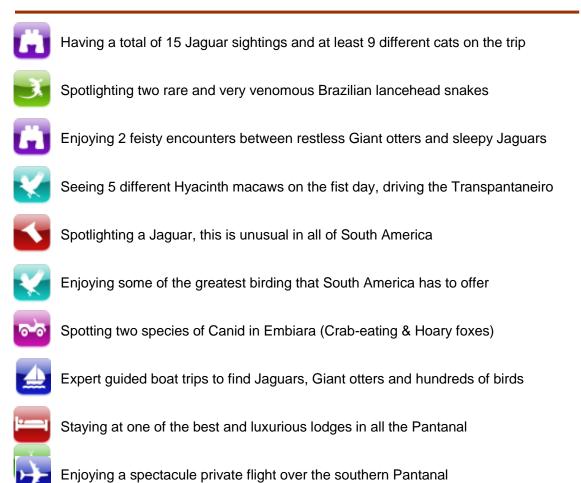
ROYLE SAFARIS

Pantanal Exploration

Destination: Pantanal, Brazil **Duration:** 15 Days **Dates:** 14th – 29th Sept



Tour Leader / Guides

Martin Royle (Royle Safaris Tour Leader) Ailton (Guide / Naturalist & Panthera Researcher) Stefan & Sam (Guides & Lodge Host) Fernando, Lucano (Horsemen and Jeep Driver)

<u>Participants</u>

Mr. W. D. Francis Mrs. Susan Francis

<u>Overview</u>

Days 1-2:	Cuiaba
Days 3-10:	Porto Jofre
Day 11:	Cuiaba
Days 12-14:	Embiara
Day 15:	Cuiaba
Day 16:	Home













Day by Day Breakdown

Overview

For a long time a forest enigma, a shadowy presence rarely seen and seldom understood the Jaguar remained one of the last big cat species to be encountered with any regularity. But as research continues in Brazil's huge wetland area (known as the Pantanal) this big cat is beginning to reveal itself to the world. Despite this, few people are aware of the frequency that Jaguars are seen here and as a result by joining this tour you could witness wonderful interactions between different Jaguars, Jaguars and Giant otters or even a hunt and kill in the presence of just a dozen of so people and a few hundred Yacre caiman. This big cat specialist trip aimed to bring you closer to a species which is so elusive elsewhere in its vast range through South and Central America; and there is no better place to do this than in the species' last stronghold the northern Pantanal. With the expert help of a local guide (Ailton Lara) and experienced boatman (Jaoday) we were in excellent hands as they guided us through the land of the Jaguar.

In addition to the tracking down Jaguars we flew south the 500 miles or so to Campo Grande and a private ranch / lodge to experience a different side of the Pantanal. Here there are fewer large rivers and far less 'swamp' habitat but instead a more dry savanna and scrub forest which is home to a whole different array of wildlife. By staying at Embiara you experienced a greater variety of wildlife that the Pantanal has to offer. Many species of birds and mammals can be seen here and most of the species should be different to what was seen in the north. You will also experience the Pantanal in a variety of ways on this lodge paradise; the way the lodges are set up here they are like small, private national parks and whether by 4x4, horseback, boat or on foot this boutique lodge will not disappoint.



Day 1 Cuiaba

Arrival

As today was a very late arrival, after collection from the airport you were taken to the hotel to rest before your first full day in Brazil.

Day 2 Cuiaba

Day of Rest

Today was a welcome break and recovery day after the long flight over from the UK yesterday. We visited the renowned Choppao, and sampled some of its wonderful food – albeit in monster sized portions. The rest of the day was spent relaxing and preparing for our journey into the Pantanal.

Day 3 Transpantaneira

Travel & Wildlife Watching

The Transpantaneira highway was originally planned to span the 350km between Pocone and Corumba and construction started in 1976. However after reaching Porto Jofre (148km from Pocone) the work was abandoned and it was too difficult and not cost effective to carry on. However the highway has now become one of the best wildlife watching roads anywhere in the world. By stopping and getting out of the vehicle at any of the hundreds of places along the road you will be a plethora of life which is comparable to anywhere outside of Africa. Our day was different species clocked up on the first day), but there where a few definite highlights to pick out from the mass of wildlife watching. Firstly 5 Hyacinth macaws was spotted today. The largest of the macaws and a majestic blue colour this bird is the flagship species of the Pantanal and a real success story. With fewer than 500 remaining in the early 1990's. However due to better policing of the international, illegal pet trade and better understanding of the macaws needs, the population is now around 6,500 with the Pantanal holding the majority of these birds. Another highlight was trying to count the throngs of Yacre caiman which congregated in every pool, stream, pond, lake, brook and puddle! This is a fruitless task as their was literally millions throughout the Pantanal. As well as the Hyacinth macaws the Jabiru storks on their mountainous nets were another birding highlight and a much smaller relative the little blue heron was spotted in one of the roadside ponds (this species being a very rare sighting in the Pantanal). But not to be outdone by birds, a very attractive Marsh deer doe posed elegantly for photographs in the bush before we left her in peace; and as we headed towards the camp and night set in the last notable highlight where spotting two Brazilian lancehead snakes as they slithered across the road. Misidentified at the time as Bushmasters, these snakes are every bit as venomous but endemic to the Pantanal. After such a eventful day we decided that a late start tomorrow was best and after some food, we hit the hav in our tents: safe in the knowledge that the army of leaf-cutter ants were keeping us safe as they marched continuously by our tents in their never ending labour of keeping their fungus happy.



