# An Austral winter in Brazil.



This is a report of my wildlife sightings and experiences in Brazil from June to mid-September 2013. The report mostly concentrates of information useful to others planning a similar trip.

I have divided the report into to 3 sections. The first is about my time as a volunteer bird guide at the REGUA reserve in the state of Rio de Janeiro, the second about some of the other places I visited whilst in Brazil while the third is a species list account.

I have not gone into detail on where to look for some species as this information is already available from many trip reports previously.

I must thank Nicholas and Raquel Locke for giving me the opportunity to work as a guide at the Guapi Assu lodge. Thanks must also go to Adeli and Leonardno, and all the staff and volunteers, and guests I met that made the experience so unforgettable. I must also thank Rachell Walls and Lee Dingain for their kind help in organising my time at REGUA. In Minas Gerais, thanks must go to Fred Tavares who is world-class naturalist guide.

For pictures please see my Flickr albums: http://www.flickr.com/photos/ian\_loyd\_wildlife/sets/72157634100644789/

# **REGUA**

Regua which stands for (Reserva Ecológica de Guapiaçu) is a non-governmental conservation organisation set up to protect and restore a large area of the *Mata Atlantica* or Atlantic Rainforest. This is a unique habitat that stretches all the way along the Atlantic coastline from north east Brazil to Uruguay and inland to Argentina and Paraguay.

The Atlantic rainforest is much less well known than the huge Amazonian rainforest, and as a result has not received the protection it requires. The forest used to cover 1,477,500 km² but after decades of deforestation only 7% of this forest remains and only 2% of this is primary forest today making it the second most endangered biome on earth. Only the ecosystems of Madagascar are rarer. This forest is also ranked in the top 5 biodiversity hotspots in the world which shows just how important it is that the remaining 7% is given full protection and areas can be re planted to increase the sustainability of the eco system.



The Regua project protects one of the largest remnants of the forest left and is determined to restore lost habitats, stop over-hunting of dwindling populations and restore lost species. It employs guards to patrol the forest to prevent any illegal extraction and had planted over 38,000 trees by 2008. The reforestation of the area is a difficult task because most of nutrients required by the native forest species have been lost from the soil when the land is reverted to cattle grazing. Therefore it is the pioneer tree species that are chosen to be planted back first to start the process of increasing the

nutrient and mineral content in the soil for more specialist species later. Natural wetlands also used to be widespread in the region but were drained for agriculture and to eliminate the spread of water borne diseases; however these wetlands were a crucial part of this ecosystem and Regua has successfully restored a flourishing wetland habitat within the Reserve.

The project has also created an environmental education scheme to give local children an awareness of the importance of the forests and hopefully encourage them to protect them in the future.

One of Regua's aims is to monitor the health of the forest and wetlands and record the species that are returning to the re-created habitats. Researchers and scientists from all over the world have visited the reserve to help research the diversity of species in different taxonomic groups.

Given the high diversity of wildlife and in particular birds, the reserve has created a bird lodge for visitors from around the world to come to and explore the diverse bird assemblages found within the reserve. There have been 455 species recorded so far including 118 Atlantic forest endemics and 62 Brazilian endemics. The lodge is non-profit making with the income going back into the conservation work.

The birdlife is the star attraction of the reserve and the trail network is fantastic and well planned to enable visitors to explore all the different habitats and some of the best birding areas.

The most popular trails for birds are the Yellow (Wetland) trail, Red (Elfin forest) trail, 4X4 trail, Green (Waterfall) trail and Sao Jose trail.

The higher up the trails the better quality the forest is because less logging was possible and the forest had been less disturbed. These areas are some of the best for the more specialist birds and the Red and Green trail is probably the most popular for this. The little walked Northern Green, Orange and Blue trails also pass through mature forest containing some localised species.



(Shrike-like cotinga)

Some of the species to look for on the Red trail include:

At the top of the trail is elfin forest where the bamboo starts and this is the best area I found for black-billed scythebill, white-bearded antshrike, ferruginous antbird, large-headed flatbill, grey-cheeked tyrannulet, rufous-capped spinetail, greenish schiffronis, and golden crowned warbler.

The **northern green trail** past the campsite was the best area for flocks of parrots including blue bellied, vinaceous, scaly-headed and golden-tailed parrotlet. The bamboo near the very top of the trail was also productive for many specialist species and the only area in which I saw variegated antpitta. Adeli (a local professional guide at the lodge) and I also heard solitary tinamou up here but despite good stalking efforts we never actually saw it.

The famous waterfall at the **Green trail** is worth spending some time in as sharp-tailed streamcreeper and white-thighed swallow often feed from the stream and the clearing gives good viewing into the canopies of the nearby trees where tanager flocks and foliage gleaners seemed to regularly pass through. The insect life attracted by the moist conditions of the falls also attracts many birds and at this spot I had sightings of scarcities such as sharpbill, salvadori's antwren and yellow-green grosbeak.

