringa flavipes Maçarico de perna amarela

26-29 October. Very abundant in lagoon shores.

Solitary Sandpiper Tringa solitaria Maçarico solitário

27 October. A few near a lagoon during morning tour.

Pectoral Sandpiper

26-27 October. A few near a lagoon.

*Buff-breasted Sandpiper Tryngites subruficollis Maçarico acanelado

27 October. One at the shores of a lake with Collared Plover during afternoon tour.

Phalaropidae

Wilson's Phalarope Phalaropus tricolor Pisa n'água

28-29 October. A few in lagoons, especially in the one with the Coati.

Laridae

Kelp Gull Larus dominicanus Gaivotão

11-15 October. Seen every day from Vila Fatima.

Sternidae

*Large-billed Tern Phaetusa simplex Trinte réis grande

25-31 October. Common both over lagoons and at the river.

Rynchopidae

Black Skimmer Rynchops niger Talha mar

25-31 October. Always a few by the river, sometimes also in lagoons.

Columbidae

Rock Dove Columba livia

16-23 October. Common in Sao Carlos.

Picazuro Pigeon Patagioenas picazuro Asa branca

16-23 October. Seen every day from the Hotel and at other places.

26, 27 October. Seen in Pantanal.

Eared Dove Zenaida auriculata Avoanta

16-23 October. Common in Sao Carlos.

*Scaled Dove Scardafella squammata Fogo apagou

25-31 October. Always present at the lodge and sometimes heard elsewhere.

Ruddy Ground-dove Columbina talpacoti Rolinha caldo de feijao

11-15 October. Always present in Vila Fatima.

16-23 October. Common in Sao Carlos.

Picui (Ground) Dove Columbina picui Rolinha picuí

29-30 October. Seen in fields near lodge.

White-tipped Dove Leptotila verreauxi Juriti pupu

11-15 October. Very common in Vila Fatima.

25-31 October. Always present at the lodge.

Psittacidae

*Hyacinth Macaw Anodorhynchus hyacinthinus Arara azul grande

25 October. Several on the way to Barranco Alto. A pair eating near Manduvi tree.

28, 29, 30 October. Seen both at the forest and the river.

31 October. A group of seven in one of the fazendas on the trip back

*Red-and-green Macaw Ara chloropterus Arara vermelha grande

25 October. At least one pair on the beach of a lagoon in the afternoon tour.

26-30 October. Seen in pairs mostly above the forest but also at the lodge and the river. One pair in nuptial parade next to Plumbeous Ibis nest.

*Blue-and-yellow Macaw Ara ararauna Arara canindé

28 October. Pairs flying on both morning and afternoon tours.

30 October. A pair seen from the lodge.

*Red-shouldered Macaw Diopsittaca nobilis Maracana pequena

26 October. Seen in forest during afternoon tour.

*Golden-collared Macaw Primolius auricollis Arara de colar

28 October. In the forest during morning tour.

29, 30 October. Both in the forest and the river.

*White-eyed Parakeet Psittacara leucophtalmus Periquitao maracana

16, 17 October. Very common in Sao Carlos. Seen from the Hotel.

20 October. Present at UFSCar.

21 October. Seen at Parque ecologico.

*Blue-crowned Parakeet Aratinga acuticaudata Periquitao de testa azul

25 October. During afternoon tour.

26-29 October. Seen frequently in forest, river and lodge.

Black-hooded Parakeet Nandayus nenday Principe negro

26, 28 October. Small groups in the forest.

Monk Parakeet Myiopsitta monachus Caturrita

25, 26, 28 October. Common, seen and heard.

*Blue-winged Parrotlet Forpus xanthopterygius Tuim

22 October. Seen at Universidade de São Paulo (USP).

*Yellow-chevroned Parakeet Brotogeris chiriri Periquito de asa amarela

17 October. Seen from the Hotel.

22 October. Seen at USP.

26 October. Seen during afternoon tour in the forest.

28, 29 October. Heard at the forest.