Day 4 North Pantanal

Wildlife Watching

The day started with a Black-striped tufted capuchin feeding over our tents, the occasional fruit falling with a thud on the floor or the roof. The rest of the day went pretty well too with fantastic photographic opportunities presenting themselves with young Capybara and plentiful Caiman. Including one Caiman who had caught a Catskudo catfish and allowed us to approach within touching distance as it seemed to figure out the best way to sallow the fish without getting stabbed by one of the fishes many sharp radial fin bones. One of the top highlights of today was spending time with a clan of 5 Giant otters as they sunbathed and played in the mid morning sun. Their position on a fallen tree trunk allowed for excellent shots and as the youngsters frolicked in the lilies we just watched these intelligent carnivores as they went about their day. As the evening drew in, I think most of us had given up on seeing a Jaguar on the first day, but alas, as we headed home the sight of 4 or 5 boats with a dozen cameras all trained on the same spot brought us hope and as we got closer a large male Jaguar made himself seen. This male is called Pink Eye by Ailton and Panthera, due to him having lost an eye recently and the scar tissue remains pinkish around the right eye. He remained lying down under a small canopy of dead brush before getting up and walking onto a nice open beach and drinking for a couple of minutes (all this without ever taking his eye of us). After drinking he skulked off into the undergrowth and presumably to a Capybara kill in the bush. This Jaguar had been seen around here for a few days and a funky smell was emanating from the area, indicating a kill of some description. Afterwards we also saw another jaguar on the prowl before approaching a group of capybara before an explosive sprint out of the bushes and towards the group. However the capybara were too guick and disappeared into the river honking away in alarm. The hunt was unsuccessful but what a first day in the Pantanal. So as we arrived back in camp we reflected on seeing two of the Pantanal's big five on the first day. The others being Giant anteater, Brazilian tapir and Maned wolf - these were to remain more elusive.

Day 5 North Pantanal

Wildlife Watching

With an early start today (05:30am) we hoped that we would see a hunt or some behaviour from a Jaguar, instead we had to make do with numerous birding incidents. Including a very photogenic Ringed kingfisher which enabled us all to get excellent photographs. This is the largest kingfisher species in South America and one of the most vocal birds in the Pantanal. Their Kookaburra-esque cackling a loud reminder to any passing kingfisher (ringed or otherwise) that this area was taken! But out hope for more Jaguars wasn't in vane as in the late morning we got wind of a female spotted not far away. As we arrived we watched as a mini drama unfolded before us. Giant otters from a new holt nearby had smelt the Jaguar and went over to investigate. This resulted in an almighty cacophony of noise from the otters as they went through their whole repertoire; from droning, whistling, clicking, gargling, barking, hissing, howling, grunting and whining they gave all they had to intimidate the Jaguar into moving. But after a couple of growls and an impressive face off the Jaguar lay down and carried on sleeping. We decided that now was as good a time as any for a siesta and lunch ourselves and packed off to a secluded spot to erect the hammocks and get some food. But our snooze was cut short as news came through the radio of another Jaguar (this time a male) that had been spotted resting close by; so off we packed again in search of the second Jaguar of the day and third in two days here. This was a male and once again the Jaguar provided some photograph opportunities but he looked like he was more than relaxed and offered little sign of any action any time soon. So we went off again in search of another one. Later in the afternoon we visited the female Jaguar from this morning and she began to move into the bush; we quickly drove around to the other side of the headland and predicted that she would emerge onto this side. Sure enough after a patient wait she appeared and moved down towards a patch of water lilies and close to the waters edge. We eagerly anticipated a hunt as an unsuspecting Capybara lay only 50m away from our Jaguar. However due to the wind blowing in the wrong direction and obstacles blocking their eye lines neither animal knew of the others presence and whilst the Jaguar bounded through the water lilies and put on quite a show the Capybara was so oblivious that it went to sleep. Between the first and second sightings of the female today we set a couple of camera traps on the headland that the female Jaguar seemed to be occupying for a few days, we would collect these at a last date to see if we had predicted the trails the Jaguar uses correctly. As a hunt was looking more and more unlikely in the fading sun we headed back to the camp.







Wildlife Watching

Day 6 North Pantanal

Today we visited the same area we left the female Jaguar yesterday and the camera traps and we were pleased to see that the Jaguar was still in the area. She was moving around but just out of view from us, so we anchored on the opposite bank and staked her out. Luckily for us she was close to a second Giant otter holt and the family put up a good performance most of the day. Between playing, sunbathing, fishing and pestering the Jaguar they provided hours of entertainment. Numerous times the adults tried to scare the Jaguar off but she wasn't budging. After a couple of attempts at hounding the Jaguar to move away, one of the adults went to collect the four young otters from inside the holt to show them how to behave when you see a Jaguar. This type of 'monkey see, monkey do' copy cat learning is the most common way of preparing a young animal for later life; and how to safely approach and try to scare a Jaguar away from your holt is an important lesson for any young Giant otter in the Pantanal. In between some good birding and a long siesta nearby the Jaguar, the otters filled our day and cameras and as the sun began sink towards the horizon we started our journey back to camp. As we approached the camp we spotted 2 male jaguars on the river bank, as the light was fading we were not able to get excellent shots or views but it wasn't long before a fight ensued. The power of these cats was immense and the noises filled the quiet riverside and left us once again fully enjoying our day on the river searching for jaguars.