The **Brown trail** was the trail I spent the most time on and there are some forest species already colonising this area. Some of the highlights included;

Unicoloured antwrens between the small bridge at post 1200 and the fork in the trail at post 1500. The small stream at post 1200 was often favoured by a pair of soortema slaty antshrike. At the junction at post 1500 on the trail towards the canopy tower and signed for Sao Jose I would often find rufous-capped motmot and woodcreepers in the more mature forest on the left hand side of the track and many mixed species flocks at the second junction for Sao Jose/Canopy Tower. On the trail towards the canopy tower this would pass more mature forest again on the left and some vine tangles near an old termite mound on the slope.

This area onwards right up to the canopy tower, I found to be the most reliable for seeing Shrike-like cotinga up until August. The area around the canopy tower itself was productive for cracker butterflies basking in the sun spot and streak-capped antwren and ferruginous pygmy owl. The view from the tower is impressive but I found the view from new tower by the lodge was more spectacular. However this Sao Jose tower offers good birding potential for tanager flocks including white-bellied and for soaring raptors including white-necked hawks. I spent a night up here alone hoping for cats using the trail below but did discover that a tawny-browed owl used the exposed branches overlooking the forest clearing to hunt at night here.

Another area to explore is the farmland along the track out to Guapiacu. There are a lot of manioc plantations and some orchards which can be good for red-cowled cardinal particularly around the second farm house after turning left out of the entrance of REGUA. Burrowing owls and yellowish pipit are sometimes in the cattle grazing fields. (Check the large boulders and mounds for the owls and the areas of shortest grass for the pipit).

The Northern Green trail was the best trail for parrots, particularly around the campsite area, and the bamboo near the top of the trail was the only place I heard solitary tinamou.

The 4x4 trail was also consistently productive with many local specialities holding territories along the top of the trail. The first part of the trail is recently planted and is still scrubby woodland that is particularly good for yellow-breasted flycatcher. Further up the forest becomes more mature secondary growth and is good for black-cheeked gnateaters, flycatchers, scaled antbird, channel-billed toucan, spot-billed toucanet, redruffed fruitcrow, yellow fronted and yellow eared woodpeckers, tawny-browed owl, slaty bristlefront, rufous-breasted leaftosser, eared pygmy tyrant, and higher is a clearing where tufted antshrike, pileated finch, plain parakeet were frequently seen.

# Mammals

There is a good diversity of mammal species in the reserve in comparison to other forest fragments nearby and the presence of several pumas in the area without any attacks on cattle show that there is abundant natural prey right up the food chain.

Observing most of the mammals in the reserve is hard work because of the low densities (due to hunting), vastness of the reserve where many productive areas are inaccessible, and the extreme shyness of most species due to the long history of (now illegal) hunting in the area.

From observations, camera trap footage and tracks I have found, here are some of the key areas to search;

- The lodge feeders at night (put down fruit at dusk) for regular visits from blackeared opossum and paca.
- The forest around the lodge including the start of the Brown trail for paca, black eared opossum and nine-banded armadillo (which has many burrows on the start of the Brown trail)
- The patch of newly planted forest you reach immediately after passing the volunteers accommodation on the start of the Yellow trail for south-eastern four eyed opossum. This area has up to 5 Black-eared opossums too and can be good for armadillos later in the night.
- The Brown trail particularly around the back of the old wetlands for Brown-throated three toed sloth (4 in this area) they favour cerecopia trees. This area is also occasionally visited by ocelot, jaguarundi, crab eating fox, red-rumped agouti, Brazilian forest rabbit and southern opossum. I also found puma scrapes on the first section behind the lodge and a visitor reported hearing one from the lodge at night.
- The 4x4 trail is a very reliable spot for guianan squirrel and many sightings of orange-spined hairy dwarf porcupine are along this trail. Halfway along the trail is an area used by a juvenile puma, 2 male occlots, tayra, crab-eating racoon, crab-eating fox and South American coati.
- The Green trail up to the waterfall is very good for brown-throated three-toed sloth and orange-spined hairy dwarf porcupine, and near to the waterfall both brown howler and black horned capuchin sometimes frequent.
- The Northern Green trail and Red trail both are areas where howlers and capuchins are sometimes seen and on extremely rare occasions Southern muriquis could be seen. (The top of the Northern Green trail is the best area to look but it is quite difficult to access). Puma, collared peccary and red-rumped agouti are frequent in these higher areas.
- Fast flowing streams at higher altitude in mature forest are good places to search for the South American water rat and water opossum has been reported from the stream by the Casa Pesqica and the Northern Green trail.