Scaly-headed Parrot Pionus maximiliani Maitaca verde

28 October. Barely seen at the forest morning tour.

29 October. Well seen on a high branch in forest on afternoon tour.

*Yellow-faced Parrot Alopiopsitta xanthops Papagaio galego

28 October. Seen in morning forest tour.

Turquoise-fronted Amazon Amazona aestiva Papagaio verdadeiro

26-29 October. Seen both at the forest and the river. Fairly common.

Cuculidae

Greater Ani Crotophaga major Anu coroca

26-31 October. Fairly common at the river.

Smooth-billed Ani Crotophaga ani Anu preto

11 October. Seen between Vila Fatima and restaurant.

23 October. Seen at Serra de Itaquerí.

25-28 October. Seen every day.

Guira Cuckoo Guira guira Anu branco

25, 27, 28 October. Easily seen near the lodge.

Strigidae

*Ferruginous Pygmy-Owl Glaucidium brasilianum Caburé

30 October. An individual perched in mango tree by workshops.

Burrowing Owl Athene cunicularia Coruja buraqueira

23 October. A pair and their two chicks at nest in Serra de Itaquerí.

25 October. Seen during afternoon tour in the forest.

Caprimulgidae

* Band-tailed Nighthawk Nyctiprogne leucopyga Bacurau d'água

27, 30 October. Seen the two times that we enjoyed sunset in the river.

Common Pauraque Nyctidromus albicollis Curiango

25-29 October. Seen in numbers during every night tour in the forest.

Apodidae

Gray-rumped Swift Chaetura cinereiventris Andorinhao cinza

13-15 October. Common above Vila Fatima.

Trochilidae

*Stripe-breasted Starthroat Heliomaster squamosus Bico reto verde

18 October. Very well seen at cerrado preserve UFSCar.

Swallow-tailed Hummingbird Eupetomena macroura Beija flor tesoura

11 October. Seen in forest between Vila Fatima and restaurant.

18, 19, 21 October. Seen at UFSCar.

21 October. Parque ecologico.

23 October. Campus USP.

Black-throated Mango Anthracothorax nigricollis Beija flor de beste preta

21 October. Parque ecologico.

Glittering-bellied Emerald Chlorostilbon aureoventris Besourinho de bico vermelho

18 October. Cerrrado preserve at UFSCar.

21 October. UFSCar.

Trogonidae

Blue-crowned Trogon Trogon curucui Surucuá de barriga vermelha

28 October. One male singing at the forest.

29, 30 October. Heard at the forest and the river respectively.

Alcedinidae

Green Kingfisher Chloroceryle americana Martim pescador pequeno

26 October. Seen at the river during morning tour.

Amazon Kingfisher Chloroceryle amazona Martim pescador verde

26, 27, 30, 31 October. Very commonly seen at the river.

*Green-and-rufous Kingfisher Chloroceryle inda Martim pescador da mata

27 October. One male seen at the river during afternoon tour.

Ringed Kingfisher Megaceryle torquata Martim pescador grande

18, 21 October. Seen at cerrado reserve and at campus UFSCar.

25, 26, 30, 31 October. Fairly common at the river.

Momotidae

Blue-crowned Motmot Momotus momota Udu de coroa azul

26 October. Seen at the river. 30-31 October. Heard at river.

Galbulidae

Rufous-tailed Jacamar Galbula ruficauda Bico de agulha

26, 27 October. Seen at the river.

Ramphastidae

Toco Toucan Ramphastos toco Tucanuçu

26-31 October. A few seen every day.

*Channel-billed Toucan Ramphastos vitellinus Tucano de bico preto

11-13 October. A pair was resident at Vila Fatima.

Picidae

*White-wedged Piculet Picumnus albosquamatus Pica pao anau escamado

21 October. One near UFSCar campus lagoon.

*Little Woodpecker Veniliornis passerinus Pica pau pequeno

18 October. Seen at the cerrado forest next to UFSCar campus.

20 October. Seen at UFSCar campus.

23 October. Seen at Serra de Itaquerí.

26, 28 October. Seen in the forest.