Day 7 North Pantanal

Wildlife Watching

Today we decided that spending more time with the birds would be a good idea, as the bird photography here is just superb. But before we even got to our first point of call (which would have been a colony of black skimmers) we spotted a mother jaguar swimming across the Rio Cuiaba with 2 cubs in tow. This was an amazing sight, we kept our boat back from their route and gently drifted in their wake. We waiting to see them properly when they reached the far bank but they climbed up into thick forest and disappeared very quickly. Well after this incredible sighting we carried on to the colony of around 50 Black skimmers. These cousins of terns have a very specialised beak design, where the lower mandible is longer than the upper and when the bird flies low over the water this longer lower jaw skims the top inch or so and when it hits something the beak snaps shut and hopefully the skimmer has a fish or shrimp. We were able to get the boat within 10m of the colony on the beach which included some birds still on nests and looking after chicks, which blend perfectly with the sand on their scraped hole of a nest. We also saw the courtship behaviour in which a male presents a female with a gift of fish and after some ceremonial dancing and jousting the female allows the male to mate and they part company. The rest of the morning was a split between the plentiful birds and some great monkey encounters; including Black howlers and Black-striped tufted capuchins which were both closer enough to allow for good photographs. We were also lucky enough to spot a rare aggregation of 7 Toco toucans on the river bank whilst on the way to investigate a Jaguar sighting close to camp. When we arrived at the Jaguar she was sunning herself in an open area of grass close to a beach. She slowly got up and heading over to a less clear spot and so we decided to come back as we were out spotlighting along the Transpantaneiro tonight. After dinner we headed out to see what lurked in the darkness and amidst the thousands of glowing Caiman eyes and the docile Capybara and stealthy Black-crowned night herons we startled a Jaguar. To see Jaguars after dark anywhere in their range is rare and it was guite a privilege to see one at close guarters (approximately 25m away from the vehicle) before we spooked him and he disappeared into the bush. The only other nocturnal animal we found was a fleeting glimpse of a Great-horned owl (the largest owl in South America), a close relative of our Eurasian eagle owl which is being slowly reintroduced into Britain. So despite not seeing a lot, we did see the best animal there is to see in the Pantanal so it was a worth while trip into the night.

Day 8 North Pantanal

Wildlife Watching

This morning started with Ailton explaining that he had to take his wife (Vera) to the doctors in Cuiaba due to bad headaches and so he couldn't join us on the boat today. So Jaoday was our guide and captain, and despite the language barrier there was the unspoken wildlife watchers' understanding between everyone and we enjoyed his expert boat handling to get into the best position for photographs time and time again. The day on the river began quite slowly but soon gathered pace as we heard of a Jaguar over the radio and started to navigate towards the Piquiri River where the Jaguar was. One the way we spotted four Southern caracaras squabbling over the river; and as events unfolded we noticed that three of the birds were violently attacking one individual which after an aerial tangle was dunked into the river and we far too wet to get back out. It was probably only our presence in the boat as we went to have a closer look that saved the Caracaras life as it was able to flap awkwardly back to the shore and scramble up the bank and to relative safety. This was such a savage attack that none of us could think what the single Caracara had done to invoke such a frenzied attack; but the life and death action was not to end there. When we eventually got to the Jaguar the sighting wasn't very good. The collared Jaguar was mostly covered by a fallen tree trunk and it took a couple of moments to realise that she was in the middle of subduing and killing a Caiman; this was a brief encounter as the Jaguar quickly dragged the Caiman into the thick bush. Realising that she was most likely to remain hidden from view as she ate and then probably sleep we left in search of another Jaguar. The search was not a long one as we found Pink Eye (the same male we saw on day 1) on an exposed bank a couple of meters above the river. We got some great pictures before departing for some lunch and a midday break. Our siesta was disturbed by a very noisy Green iguana rustling in the bushes before it was spooked and disappeared





with a loud crash and thud. The afternoon consisted of some more great birding and a short visit to both Jaguars we had seen today, only to find that they had not moved and so left for camp once again.

Day 9 North Pantanal

Wildlife Watching

We didn't even get into the boat this morning before news came through the radio of Jaguar sighting close to camp; it was Pink Eye again and he was in a nice photographic position. So we sat and watched as he rolled one way and then the other to get comfortable before settling down to sleep. We decided to move on when a small troop of Black-striped tufted capuchin monkeys moved in and even their twittering didn't prompt any movement from him. On our search for another Jaguar was happened across a group of 5 Giant otters as they fished and socialised; we followed them and watched as they caught fish after fish. Giving us great opportunities for pictures, especially when they caught a big fish and headed to a semi-submerged branch for support as they gripped the fish in their forepaws and gnawed and ripped away at the flesh. It was also fun to see the Otters tormenting Caiman, they must have been biting the Caiman's tails and after a quick tail flick and splash the Caiman dived for safety. Whether this is for fun or to help combat the inter-specific competition between the two main psicivorous predators in the Pantanal I'm not too sure. It would be a day for Giant otters actually as after paying a short visit to Pink Eye (who hadn't moved) and some lunch we came across a group of four adult Otters on the move. After a couple of surfaces we noticed that one of the Otters had a young one in her mouth. How the baby managed to get enough oxygen I couldn't tell you. The mother would come up for a breathe regularly but 2 out 3 breathes the baby's head would remain under the water! But low and behold when they got back to the holt the young Otter was making enough noise to convince us that it wasn't harmed in any way from the experience. We also saw one of the Otters catch and eat a Dourado (the famous golden game fish of the Pantanal), whilst not a large one, it was still dazzling golden in the sunlight. Today was the day that we also collected the camera traps, which despite begin in a good position for 4 nights and being close to where we had seen a female on two different occasions; all we caught where myself and Ailton and one lone Pale-vented dove! Oh well, that is the difficultly with second guessing wild animals in such a short amount of time. But the best sighting of the day was about to come as we travelling around a bend and onto a tributary of the Rio Cuiaba and all of a sudden a jaguar rushed from the reeds and straight into the water, at first we didn't understand what was happening until we noticed that the jaguar was not the only animal in the water. It had caught a capybara! The kill was pretty quick and the afterwards the large male jaguar dragged the capybara into the dense bush for consumption. Once again the big cat watching in the Pantanal lives up to its lofty reputation.