I used several small mammal traps to try and find some of the rodent species in the reserve but had a very poor rate of success maybe because of the recovering populations or habits of rainforest rodents avoiding anything that smells of man. However it appears that both large-headed and black-footed pygmy rice rats are resident around the conservation centre and I had sightings of other unidentified species at night in the trees and bamboo. The naturally rare Southern bamboo rat that lives 2 meters up in dense bamboo thickets near water is present in the reserve and Barata (a local ranger) at the conservation centre has a population living around his home in Matumbo.

I tried several times to see both ocelot and puma on the 4x4 trail by camping out at night and staking out the scent marking tree used by the cats and even had success with baiting the tree for them. The juvenile puma that has now dispersed from its mother and is frequenting this area and seemed to enjoy the dead chicken I put out for it from the video on my camera trap. On one occasion another volunteer and I camped in a pop up hide overlooking the tree and bait and I awoke at 4 am to hear it purring, snorting and breathing just meters from away the hide at night and it remaining close by into the morning when we eventually had to leave the hide to go to the toilet and we had a cautious search on foot but it never put in an appearance. I also had a rather scary encounter hearing one growl close by while spotlighting alone at night near to the canopy tower.

I would regularly encounter evidence of pumas around the reserve but despite the time spent in the field by the rangers, guides and researchers there have only ever been 2 live sightings showing how difficult these cats are to see here. Maybe the reason they survived the persecution that Jaguars did not in the Rio State.

Minas Gerais

Serra da Canastra National Park



(Ophiodes striatus)

The park was established to protect the source of the Rio San Francisco, which is an important source of water to much of eastern Brazil. The park covers an area of 715 km2 and most of this is a highland plateau which has an interesting diversity of grassland flowers, and scattered forest. There are several small streams and pools and of course the San Fransisco river which flows to an impressive waterfall at Casca d'Anta. The river valley below the waterfall is lower altitude and supports areas of dense gallery forest. The park is open from 7:30 am to 6pm and most easily accessed from Sao Roque de Minas (entrance is 8km from the town). There are lots of tracks across the park but many can become unsuitable for 2wd vehicles especially after heavy rain.

The park is not an easy place to view wildlife due to the vast expanses needed to be covered but there are some very special species found here. The park is probably the best place in Brazil (maybe the world) for finding Giant anteaters, as the habitat is ideal for supporting high densities. Unlike many other areas where Giant anteater is regularly seen, the open landscape of Canastra enables you to scan a large area in a short amount of time and approach the animals from downwind to sometimes very close quarters.

Canastra has a relatively healthy population of the unique maned wolf which is well monitored within the park. They again can be found by scanning the open grasslands particularly around dawn and dusk. They are quite regularly seen around the park entrance at dawn. Pampas deer is another speciality mammal of the area and it can usually be found within a couple of days exploring the park. Unfortunately its numbers are declining though and they are no longer as abundant as they used to be. Some of the other mammals sometimes seen include striped hog nosed skunk, hoary and crab-eating

foxes, armadillos and Brazilian guinea pig. Giant armadillo appears to be uncommon within the park but unfortunately night drives are not permitted within the park which is when this species is active. Pampas cat and oncilla are also found in the park but again are only likely to be seen at night.

The birding within the park concentrates on the two habitats (cerrado and gallery forest) and there are specialist species found in both to look for.

Special species to look for in the cerrado include: cock tailed tyrant, sharp tailed tyrant, campo miner, firewood gatherer, red-winged tinamou, dwarf tinamou, peach fronted parakeet, brasilia tapaculo, hellmayr's pipit, ochre-breasted pipit, capped seedeater, grey-and chestnut seedeater, black-bellied seedeater, black-masked finch and greater rheas.

The area from Sao Roque to the park entrance passes through some habitat where golden capped parakeet, toco toucan, sooty fronted spinetail, rufous-winged antshrike, great pampa finch and sickle-winged nightjar are often found.

The star bird of Canastra is the Brazilian merganser which is one of the rarest ducks in the world. There are many areas in the lower part of the park that offer good chances to find this species.

# Caraca Natural Park



(Maned wolf)

The protected area is about 43 square miles and is a natural eco-tone where the two habitats of cerrado and Atlantic rainforest meet. The reserve is also within the 1 billion year old Serra Do Mar mountain range which stretches along the eastern edge of Brazil and home to many endemics. The monastery is among the mountains and at an altitude of 1,250 m.

The biggest highlight of the reserve is the maned wolf. In 1982 the priests noticed regular damage to the rubbish bins and began to leave out food to stop animals from causing a mess. This then lead to one of the priests leaving a tray of chicken out to watch the wolves coming to feed, and it has now become a nightly ritual. Over the 2 nights we spent on the patio outside 2 different wolves came to feed on the chicken sometimes less than a meter away from us. They give onlookers a good look up and down before grabbing a mouth-full and disappearing back into the darkness. A striped hog-nosed skunk also visits the bait on occasions but not while we were there.