*Red-stained Woodpecker Veniliornis affinis Pica pau pauzinho avermelhado

28 October. One during forest morning tour.

*White Woodpecker Leuconerpers candidus Birro

19 October. One at parquet Ecologico.

29 October. A pair flying to a tree and back in the sunset.

Green-barred Woodpecker Colaptes melanochloros Pica pau carijó

25 October. Seen in afternoon tour near forest.

Campo (field) Flicker Colaptes campestris Pica pau do campo

12-13 October. A pair in Vila Fatima gardens.

23 October. Seen in Serra de Itaquerí.

26, 28 October. Seen in forest.

25-31 October. A pair frequently seen near the lodge.

*Pale-crested Woodpecker *Celeus lugubris* Pica pau louro 29 October. One briefly seen in forest morning tour. A second one very well seen in the

afternoon tour.

Lineated Woodpecker Dryocopus lineatus Pica pau de cabeça vermelha

27 October. One flying near lodge and another one in nest (in a hole of the pole for a gate).

*Crimson-crested Woodpecker Campephilus melanoleucus Pica pau de topete vermelho

28 October. One in forest during morning tour.

30 October. One from the river.

Furnariidae

Joao de barro Rufous Hornero Furnarius rufus

12-15 October. Seen every day in Vila Fatima gardens.

19-20 October. Seen every day at campus UFSCar.

21 October. Campus UFSCar and Parque ecologico.

22 October. Campus USP.

25-31 October. A pair had a nest at the lodge. Also seen at the forest.

*Band-tailed Hornero Furnarius figulus Maria de barro de pe preto

21 October. A group of four or five at entrance to parque ecologico.

*Pale-legged Hornero Furnarius leucopus Maria de barro de pe branco

29 October. Seen at the river during morning tour.

*White-lored Spinetail Joao do Pantanal Synallaxis albilora 30 October. Seen at the river during morning tour. Heard several times previous days.

*Rusty-backed Spinetail Cranioleuca vulpina Arredio do rio

29 October. Seen at the river during morning tour.

*Yellow-chinned Spinetail Certhiaxis cinnamomeus Curutié 28 October. Seen at nest in dry reeds in one of the lagoons during morning tour.

*Greater Thornbird Phacellodomus ruber Graveteiro 26 October. One inspecting potential nest at the river and partner heard during morning tour.

Fura barreira *Henna-capped Foliage-gleaner Hylochryptus rectirostris 30 October. Seen at the sand dune by the river during morning tour.

Dendrocolaptidae

Narrow-billed Woodcreeper Lepidocolaptes angustirostris Arapaçu do cerrado

18 October. Cerrado reserve of UFSCar.

21 October. Campus of UFSCar and Parque ecologico.

26, 27 October. Seen at the lodge.

28 October. Seen at forest during morning tour.

*Red-billed Scythebill Campylorhamphus trochilirostris Arapaçu beija flor

27 October. A pair in tree right next to lodge.

30 October. One in trees behind the lodge.

*Great Rufous Woodcreeper Xiphocolaptes major Arapaçu gigante

28 October. One very nicely seen at the forest during morning tour.

Thamnophilidae

*Mato Grosso Antbird Cercomacra melanaria Chorroró do pantanal

30 October. Heard and seen at the dune by the river.

Barred Antshrike Thammophilus doliatus Choca barrada

21 October. A male at campus UFSCar.

28 October. A male at the forest during morning tour.

30 October. Heard at the dune by the river.

Pipridae

*Helmeted Manakin Soldadinho Antilophia galeata

23 October. Heard and seen at Serra Itaquerí.

Tyrannidae

*Southern Beardless Tyrannulet Camptostoma obsoletum Risadinha

18 October. One at the cerrado reserve UFSCar.

Pearly-vented Tody-Tyrant Hemitriccus margaritaceiventer Olho de ouo

28 October. Seen at forest during afternoon tour.

*Yellow-lored Tody-flycatcher Todirostrum poliocephalus Teque-teque

23 October. Very nice views at Serra Itaqueri.

Common Tody-flycatcher Todirostrum cinereum Relógio

21 October. Seen at campus UFSCar.

Cliff Flycatcher Hirundinea ferruginea Gibao de couro

20 October. Seen at campus UFSCar.

Black-backed Water-tyrant (Pied) Fluvicola albiventer Lavadeira de cara branca

26 October. Seen at the river during morning tour.

Masked Water-Tyrant Fluvicola nengeta Lavadeir mascarada

18, 20, 21 October. Seen at campus UFSCar.