Day 10 North Pantanal

Wildlife Watching

With today being our last day in the Jaguar Camp and with potentially two long days of travelling ahead of us, we decided to have an early start and early finish to the last boat safari so that we could pack and get an early night. Derek also wanted to explore downstream on the Rio Cuiaba and so we left in the opposite direction to the last couple of days. Ailton had explained that there were a couple of trees which attract different species of birds when they are in bloom, but unfortunately we couldn't find any of these trees in flower. Unlike upstream the river is large with very few small streams to explore; we did find one and after running aground a couple of times we had some more good birding. Including a rare Sunbittern, although it didn't cooperate for photographs we did at least see the magnificent wing plumage as it flew away from us at every chance. We also found that downstream seemed devoid of many Capybara and Caiman and as a result we had little chance of finding a Jaguar but it was the only time when we had come across tracks in the sandy beaches. The first set Ailton found were either an immature Jaguar or an adult Ocelot and the second were Brazilian tapir. However none of these animals appeared for us and instead we were treated to a Ringed kingfisher trying to swallow a Red-bellied piranha (which was at least half the size of the bird) with incredible difficultly. I am convinced that the Kingfisher would either give up of choke as there was no way a fish that size was fitting down the narrow throat of the Kingfisher. But before either outcome developed the Kingfisher flew into the bush. On our way back to the camp we got wind of Pink Eye being spotted close by the camp, so we went over for some last minute jaguar pictures before we returned to the camp and realised that by accident we had devised a very good plan for today as the a rainstorm hit the camp only about 40mins after arriving back! We all decided that it was much better to be under the shelter of the dinner hall or our tent than the open canopy of the boat! So after our last evening meal in Porto Jofre and a refreshing caiprinha we headed to bed equally happy about all our Jaguar sightings and excellent bird photographs and excited about what the South Pantanal would have to offer the day after tomorrow.





Day 11 **Transpantaneira**

Travel & Wildlife Watching

Today started with a change of plan, due to a freak storm which hit without warning yesterday the roads in and out of Porto Jofre became almost unusable. So much so that the driver who was arranged to take another couple back to Cuiaba, was stuck and Ailton had to take them there last night and come back in order to pick us up and take us. This could have turned out to be almost 18 hours of continuous driving for our host. But as he approached the camp after taking Milton and Deepa back to Cuiaba the car broke on the rough and slippery roads. It was beyond repair by the side of the road and with no other transport or communication, Ailton was forced to walk back the 5-6 miles to camp in the early morning dark. He also saw Jaguar tracks on the road and heard one roaring close by; but he eventually made it back and ordered a pickup truck to collect the car and arrange a specially designed 4x4 people carrier to come from Cuiaba and collect us. Just before we left we where privileged to get close up views of a nesting pair of Hyacinth macaws who were deciding whether the tree next to the dinning room was a good spot to incubate their brood. Unfortunately due to the lateness of the journey back we didn't see as many animals along the Transpantaneira. The one stand out animal was a small Red-brocket deer which quickly crossed the road in front of us.

Day 12 South Pantanal

Travel & Wildlife Watching

After the slightly delayed flight from Cuiaba to the southern city of Campo Grande we were met by our local driver Jefferson and transferred through the many vast cattle ranches and past 1000's of Bhrama cattle. During the journey we had some wonderful sightings included our first Great rheas and 2 Giant anteaters as they slowly ambled through the fields in search of termite mounds. It is rare to see these unusual mammals during the middle of the day but the first one in particular was very accommodating and even clawed its way into a mound and ate as we watched from a pretty close distance. But probably the highlight of the journey was the great sighting of 2 foxes, which remained a mystery until later in the trip when they were identified as Hoary foxes, which despite not being rare and seldom ever seen. Once we arrived at Embiara a welcoming and refreshing caiparinha was just the ticket as we were introduced to the English and Scottish guides (making a bizarre home away from home feeling throughout the lodge). Before dinner a Brazilian tapir decided to make an appearance right outside the lodge as he fed on bociuva palm nuts. Whilst the sighting was short (2 people walking in the field disturbed him), and Derek couldn't get his camera set up for night shots in time it was incredible to see South America's largest mammal and usually a very shy animal at such close quarters.



Day 13 South Pantanal

This morning we started with a morning 4x4 safari around some of the grounds of the ranch. With over 1000 hectares of land the ranch has a staggering variety of wildlife and with a birding list of over 300 species recorded here there was so much to take in at every turn. Before we left we were told of a nesting pair of Red-and-green macaws in a large tree in the grounds of the lodge; whilst we didn't see the birds at the nest until the last day we did see the pair whilst on the safari. These beautiful birds are quite rare this far south as they reach the limit of their range here. We also saw 2 new species of deer here, including the shy Brown-brocket deer with its short and straight antlers, reminding us of muntjacs and duikers. The other deer being the more common species the Pampas deer which at around the size of Fallow deer are the largest common grazing animal in the south Pantanal. Also despite seeing so many birds in the north we were still impressed with an incredible sight of a large congregation of birds (Cattle egrets, Great egrets, Snowy egrets, Jabiru, Roseate spoonbills, Plumbeous ibis, Brazilian teals and a Cocoi heron) in a small lake which must have a huge amount of fish still available in the shrinking pool. During the drive we also stopped for a walk through some of the fields and scrub woodland. It is a great way to see the different tracks, fruits and nuts support a huge proportion of the ecosystem here. In the afternoon we left for the stables and with the help of Fernando, Lucano and Stefan were taken around some of the vast drainage field. Being on horseback is the best way to see the Pantanal and it is easy to see why the Pantanieros are amongst some of the best cowboys in the world. Whilst the wildlife watching was slim during the horse Riding we did see two large Golden tegu lizards (which display more convergent evolution with Monitor lizards in the Old World) and we also saw a persistent hunting wasp struggling with a paralysed tarantula on the sandy pathway. Not even the sight of huge hooves was enough to scare the wasp from its quarry. All in all this first day was a great way to see some of this ranch and whetted the appetite for the next day and a half.