Masked titi monkeys can be easily found along the Tanque Grande trail in the morning after the sun is up. There are 3-4 troops in the area and they can be very vocal, making locating them much easier. The area around the pond in the car park is a regular spot for guianan squirrel, but they can also be seen on many of the trails through the forest. The allotment around the back is often visited by Brazilian cavy (guinea pig) but because of the cold weather we were unlucky not see them here. Brazilian tapir were very evident in the Tanque Grande area where we found prints from a mother and calf. We had a very good sighting of a lone individual on the road just after leaving the monastery. Another good spot for them is where the road crosses over the river halfway from gateway entrance into the reserve and the monastery. We had a surprise sighting of Brazilian porcupine on a power line at the start of the Tanque Grande trail at dusk. There are 75 species mammal in the reserve but most people only visit for a few days so few other species are reported but sightings of most species are still very rare.

Birding at Caraca is very easy as many exciting and range restricted species can be easily found in the immediate area around the monastery such as dusky-legged guan, blackish and slaty-breasted wood rails, rusty-margined flycatcher, hepatic tanager, cliff flycatcher and a short walk to the Tanque Grande trail can produce both Atlantic forest and motane cerrado species. There are many trails leading through different habitats but some lead up into cerrado rock fields where different bird communities can be found.

# Amazonas

# Parque Do Mindu

Unfortunately we only had 2 hours to explore this 33 hectare urban park, because rain prevented us from visiting the day we had originally planned. The park is an example of secondary Amazonian terra firm forest and there are 8 connecting paths that lead through a small part of the park.

We never found the pied bare-faced tamarin which is the flagship species of the site. However the park has a healthy population of red-rumped agoutis which were used to people and allowed a close approach. Early mornings and dusk would be the best times to search for them, before too many people arrive at the site.

There is a trail to the edge of the river that runs along the edge of the park which is sadly heavily polluted from a favela upstream, but we still easily saw 30 spectacled caiman, kingfishers, herons and passerines here.

# <u>Uakari lodge/ Mamirauá Sustainable Development Reserve</u>



Black caiman

We flew from Manaus to Tefe on a one hour flight over the Amazon rainforest and transferred to the Uacari floating lodge by speedboat.

The lodge is situated on a bend in the river just within the Mamirauá Sustainable Development Reserve. The reserve is a 22,000 square mile area of vareza or flooded Amazonian rainforest with abundant waterways, oxbow lakes and includes the Solimoes River. The forest here is varzea which means it is flooded for several months of the year by the sediment rich white water of the Solimoes River. This means that much of the wildlife is very specialist as it has to be able to survive this period of inundation. The reserve was the first sustainable development area to be designated in Brazil and it aims to combine an improvement of sustainable practice for local people living within the reserve (such as fishing management, jobs and education) alongside conservation and scientific research.

The Uacari floating lodge is a fantastic place to stay, it is sensitively built on a bend in one of the rivers and all the staff and guides are from the local communities within the reserve. Much of the proceeds from visiting are put into the projects of the reserve such as community development or conservation work.

While we were staying there we visited one of the local communities that live year round on the river. The people are extremely friendly and happy to show you how they live in such an extreme environment. We timed our visit with the high water floods which is the best time to find primates, but it also means that the entire forest is underwater and once you leave Tefe you will not touch land again.

During June and July the flood is at its peak and all of our excursions were undertaken by motorised boat or canoe.

The first mammals we encountered were the gray river dolphin or tucuxi dolphin which is not a true river dolphin as it is more closely related to the marine dolphin families, and it does occur in saltwater environments along the coastline of northern South America. We had several good views of this species around the Tefe lake area.

On the excursions from the lodge we found Venezuelan red howler monkey, huge troops of common squirrel monkey and lesser numbers of brown capuchins. The Mamirauá Reserve also has an endemic species of primate; the black-headed or (black-capped) squirrel monkey, which is restricted to just the varzea forests within this region. It is the primate with the smallest natural distribution in the world. We found 2-3 different troops of this species which occur in smaller groups but in the same habitat as the common squirrel monkey.

We also found the striking bald-headed uakari (it is the sub species *Cacajao c. calvus* that occurs in the reserve) which is the flagship animal of the reserve and this site is very reliable for seeing this spectacular primate even though they are still difficult to see well. I had 4 different sightings of 3 individuals but they were very shy so the views were always brief.

We also had 2 sightings of Northern amazon red squirrel further into the forest and saw 7 brown-throated three-toed sloths which favour cerecropia and other fruiting trees. Southern two - toed sloths are also present and are seen occasionally.