23 October. Serra de Itaqueri.

White-headed Marsh-tyrant Arundinicola leucocephala Freirinha

26 October. Seen at the river during morning tour.

27 October. Seen at forest during morning tour.

Grey Monjita Xolmis cinereus Maria branca

19 October. Serra de Itaqueri.

*White-rumped Monjita Xolmis velatus Noivinha branca

27 October. Forest during morning tour.

Long-tailed Tyrant Colonia colonus Viuvinha

19 October. Entrance to Parque ecologico.

Cattle Tyrant *Machetornis rixosa* Siriri cavaleiro

29 October. Seen at forest during afternoon tour.

Piratic Flycatcher Legatus leucophaius Bentevi pirata

12 October. Vila Fatima.

28 October. Seen at the forest during afternoon tour.

*Variegated Flycatcher Empidonomus varius Peitica

18, 21 October. Campus UFSCar.

22 October. Campus USP.

Rusty-margined Flycatcher Myiozetetes cayanensis Bentevizinho de asa ruiva

28 October. Seen at the forest during morning tour.

30 October. Seen at the river during morning tour.

Social Flycatcher Myiozetetes similis Bentevizinho

15 October. Vila Fatima.

19, 21 October. Parque ecologico.

20 October. Campus UFSCar.

Great Kiskadee Pitangus sulphuratus Bantevi

11-15 October. Seen every day at Vila Fatima.

16-23 October. Seen every day in Sao Carlos.

25-31 October. Seen every day at Pantanal.

*Lesser Kiskadee Philoydor lictor Bentevicinho do brezo

31 October. Seen at the river during afternoon tour.

Streaked Flycatcher Myiodynastes maculatus Bentevi rajado

20 October. Campus UFSCar.

28 October. Seen at the forest during morning and afternoon tours.

30 October. Seen at the lodge.

*Rufous Casiornis Casiornis rufus Caneleiro

28 October. Seen at forest during afternoon tour.

Crowned Slaty Flycatcher Griseotyrannus aurantioatrocristatus Bentevi de chapéu

22 October. Campus USP.23 October. Serra de Itaqueri.

Tropical Kingbird Tyrannus melancholicus Siriri

11-15 October. Seen almost every day at Vila Fatima.

18-23 October. Seen every day at Sao Carlos.

25-30 October. Seen almost every day at Pantanal.

Fork-tailed Flycatcher Tyrannus savana Tesourinha

20-21 October. Campus UFSCar.23 October. Serra de Itaqueri.

*Short-Crested Flycatcher Myiarchus ferox Maria cavaleira

18 October. Cerrado reserve at UFSCar.

23 October. Serra de Itaqueri.

26 October. At the river during morning tour.

*Swainson's Flycatcher Myiarchus swainsoni Irré

26 October. Seen at the forest during afternoon tour.

Brown-crested Flycatcher Myiarchus tyrannulus Maria Tola

27-29 October. Seen at the forest.

Hirundinidae

White-winged Swallow Tachycineta albiventer Andorinha do rio

21 October. Seen at campus UFSCar.

26, 30-31 October. Pantanal, especially at the river.

Gray-breasted Martin Progne chalybea Andorinha grande

27 October. Seen in Pantanal.

Brown-chested Martin Progne tapera Andorinha do campo

26-28 October. Seen both in forest and river at Pantanal.

Blue-and-white Swallow Pygochelido) cyanoleuca Andorinha pequena

11 October. Present at Vila Fatima. 16-23 October. Every day in Sao Carlos. Southern Rough-winged Swallow Stelgidopteryx ruficollis Andorinha serradora

31-33 October. Seen near the river in Pantanal.