Day 14 South Pantanal

Wildlife Watching

Wildlife Watching

Today we had a morning on the Rio Negro, this was similar yet different. With most of the same birdlife and Caiman (although far less then up north) the river had a familiar feel yet without the 'pressure' of spotting Jaguars. But we did





often forgotten) South American otter species. Being around the same size as our Eurasian otter and without the have a great sighting, a solitary Neotropical otter swam close to the shore past our boat and onwards foraging. A

quick scrabble up the bank (possibly in search for a suitable holt site) allowed for good views of the second (and flattened tail and pale throat patches the identification was fairly simple (once it had crawled out on the shore!). We also saw an interesting bit of Caiman behaviour as a male made its mating display very close to the boat. With head help up straight and the tail at a 45° angle he vibrated its back and in a stunning display the water dances and coupled with a deep roar and clap the male submerges and waits for the females to come. During lunch we spotted the world's smallest macaw species, the Yellow-collared macaw, which was also nesting in the lodge grounds. During the afternoon we had another 4x4 safari where a recent Puma kill of a Capybara was the highlight, almost every single bit of flesh had been cleansed from the carcass and the iridescent flies made some a macabre yet attractive sight. The other highlight of the drive was the spectacular strangler fig shapes and patterns which covered many of the bociuva palms along a particular road. We also saw a large Egret rookery on a distance island surrounded by a 'predator-proof' lake. As the sun began to set we spotted 5 Crab-eating foxes (all of which convinced me that the mysteries foxes we saw on the drive to Embiara were not Crab-eating foxes), we also had a rather unusual sighting of a roosting Red-legged Seriema up a tree! Its unusual to see a bird with such long legs perched on a tree branch.



Day 15 South Pantanal / Cuiaba

Wildlife Watching & Transit

This mornings jeep safari was dominated by macaws, as we saw the Yellow-collared macaws and nesting Red-and-green macaws in the camp before having an incredible flyby from 7 Blue-and-yellow macaws whilst in the vehicle. This was before walking close by a large tree which was home to a nesting pair of Hyacinth macaws, a Jabiru stork family and their smaller Monk parakeet lodgers. It was great for birding around here and with colourful parakeets and striking woodpeckers there was enough to distract Susan from her (and Stefans) brush with a nasty looking Marimbondo wasp nest. But luckily their appearance was worse than their sting and no lasting effects were felt. After our last bird watching and lunch we left the lodge via a light aircraft. This proved to be a fantastic way of seeing the Pantanal and how the different ranches use their land, some very barren and solely used for cattle farming and others with large areas of woodland, which have been converted to eco-lodges. The day was a long one and a good nights rest was the order of the day once we got back to Cuiaba.

The next day we travelled to the airport to find out that the flight to Sao Paulo had been cancelled, but I managed to get you rerouted via Brasilia to get to Sao Paulo in plenty of time to catch your long flight back across the Atlantic home.

Species List

Just Jaguars & South Pantanal / September 2011

Mammals (* = heard or signs only)

	O a mum an Nama	Din eminel Neme							SEF	PTEME	BER						
_	Common Name	Binominal Name	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	Black howler monkey	Alouatta fusca		*		7		2		3				*	*	4	
2	Black-striped capuchin monkey	Aotus libidinosus			10			31		7		4					
3	Large fruit-eating bat	Aritbeus jamaicensis			3												
4	Marsh deer	Blastocerus dichotomous		1													
5	Crab-eating fox	Cerdocyon thous												1	4		
6	Azara's agouti	Dasyprocta azarae												2	2		
7	Nine-banded armadillo	Dasypus septemicinctus				1											
8	Capybara	Hydrochaeris hydrochaeris		30	68	45	31	21	~50	39	26	47	6		16	4	
9	Common long-tongued bat	Glossophaga soricina													2		
10	Ocelot	Leopardus pardilus									*			*	*	-	
11	Neotropical otter	Lontra longicaudis													1		
12	Hoary fox	Lycalopex vetulus											2				
13	Red-brocket deer	Mazama americana										1			1		
14	Brown-brocket deer	Mazama gouazoubira												1	3	4	
15	Giant anteater	Myrmecophaga tridactyla											2	1			
16	South American coati	Nasua nasua											6		3	5	
17	Greater bulldog bat	Noctilio leporinus		~10	50+	50+		~20				1			1		
18	Pampas deer	Ozotocerus bezoarticus												4	8	8	
19	Jaguar	Panthera onca		2	1	3	4	2	2	1							
21	Crab-eating raccoon	Procyon cancrivorus												*			
21	Giant otter	Pteronura brasiliensis			5	12	9	2	4	13							
22	Puma	Puma concolor												*	*		
23	Feral pig	Sus scrofa												4	3	8	
24	Tapiti (Brazilian rabbit)	Sylvilagus brasiliensis													1		
25	Brazilian tapir	Tapirus terrestris									*		1	*			
26	Common round-eared bat	Tonatia bidens			~10			~5									

Birds (* = heard or signs only)