During a stay at the lodge at least 1 night boat ride will be available which offers good chances of seeing black caiman (particularly during the dry season) and sometimes snakes in the branches overhanging the water. Opossums, sloths, Amazon bamboo rats and even margays are sometimes seen. It is pretty much guaranteed that you will see large numbers of bats hunting over the water at night including greater bulldog bats.

Rio de Janeiro

Poco Das Antas Biological Station.

This is a private nature reserve, which is part of the Golden lion tamarin project in Silva Jardim province about 2 hours from Rio. We made a day excursion to the headquarters of the project where one of the lead scientists gave us a presentation about the work they are undertaking. It was a very inspiring project and they have boosted the tamarin population up from 400 to 1,500.

We went out with one of the team with a radio transmitter to track one of the habituated troops. It was a very a special encounter with the troop as they actively came closer to us to investigate us. One of the females even came to within half a meter of us in the branches above. There 8 in the troop and they were associating with the introduced white-tufted ear marmosets. The marmosets are native to north east Brazil and were escaped pets from Rio where they have now spread and are out competing the native marmoset and risk hybridisation. It is very expensive to visit this project, but does directly help with the conservation work.

# Mato Grosso do Sul

# Fazenda San Francisco/Southern Pantanal

I spent 3 nights at the family run working farm and lodge Fazenda San Francisco, the fazenda is a huge working farm for cattle rearing and produces rice and other crops alongside preservation of native Pantanal habitat.

The land here has been used for rearing cattle breeds for meat for generations but more recently rice production has also been a key part of their income because of the suitable soils. Most recently the owners decided to open the farm to tourism as they have still preserved half of their land as the natural landscape of the Pantanal.

The landscape of the southern Pantanal is very similar to that of the north, and the Fazenda has a good percentage of gallery forest, wet and dry savannah, scrub, rivers, seasonal pools and agricultural land.

They run a popular lodge and offer their land for both tourism activities and scientific research. Most visitors to the lodge are coming as part of a package and the activities on offer include boat rides, piranha fishing, horse rides, jeep safaris, walking trails and night drives. The lodge is a popular destination for big groups of day trip visitors arriving from Bonito and this could be a problem as it did hold up the daily activities and restricted the amount of wildlife viewing opportunities.

However the lodge was very pleasant with a friendly atmosphere and the wildlife watching potential was superb.

The main focus of my trip to the lodge was the mammal life, with particular focus on species I missed seeing or photographing before in the northern Pantanal.

The property has a good amount of dry savannah and termite mound filled ranch land that supports a healthy population of Giant anteaters. The entrance track from the road to the lodge passes through an area of suitable habitat that appears to be a very reliable location to see this unique creature. I had 12 sightings of them almost all along this entrance track including 7 in one night. I even witnessed a female having to fight off an eager male who was trying to mate with her. The wet grasslands and forest edges were reliable places to see the endangered marsh deer which appears to be common on this property. I saw several on most outings, but they were more common at night. Yellow armadillo was a regular nocturnal visitor to the bird feeders to feed on the leftover grain. There was plenty of evidence around the farm of several armadillos.

The night drives offer good possibilities for many species and I saw 5 crab-eating foxes, 5 ocelots, numerous marsh deer, giant anteaters, etc.



(Male ocelot)

The reason for the high success rates in seeing ocelots and other carnivores at this site is most likely because of the high density of rodents using the drainage ditches adjacent to the rice fields and pastureland that has attracted the normally forest dwelling carnivores out to hunt these productive areas. The population of ocelot is particularly high on this property compared to others in the Pantanal, where they have much larger territories.

I took a couple of boat trips along the smaller of the two rivers that passes through gallery forest and this was where I had sightings of black howler and black-striped tufted capuchin. I also found a jaguar in a clearing in the forest mid-morning, their habit of hunting caiman and capybara along the river edges and the dense forest that borders the water's edge provides reasonable likelihood of a sighting. There are

8 jaguars in residence on the Fazenda and although sightings are much less common than in the Jofre area in the north this site is possibly the best in the South for seeing them. They are seen on about 10% of the night drives per month in the dry season too.



**Species Lists** 



(Sickle-winged nightjar)

**Mammals** 



(Lesser grison)

#### 1. Brown howler

Green trail at REGUA on 2 occasions, a troop of 3 and a single individual.

# 2. Venezuelan red howler

7+ troops within the Mamirauá reserve.

# 3. Black howler

A lone male and a pair seen along the riverine gallery forest at Fazenda San Francisco

# 4. Black-striped tufted capuchin

A troop of 10 seen in the riverside trees in the gallery forest at Fazenda San Francisco.

# 5. Black horned capuchin

A troop of 20 seen very well on the edge of the Botanical gardens in Rio de Janerio, they were around the lake at the back of the gardens near to the edge of Tijuca National Park.