Troglodytidae

*Thrush-like Wren Campylorhynchus turdinus Catatau

27-30 October. Seen or heard all these days in Pantanal.

Southern House Wren Troglodytes musculus Corruíra

11-15 October. Seen and heard al days in Vila Fatima.

19, 21-23 October. Seen in São Carlos.

Mimidae

Chalk-browed Mockingbird Mimus saturninus Sabiá do campo

18, 20, 21 October. Seen at UFSCar campus in São Carlos.

27 October. Seen in forest morning tour.

Turdidae

Creamy-bellied Thrush Turdus amaurochalinus Sabiá poca

17-22 October. Seen almost daily.

Pale-breasted Thrush Turdus leucomelas Sabiá barranco

20-21 October. Seen at UFSCar campus in São Carlos.

22 October. Campus USP in São Carlos.

Rufous-bellied Thrush Turdus rufiventris Sabiá laranjeira

15 October. Seen at Vila Fatima.

19 October. UFSCar campus and Parque ecológico.

23 October. Serra de Itaquerí.

30 October. Heard from the river boat.

Corvidae

*Azure Jay *Cyanocorax caeruleus* Gralla azul

11 October. Seen in forest around Vila Fatima.

12 – 15 October. Seen every day at Vila Fatima.

*Purplish Jay Cyanocorax cyanomelas Gralla do pantanal

25 October. Very noisy in the mango tree by the lodge.

26-30 October.. Seen almost every day at the lodge and making a racket both in the forest and

the river.

Plush-crested Jay *Cyanocorax chrysops* Gralla do mato

25, 27, 28 October. Seen near lodge.

Passeridae

House Sparrow Passer domesticus Pardal

11 - 23 October. Seen often in cities.

Vireonidae

H Rufous-browed Peppershrike Cyclarhis gujanensis Pitiguarí

21 October. Heard near lagoon at campus in São Carlos. ID by Augusto Batistelli.

Parulidae

Southern Yellowthroat Geothlypis velata Pia cobra

21 October. Seen near lagoon at campus in São Carlos.

Thraupidae

Grey-headed Tanager Eucometis penicillata Pipira da taoca

29 October. One at the shores of the river.

Sayaca Tanager Thraupis sayaca Sanhaço cinza

15 October. Seen in Vila Fatima.

16-23 October. Seen every day near hotel and at campus in São Carlos.

25-31 October. Frequent at the lodge.

Palm Tanager Thraupis palmarum Sanhaço do coqueiro

11 October. A pair at Vila Fatima. 26 October. A pair at the lodge.

Blue Dacnis Dacnis cayana Saí azul

15 October. One seen near the lagoon at Vila Fatima.

*Burnished-buff Tanager Tangara (Stilenia) cayana Saíra amarela

21 October. A male and a female trapped with net at UFSCar campus.

*Silver-beaked Tanager Ramphocelos carbo Pipira vermelha

19 October. A pair seen at the entrance of Parque ecologico.

21 October. Seen at Parque ecologico.

23 October. Seen at Serra de Itaquerí.

26, 27, 20 October. Seen at the river the three days.

Bananaquit Coereba flaveola Cambacica

11-15 October. Seen often at Vila Fatima.

18-22 October. Seen almost every day at UFSCar.

25-31 October, NOT SEEN at Pantanal.

Cardinalidae

*Black-throated Grosbeak Saltator fuliginosus Pimentao

21 October. Briefly seen at Parque ecologico.

Thraupidae

*Rusty-collared Seedeater Sporophila collaris Coleiro do brejo

28 October. Seen at dry lagoon on morning tour.

Purple-throated Euphonia Euphonia chlorotica Fim-fim

22 October. One eating at feeder in USP campus.

Emberizidae

Rufous-collared Sparrow Zonotrichia capensis Tico-tico

11-15 October. Seen often at Vila Fatima. I did not pay much attention to this bird.

21 October. I only have one record from UFSCar.

Saffron Finch Sicalis flaveola Canário da terra

11-15 October. Seen every day at Vila fatima.