		Discontract Name							SE	PTEM	BER						
	Common Name	Binominal Name	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	Blue-throated piping guan	Aburria cumanensis					1			4	2	2		3	3		
2	Bicolor hawk	Accipiter bicolor									1						
3	Tiny hawk	Accipiter superciliosus					1										
4	Spotted sandpiper	Actitis macularius		1								1					
5	Bay-winged cowbird	Agelaioides badius		~15	1				2			2					
6	Unicoloured blackbird	Agelasticus cyanopus		1				11									
7	Yellow-faced parrot	Alipiopsitta xanthops												2			
8	Blue-fronted parrot	Amazona aestiva					6	1							2	1	
9	Orange-winged parrot	Amazona amazonica												2			
10	Brazilian teal	Amazonetta brasiliensis											3	1	21		
11	Scarlet-headed blackbird	Amblyramphus holosericeus		2													
12	Southern screamer	Anhima cornuta		1		2	4	4	5	7	4	13		4	1	7	
13	Anhinga	Anhinga anhinga		1	7	~20	22	32	32	36	40	1			5		
14	Hyacinth macaw	Anodorhynchus hyacinthinus		5	1	2	6			4	4	2	2	2	2	2	
15	Blue-and-yellow macaw	Ara ararauna														7	
16	Red-and-green macaw	Ara chloropterus												4		4	
17	Grey-necked wood-rail	Aramides cajanea		7	2	3	2	1	2	1	3	9			3		
18	Limpkin	Aramus guarauna		6		7		3	4	2		9			3	1	
19	Blue-crowned parakeet	Aratinga acuticaudata														8	
20	Peach-fonted parakeet	Aratinga aurea														4	
21	Great egret	Ardea alba		10+	20+	2	9	54	10	22	6		3	73	100's	2	
22	Cocoi heron	Ardea cocoi		5	33	19	43	29	28	22	15	12			10	2	
23	White-headed marsh-tyrant	Arundinicola leucocephala		2													
24	Burrowing owl	Athene cunicularia											2	2	2		
25	Yellow-chevroned parakeet	Brotogeris chiriri		~20			7			2	4	2	2	4	7		
26	Great-horned owl	Bubo virginianus						1									
27	Cattle egret	Bubulcus ibis		7			3	2	2	4	2	130+		9	125+	~25	
28	Black-collared hawk	Buteogallus nigricollis		3	1	2	4	1	2	2		4			1		
29	Great black hawk	Buteogallus urubitinga		5	3		1	1	5	3	1	3					
30	Striated heron	Butorides striata		1	1	1	4	18	12	6	7	1			3	1	
31	Yellow-rumped cacique	Cacicus cela				1	1	2	1	11		4		2	2		
32	Golden-winged cacique	Cacicus chrysopterus												2			
33	Muscovy duck	Cairina moschata				3						1	1	2	2	6	

34	Green-barred woodpecker	Caloptes melanochloros						1									
35	Cream-backed woodpecker	Campephilus leucopogon														2	
36	Crimson-crested woodpecker	Campephilus melanoleucos													1		
37	Red-billed scythebill	Campylorhamphus trochilirostris						1			1						
38	Thrush-like wren	Campylorhynchus turdinus						2									
39	Campo flicker	Colaptes campestris											1		1		
40	Southern caracara	Caracara plancus		30+	3	4	7	5	11	12	3	20	8	2	2	1	
41	Red-legged seriema	Cariama cristata												1	1	1	
42	Turkey vulture	Cathartes aura		1	10+	12	12	3	7	1	4	2	8		2	1	1
43	Lesser yellow-headed vulture	Cathartes burrovianus		1									5	7	8	2	
44	Collared plover	Charadrius collaris					2	8		1							
45	Amazon kingfisher	Chloroceryle amazona		1	5	11	9	14	9	7	12	1			8		
46	American pygmy kingfisher	Chloroceryle aenea						*									
47	Green kingfisher	Chloroceryle americana			1		2		2	3	2	1					
48	Green-and-rufous kingfisher	Chloroceryle inda								1							
49	Maguari stork	Ciconia maguari														2	
50	Little cuckoo	Coccycua minuta									1						
51	Pearly-breasted cuckoo	Coccyzus auleri		2													
52	Black-billed cuckoo	Coccyzus erythropthalmus					1										
53	Dark-billed cuckoo	Coccyzus melacoryphus		1	1	1											
54	Boat-billed heron	Cochlearius cochlearius			7		2		1	1	3						
55	Feral pigeon	Columba livia	50+	10+								20+					~30
56	Plain-breasted ground-dove	Columbina minuta											30+				
57	Scaled dove	Columbina squammata		2				4		4							
58	Ruddy ground-dove	Columbina talpacoti			1				2	2		4	2	7	2	17	
59	Black vulture	Coragyps atratus		30+	20+	20+	~25	35	26	99	11	10	2	7	13		3
60	Bare-faced currasow	Crax fasciolata		~10	3	2	2	3		5		3	4	21	26	18	
61	Smooth-billed ani	Crotophaga ani		15	30+	2	6	6	7	9		19				3	
62	Greater ani	Crotophaga major							1	1	3	2					
63	Undulated tinamou	Crypturellus undulatus									1						
64	Plush-crested jay	Cyanocorax chrysops											2	8	4	1	
65	Purplish jay	Cyanocorax cyanomedas								1					1		
66	Great dusky swift	Cypseloides senex									1						
67	Black-bellied whislting duck	Dendrocygna autumnalis													~60		
68	Banded antbird	Dichrozana cincta				1											
69	Black-capped conacobius	Donacobius atricapilla						7	3	4	3	1					
70	Lineated woodpecker	Dryocopus lineatus													1		
71	Little blue heron	Egretta caerulea		2													