# 6. Brown capuchin

4 troops in the Mamirauá reserve, and a pair seen in the forest at Iguazu falls National park in Argentina.

# 7. Bald-headed (white) uacari

3 individuals seen and photographed at Mamirauá

### 8. Common squirrel monkey

10+ troops sometimes containing 20 or more were seen in the forest at Mamirauá reserve.

### 9. Black-headed squirrel monkey

2 groups seen in the Mamirauá reserve in the same habitat as the common squirrel monkey.

# 10. Masked titi monkey

Seen on both days in Caraca along the Tanque Grande trail

#### 11. Black tufted ear marmoset

A group of 4 in a garden in San Roque de Minas and a troop of 8 in Caraca along the Tanque Grande trail.

### 12. Golden lion tamarin

1 troop of 8 in an area of private forest part of the Poco Das Antas Biological Reserve.

# 13. (Introduced) white-tufted ear marmoset

Common in REGUA, and easily observed at the lodge feeders after 8 am. Also seen in Poco das Antas Biological reserve associating with the tamarins.

# 14. Northern Amazon red squirrel

2 in the interior forest at Mamirauá.

# 15. Guianan squirrel

Seen regularly on the brown, 4x4 and Green trails, and 2 seen at Caraca.

# 16. Brazilian forest rabbit

1 seen on the trail to the tower at night at REGUA.

# 17. Red-rumped agouti

1 seen briefly on the brown trail at REGUA, 4 at Parque do Mindu including the edge of the forest by the car park.

# 18. Azara's agouti

1 seen well on a track next to the forest and river at Iguazu falls National Park in close proximity to a café.

#### 19. Paca

1 at a baited site on the Brown trail at REGUA, a second seen feeding from the fruit under the lodge feeders at night.

# 20. Brazilian cavy (Guinea pig)

5 seen well grazing on the short grassland near to the first train station in Iguazu Falls Park entrance in Argentina.

### 21. Capybara

A group of 20+ residents at the wetlands in REGUA, easy to see around the main lake.

# 22. Southern bamboo rat

1 was seen very well in a dense bamboo thicket next to a stream in the garden of Barata, who very kindly helped me find this elusive species.

### 23. South American (scaly-footed) water rat

1 caught and released from a trap I set on the edge of a fast flowing stream at the beginning of Schincaroel trail at REGUA.

# 24. Large-headed rice rat

2 caught and released from traps in grassland and forest on the yellow/brown trails.

# 25. Black-footed pygmy rice rat

1 seen well at night in the heliconas that border the garden of the lodge at REGUA.

# 26. (Introduced black rat)

3 seen around buildings in the REGUA area including one trapped on the stream by the Casa Pesqisa.

# 27. Orange-spined hairy dwarf porcupine

1 seen at night in the forest 50 meters from the new canopy tower by the lodge, near the top of a tree on the wetland side of the track.

# 28. Brazilian porcupine

1 on the beginning of the Tanque Grande trail at dusk in Caraca.

# 29. Black-eared opossum

6 different individuals seen around the yellow trail at REGUA, 2 adults regularly feeding from the feeders at the lodge at night.

# 30. Bare-tailed woolly opossum

4 at REGUA, 1 roosting in the tower hide on the yellow trail, 1 regularly around the conservation centre, 2 on both sides of the Gupaciu river near the schincaroel.

# 31. South-Eastern four-eyed opossum

1 seen 3 times in the woodland between the conservation centre and Amanda's hide.

### 32. Nine-banded armadillo

3 sightings of 2 individuals, the start of the brown trail at REGUA is particularly good, but also seen on the green trail.

#### 33. Yellow armadillo

2 seen very close feeding on grain for the birds at night at Fazenda San Francisco.

#### 34. Brown-throated three toed sloth

10 different individuals seen in REGUA, the brown and green trails being the most reliable locations. 7 seen in the Mamirauá Reserve including 2 infants.

# 35. Giant anteater

5 seen in Serra da Canastra, the 12 sightings at Fazenda San Francisco, which is another very good site for this species particularly along the main entrance track which passes through large areas of suitable habitat that can be walked to from the lodge. I saw probably the same individuals during both the day and night on all 3 days, including 7 in one night. Late afternoon (3pm onwards) appears to be the optimum time to start searching for them.

### 36. Brazilian tapir

1 at Caraca, crossing the road 700 meters from the monastery.

# 37. Pampas deer

5 in Serra da Canastra, seen easiest in areas of fresh growth after fire.

#### 38. Marsh deer

20 seen during the day and night at Fazenda San Francisco favouring areas of sedge and tall grass during the day. The boardwalk trail to the lookout is a particularly good area to see them.

#### 39. South-American coati

3 troops were easily observed and approached in Iguazu Falls National park, where they have become slightly habituated and steal food from the cafes.