18-23 October. Seen every day at UFSCar.

25-31. Seen most days at lodge and surroundings.

Grassland Yellow-finch Sicalis luteola Canário tipiu

23 October. Seen at Serra de Itaquerí.

Yellow-billed Cardinal Paroaria capitata Cavalaria

26-31 October. Seen almost every day at Pantanal.

*Red-cowled Cardinal Paroaria dominicana Galo de campina

19 October. One near lagoon within UFSCar campus.

Blue-black Grassquit Volatinia jacarina Tiziu

21 October. A female at UFSCar campus.

Double-collared Seedeater Sporophila caerulescens Coleirinha

21 October. Abundant at UFSCar campus.

Icteridae

*Solitary Cacique Cacicus solitarius Iraúna de bico branco

28 October. One behind the lodge.

30 October. A distant one from the river in morning tour.

*Crested Oropendola Psarocolius decumanus Japu

26 October. Seen during afternoon tour.

28 October. Seen by the river.

*Orange-backed Troupial Icterus croconotus Joao Pinto

26 October. Seen for the first time singing atop a tree by the river.

28 October. Another male singing by the lodge.

29-31 October. Heard several times by the lodge and near the river.

Giant Cowbird Molothrus oryzivorus Iraúna grande

25-26 October. Seen often at the lodge.

Shiny Cowbird Molothrus bonariensis Chupim

11-13 October. Seen most days at Vila Fatima.

17-23 October. Seen almost every day in São Carlos.

25-26 October. Seen often at the lodge.

Scarlet-headed Blackbird Amblyramphus holosericeus Cardeal do banhado

27 October. One flying back and forth. Same lagoon as the next two birds.

28 October. One flying above another lagoon.

*Unicolored Blackbird Agelasticus cyanopus Carretão do brejo

27 October. A pair in reeds. Male singing. Same lagoon as Donacobius.

Donacobiidae

*Black-capped Donacobius Donacobius atricapilla Japacanim

27 October. One singing while perched in reeds.

Mammals

Bovidae	Syncerus caffer	Bufalo	3
Canidae	Cerdocyon thous	Crab-eating fox	7
Caviidae	Hydrochoerus hydrochaeris	Capibara	n
*Cervidae	Ozotocerus bezoarticus	Pampas deer	n

Cervidae	Mazama americana	Gray brocket	2
*Chlamyphoridae	Euphractus sexcintus	Six-banded armadillo	2
Dasyproctidae	Dasyprocta azarae	Agutí	~5
*Felidae	Panthera onca	Jaguar	1
*Mirmecophagidae	Mirmecophaga tridactyla	Giant ant-eater	4
*Mustelidae	Pteronura brasiliensis	Giant otter	8
*Primates	Callithrix penicillata	Black-tufted Marmoset	~6
Procyonidae	Nasua nasua	Coatí	3
Procyonidae	Procion cancrivorus	Crab-eating Racoon	1
*Suidae	Tayassu pecari	White-lipped pecari	~15
Suidae	Sus scrofa	Wild pig	~15
*Tapiridae	Tapirus terrestris	Tapir	1

Reptiles and amphibians

Alligatoridae	Cayman yacare	Yacaré
*Teiidae	Salvator merianae	Black and white Tegu
*Hylidae	Scinax fuscovarius	Snouted treefrog (toilet)
*Leptodactylidae	Physalaemus albonotatus	Mewing frog (formula 1)

Invertebrates

Dryadula phaetusa	Orange tiger
Danaus erippus	Southern Monarch
Morpho deidamia	Brasilian Morpho
Agraulis vanillae	Gulf Fritillary
Phoebis sennae marcellina	Cloudless sulphur
Aphrissa statira	Statira sulphur
	Danaus erippus Morpho deidamia Agraulis vanillae Phoebis sennae marcellina



Fig. 31. Photographing butterflies and celebrating the jaguar.