72	Snowy egret	Egretta thula		10+		4		4		3	11	81		22	100's	1	
73	Sunbittern	Eurypyga helias		1							1						
74	Pale-legged hornero	Furnarius leucopous		2	2	2	1	6	3	4	1		9			2	
75	Rufous hornero	Furnarius rufus						3	3	1		4	5				
76	Rufous-tailed jacamar	Gallbula ruficauda			2	2	1	5	4		2				4		
77	Paraguay snipe	Gallinago paraguaiae		1													
78	Chopi blackbird	Gnorimopsar chopi										8					
79	Guira cuckoo	Guira guira											30+	41	11	15	
80	Rufous-thighed kite	Harpagus diodon				1											
81	Laughing falcon	Herpetotheres cachinnans														2	
82	Savanna hawk	Heterospizias meridonalis		7	1		1			1		1	2		1		
83	Black-necked stilt	Himantopus mexicanus		4											~50		
84	Barn swallow	Hirundo rustica			~10												
85	Band-tailed antbird	Hypocnemoides maculicauda									1						
86	Orange-backed troupial	Icterus croconatus		1		3		1	1	2	1						
87	Jabiru	Jabiru mycteria		6	4	5			1	7	5	4	17	3	2	5	
88	Wattled jacana	Jacana jacana		7		1			2			8	11	5	6	3	
89	Narrow-billed woodcreeper	Lepidocolaptes angustirostris										1					
90	Gray-headed kite	Leptodon cayanensis							1								
91	Gray-fronted dove	Leptotila rufaxilla												8	9	7	
92	White-tipped dove	Leptotila verreauxi					2	3	12	7	13	2	85+	28	5	19	
93	Cattle tyrant	Machetornis rixosa		~10	4	3	2	4	4	2	3	1	5				
94	Ringed kingfisher	Megaceryle torquata		4	7	9	16	10	16	13	16	5			5		
95	Boat-billed flycatcher	Megarhynchus pitangua	1														
96	White woodpecker	Melanerpes candidus												2			
97	Green ibis	Mesembrinibis cayennensis			3	1			2			2					
98	Yellow-headed caracara	Milvargo chimachima												1			
99	Giant cowbird	Molothrus oryzivorus				1		3		1	3	8		1			
100	Black-fronted nunbird	Monasa nigrifrons						1	2	1							
101	Wood stork	Mycteria americana		~35	5		13	7	14	10	12	18		11	5	13	
102	Short-crested flycatcher	Myiarchus ferox												2			
103	Monk parakeet	Myiopsitta monachus			11	30+	25	22	28	24					9	13	
104	Nanday parakeet	Nandayus nenday		~10									8				
105	Common potoo	Nyctibius griseus												1	1		
106	Black-crowned night-heron	Nycticorax nyticorax		5				~20			1	7					
107	Common pauraque	Nyctidrromus albicollis		4													
108	Band-tailed nightjar	Nyctiprogne leucopyga		~10		~50	19	3									
109	Chaco puffbird	Nystaclus striatipectus												1			

110	Chaco chachalaca	Ortalis canicollis		28	~10	~15	~15	19	11	12	17	24	8	4	8		
111	Yellow-billed cardinal	Paroaria capitata	1	~30	~30	3	9	38	43	25	23	45			11		
112	Red-crestd cardinal	Paroaria gularis	1	7													
113	House sparrow	Passer domesticus	1	~10									4				
114	Pale-vented dove	Patagioenas cayennensis	1		10+	~10	11	14	10	13	6	3				1	
115	Picazuro pigeon	Patagioenas picaxuro				1	2			2							
116	Ruddy pigeon	Patagioenas subvinacea	1				2				1						
117	Rusty-margined guan	Penelope superciliaris] [4													
118	Planalto hermit	Phaethornis pretrei]							1							
119	Large-billed tern	Phaetusa simplex		1	30+	36	38	33	39	31	5	1			1		
120	Neotropical cormorant	Phalacrocorax brasilianus				7	29	16	39	16	2	3			9		
121	Lesser kiskadee	Philohydor lictor					7	5	9	18	14	2	2		3	1	
122	Bare-faced ibis	Phimosus infiscatus								5	1		1		12	1	
123	Squirrel cuckoo	Piaya cayana			1			1	1			1					
124	Golden-green woodpecker	Piculus chrysochlorus					2										
125	Capped heron	Pilherodius pileatus		3	1			1	1		1	4					
126	Scaly-headed parrot	Pionus maximillani		2						12				1	1		
127	Great kiskadee	Pitangus sulphuratus		4	~10	5	10	12	6	14	11	2			1		
128	Roseate spoonbill	Platalea ajaja		1			14	13	16			16		54	13	7	
129	White-faced ibis	Plegadis chihi													1		
130	Nacunda highthawk	Podager nacunda										2			6		
131	Purple gallinule	Porphyrio martinica		2								1				1	
132	Yellow-collared macaw	Primolius auricollis												2	4	1	
133	Solitary-black cacique	Procacicus solitarius			2		3	3	2	3	1						
134	Grey-breasted martin	Progne chalybea								2	1						
135	Brown-chested martin	Progne tapera		2	20+	~25	~100	89	43	27	38				8		
136	Crested oropendola	Psarocolius decumanus						1									
137	Rufous cacholate	Pseudoseisura unirufa					1										
138	Chestnut-eared aracari	Pteroglossus castanotis	┦┠──	1		1	2			2							
139	Vermillion flycatcher	Pyrocephalus rubinus	┦┠──	_			1		1								
140	Toco toucan	Ramphastos toco	↓	5		4	2	11		4	2			1	8	2	
141	Silver-beaked tanager	Ramphocelus carbo	┤┝──					3		3	2				3		
142	Greater rhea	Rhea americana	↓										13	3	1	5	
143	Snail kite	Rostrhamus sociabilis	┦┠──									1				1	
144	Roadside hawk	Rupornis magnirostris	↓	1				1	1		1		2		3	1	
145	Black skimmer	Rynchops niger	┤┝──		3	20+	~55	78	54	51	2				17		
146	Greyish saltator	Saltator coerulescens	↓	2							2						
147	Saffron finch	Sicalis flaveola		20+													