#### 40. Giant otter

A lone individual and a small family group of 4 were seen on 2 occasions along the small river (not the Miranda river) at Fazenda San Francisco.

# 41. Lesser grison

2 together half a mile from the start of the Schincaroel trail at REGUA.

A third sighting on the start of the brown trail near to marker 700.

# 42. Crab-eating fox

1 seen hunting in the long grass at the side of the road in Caraca late at night.5 Seen very well on night drives at Fazenda San Francisco.

# 43. Maned wolf

1 seen in Canastra and 2 together at Caraca on 2 nights.

#### 44. Ocelot

4 seen very well on night drives at Fazenda San Francisco and a  $5^{\rm th}$  seen during the day there.

# 45. Jaguar

1 female seen on a boat ride along the riverine belt of gallery forest on a sunny morning at Fazenda San Francisco.

# 46. Tuxuci (gray river) dolphin

3-4 at Tefe lake and 3 groups in the forest backwaters of Novo Ariau.

# 47. Boto (Amazonian river dolphin)

3 groups seen in Mamirauá reserve including Mamirauá and Tefe lakes. A group of 5 seen at the Novo Ariau on the Rio Negro.

# 48. Fringe-lipped bat

A maternity roost containing 70 or more seen in an abandoned house near to the Schincaroel farm at REGUA.

# 49. Greater spear-nosed bat

2 seen in the abandoned house near to the Schincaroel farm at REGUA.

# 50. Black mastiff bat

A roost of 20-30 present in the roof of the volunteer accommodation at REGUA, a group of 5 seen roosting under an eave at the Uakari lodge in Mamirauá reserve.

#### 51. Black myotis

Seen frequently hunting insects over the water at REGUA after the sun had set.

### 52. Greater fruit-eating bat

Seen most evenings an hour after dark feeding from Cerecropia fruits or bananas.

# 53. Proboscis bat

Small numbers were seen roosting under the eaves of the bungalows at Pousada Uakari, and again feeding over the water at dusk.

### 54. Greater bulldog bat

Seen on a few occasions at REGUA hunting over the water at night, seen easily in large numbers over water at night in Mamirauá reserve, and a single sighting over pasture at Fazenda San Francisco at dusk.

# 55. Common leaf-nosed bat

This species was seen on most visits to the hummingbird feeders at night at REGUA, but it is extremely difficult to be certain of species identification between this and the hairy legged long tonged bat that also visits the feeders. The common leaf-nosed is apparently the more common.

- Puma was heard purring and snorting on 2 occasions on the 4x4 and tower trails and recorded on my camera trap. I found prints, scats, remains of kills, scratch marks and scent marking scrapes regularly along the 4X4, Red, Sao Jose, and Northern green, Yellow, Orange, Brown and Tower trails. There appear to be at least 3 probably 4 individuals using the reserve, a male in the higher forest frequently using the red trail, a female around the 4x4 and probably using the wetland and brown trail areas, and a juvenile using the 4x4 area very frequently. A fourth cat is possibly present in the Northern green and orange trail vicinity.
- A small cat species ran across the road at night in Fazenda San Francisco could not be identified unfortunately as it was a fleeting glimpse.
- A small brown animal was flushed from a stream along the brown trail at REGUA that I suspect was a jaguarundi but I frustrating never saw enough of it to be sure, this area is where Adeli has had a few sightings of them in the past. I tried staked this area out ever since the sighting but never had any more signs.
- Many species of bat and small rodent were seen at night while spotlighting around the reserve at REGUA which unfortunately could not be identified.

I also recorded a tayra using the 4x4 track on my camera trap, and found fresh signs of collared peccary on the Sao Jose, Red and 4x4 trails at REGUA.



(Large-eyed green whip snake)

Reptiles

- 1. Broad-snouted caiman Iguaçu National Park
- 2. Black caiman Uakari Floating Lodge
- 3. Spectacled caiman Parque do Mindu
- 4. Yacare caiman Fazenda San Francisco
- 5. Argetinan black and white tegu lizard REGUA, Fazenda San Francisco
- 6. Amazon whiptail (racerunner) Everywhere
- 7. Amazon bark anole Uakari Floating Lodge
- 8. Chaco spiny lizard Iguaçu National Park
- 9. Tiger ratsnake REGUA
- 10. Bothorops jacare REGUA
- 11. Green forest racer REGUA
- 12. Large eyed green whip snake REGUA
- 13. Five-lined burrowing snake REGUA
- 14. Atlantic coral snake REGUA
- 15. South-American water snake REGUA
- 16. Common whip snake REGUA
- 17. Ophiodes striatus (legless lizard) Serra da Canastra National Park
- 18. Argentine side-necked turtle (*Hydromedusa tectifera*) **Iguaçu** National Park



(Burmeister's tree frog)

**Amphibians** 

Unfortunately not all the species seen could be identified to species level. But hopefully I will find out the species level for more species in time.