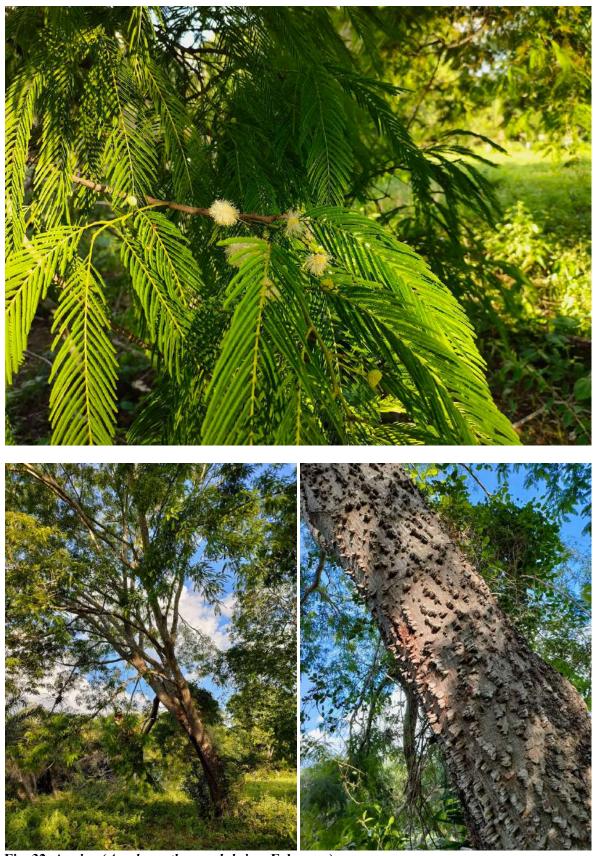


Fig. 32. Angico (Anadenanthera colubrina, Fabaceae)

Plants

Anacardiaceae Magnifera indica Mango

Alface d'agua Araceae Pistia stratioides Araucariaceae Araucaria angustifolia Araucaria Arecaceae Bactris glaucescens Tucum Bocaiúva Arecaceae Acrocomia sclerocarpa Arecaceae Scheelea phalerata Acurí Arecaceae Copernicia alba Carandá Arecaceae Euterpe oleracea Açaí Bignoniaceae Paragonia pyramidata Cipó

Bromeliaceae Bromelia balansae Caraguatá, Gravateiro

Cactaceae Cereus peruvianus Urumbeba Caryocaraceae Pequi Caryocar brasiliense Cecropiaceae (Moraceae) Cecropia pachystachya Embaúba Commelinaceae Commelina cf. Nudiflora Santa Luzia Fabaceae Enterolobium contortisiliqum Ximbuva Fabaceae Dypterix alata Cumbaru Fabaceae Jatoba Hymenaea stigonocarpa Fabaceae Anadenanthera colubrina Angico Malvaceae Sterculia apetala Manduvi Menyanthaceae Nymphoides indica Lagartixa

Moraceae Ficus clusiifolia Figueira mata pau

Myrtaceae Eugenia pitanga Pitanga

Orchidiaceae Vanilla palmarum Bahunilla de acurí

Pontederiaceae Eichhornia azurea Camalote
Rubiaceae Genipa americana Jenipapo
Salviniaceae Salvinia auriculata Orella de onça

Verbenaceae Vitex cymosa Tarama

Vitaceae Cissus spinosa Cipó-de-arraia

The Bromeliaceae has two names. In the Boschetti guide it is called Gravateiro (Bromelia balansae) (https://www.monaconatureencyclopedia.com/bromelia-balansae/?lang=es). But Hugo and (I think) Stephan called it Caraguatá (Aëchmaea distichanta)

(https://www.monaconatureencyclopedia.com/aechmea-distichantha-var-schlumbergeri/?lang=es)
According to the Monaco Nature Encyclopedia web it fits the Gravateiro better. This one is typical of drier climates and tolerates direct sunshine, while the Caraguatá is more typical of wet tropical environments and does not like direct sun. It also seems that the Caraguatá does not have the vividly red leaves of the Gravateiro. The Gravateiro can also be called Caraguatá, creating confusion.

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