148	Misto yellow-finch	Sicalis lutiventris											2				
149	Rusty-collared seedeater	Sporophila collaris						1									
150	Southern rough-winged swallow	Stelgidopteryx ruficollis					2	31	21	11	29				1		
151	White-browed blackbird	Sternella superciliaris								~60							
152	Yellow-billed tern	Sternula supercilaris			50+	5	27	12	6	11	1				2		
153	White-lored spinetail	Synallaxis albilora					1	5		2	1						
154	Sooty-fronted spinetail	Synallaxis frontalis						2									
155	Yellow-chinned spinetail	Synallaxis rutilans								1							
156	Whistling heron	Syrigna sibilatrix		2													
157	Least grebe	Tachybaptus dominicus													~10		
158	White-winged swallow	Tachycineta albiventer			3	15	~10	58	27	16	14	3					
159	White-rumped swallow	Tachycineta leucorrhoa		18							2						
160	White-lined tananger	Tachyphonus rufus					1										
161	Great antshrike	Taraba major								1							
162	Barred antshrike	Thamnophilus doliatus						1			2						
163	Plumbeous ibis	Theristicus caerulescens		14						4	2		1	3	3		
164	Buff-necked ibis	Theristicus caudatus								5	1			5	2	4	
165	Palm tanager	Thraupis palmarum	20+														
166	Sayaca tanager	Thraupis sayaca	3														
167	Sooty grassquit	Tiaris fuliginosus		1	6			15	1			3		16	8		
168	Rufescent-tiger heron	Tigrisoma lineatus		6	8	3	5	8	4	6	6	7			6	1	
169	Yellow-browed tody-flycatcher	Todirostrum chrycocrotaphum					1		2								
170	Common tody-flycatcher	Todirostrum cinereum						1		1							
171	Greater yellowlegs	Tringa melanoleuca							2								
172	Blue-crowned trogon	Trogon curucui						3									
173	Creamy-bellied thrush	Turdus amaurochalinus													2		
174	Rufous-bellied thrush	Turdus rufiventris												2	3	2	
175	Tropical kingbird	Tyrannus melancholicus		1	1		1										
176	Fork-tailed flycatcher	Tyrannus savanna		7		~10							2				
177	Pied lapwing	Vanellus cayanus		5			3	1		3	2				6		
178	Southern lapwing	Vanellus chilensis		10+						44			9	10	6	7	
179	Little woodpecker	Veniliornis maculifrons									1						
180	Great-rufous woodcreeper	Xiphocolaptes major													1		
181	White monjita	Xolmis irupero												2	1		
182	Eared ground-dove	Zenaida auriculata		1													

Reptiles (* = heard or signs only)

	Common Nome	Dineminal Name							SEI	РТЕМВ	ER						
_	Common Name	Binominal Name	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	Amazon racerunner	Ameiva ameiva	1												1		
2	Brazilian lancehead	Bothops moojeni		2													
3	Yacre caiman	Caiman yacare		100's	~50	100's	16	~100	125+	~75	i l						
4	Schreiber's spectacled lizard	Cerocaura schreibersii													1		
5	Green iguana	Iguana iguana		2	4		1		2								
6	Black-spotted skink	Mabuya nigropunctata							1								
7	Point-nosed false chameleon	Polychrus acutirostris												2			
8	Brown leaf lizard	Stenocercus caducus														1	
9	Golden tegu	Tupinambus teguixin			1					2					3		

Amphibians (* = heard or signs only)

	Common Nomo	Binominal Nama							SEF	PTEME	BER						
	Common Name	Binominal Name	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	Common lesser toad	Bufo granulosus									2						
2	Quacking treefrog	Hyla lanciformis					1										
3	Dwarf treefrog	Hyla nana			1												
4	Spotted treefrog	Hyla punctata			3												
5	Schneider's toad	Rhinella schneideri													1		

Freshwater Fish (* = heard or signs only)

	Common Name	Binominal Name							SEI	PTEME	BER						
	Common Name	Binominai Name	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	Red-bellied piranha	Pygocentrus nattereri		4						1	1						
2	Cascudo	Liposarcus anisitsi			1		1	1									
3	Madalena	Roeboides meyersi					4										
4	Pacu	Piaractus mesopotamicus			~20	~20	~20	~30	~20	~20	~50						
5	Surubim	Pseucoplatystoma fasciatus							1								
6	Dourado	Salminus brasiliensis								1							

Notable Invertebrates (* = heard or signs only)

	Common Nome	Dineminal Name							SE	PTEME	BER						
_	Common Name	Binominal Name	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	Spider wasp	Auplopus spp.		1											1		
2	Leaf cutter ant	Atta spp.		100's													
3	Brazilian morpho butterfly	Morphio deidamia									1						
4	Cloudless sulphur butterfly	Phoebis sennae									~20						
5	Leaf-minicking katydid	Cycloptera speculate				1											
6	Marimbondo wasp	Auplopus spp.									~20						
7	Scarlet dragonfly	Diastatops pullata				2	2				5						
8	Brown huntsman spider	Heteropoda venatoria		1				1						1	1		