- 1. Gunther's smooth horned frog (Proceratophrys appendiculata) REGUA
- 2. Cane toad (Rhinella icterica) REGUA
- 3. Dendropsophus elegans REGUA
- 4. Two spotted treefrog (Dendropsophus bipunctatus) REGUA
- 5. Creole frog (Leptodactylus latrans) REGUA
- 6. Haddadus binotatus REGUA
- 7. Burmeister's tree frog (Phyllomedusa burmeisteri) REGUA
- 8. Ischnocnema guentheria REGUA
- 9. Hylodes lateristrigatus REGUA
- 10. Porto Alegre golden-eyed tree frog (Trachycephalus mesophaeus) REGUA
- 11. Bandeirantes snouted tree frog (Scinax perpusillus) REGUA
- 12. Teresopolis treefrog (Aplastodiscus arildae) REGUA
- 13. Greater hatchet faced tree frog Uakari Floating Lodge
- 14. Dwarf Jungle frog Uakari Floating Lodge
- 15. Hipsiboas semllinezta REGUA
- 16. Dendrospolis minutus REGUA
- 17. Crubixa snouted tree frog (Scinax alter) REGUA
- 18. Girard's dwarf frog (Physalemus signifier) REGUA
- 19. Dendropsophos meridianus REGUA
- 20. Green tree frog RIO Botanical Gardens
- 21. Scinax cuspidatus REGUA



# **Birds**

I have not recorded birds in the list below that I heard only which was many including some exciting species like Giant antshrike, Black-capped screech owl and long-tailed potoo, and there are still a few species I have to yet to full id.

RE – REGUA (including off site excursions) CAN- Canastra National Park, CAR-Caraca Natural Park, U – Uakari Lodge, FSF- Fazenda San Francisco, IG- Iguacu National Park Argentina.

- 1. Magnificent frigatebird RE, RIO
- 2. Least grebe REG
- 3. Neotropical cormorant RE, CAN, U, FSF, IG
- 4. Anhinga UFSF
- 5. Buff-necked ibis CAN, FSF
- 6. Bare-faced ibis FSF
- 7. Plumbeous ibis FSF
- 8. Black-crowned night heron REG, FSF
- 9. Striated heron REG, U, FSF, RIO
- 10. Rufescent tiger heron REG, U, FSF
- 11. Whistling heron REG, FSF
- 12. Snowy egret REG, FSF, RIO, U, CAN
- 13. Great egret REG, FSF, U,
- 14. Cattle egret REG, FSF, CAN
- 15. Capped heron REG, FSF,
- 16. Cocoi heron REG, FSF, U

- 17. American wood stork FSF
- 18. Maguari stork FSF
- 19. Jabiru stork FSF
- 20. Roseate spoonbill FSF
- 21. Southern screamer FSF
- 22. Horned screamer U
- 23. Black-bellied whistling duck REG, U
- 24. White-faced whistling duck REG, U,
- 25. Masked duck REG
- 26. Muscovy duck REG, FSF, U, CAN
- 27. Brazilian merganser CAN
- 28. Brazilian teal REG, FSF
- 29. Black vulture REG, CAN, CAR, U, FSF, IG, RIO
- 30. Turkey vulture REG, CAN, CAR, U, FAF, IG
- 31. Lesser yellow-headed vulture REG, FSF, CAN
- 32. King vulture CAN
- 33. Snail kite FSF, U
- 34. Gray-headed kite REG IG
- 35. Crane hawk REG, U
- 36. White-necked hawk REG
- 37. Mantled hawk REG
- 38. White-tailed hawk CAN, REG
- 39. Roadside hawk REG, CAN, U, FSF
- 40. Savannah hawk REG, FSF
- 41. Great black-hawk REG, FSF, U
- 42. Black-collared hawk REG, FSF, U
- 43. Black-and-white hawk eagle REG
- 44. American kestrel REG, FSF, CAN
- 45. Aplomado falcon REG, CAN
- 46. Bat falcon CAN, IG
- 47. Laughing falcon REG
- 48. Black caracara U
- 49. Southern crested caracara REG, CAN, FSF
- 50. Yellow-headed caracara REG, CAN, CAR, FSF, IG
- 51. Greater rhea CAN, FSF,
- 52. Red-winged tinamou CAN
- 53. Spotted nothura CAN
- 54. Brown tinamou REG
- 55. Tatupa tinamou REG
- 56. Limpkin REG, U, FSF
- 57. Hoatzin U
- 58. Rusty-margined guan REG,
- 59. Dusky-legged guan REG, CAR
- 60. Red-legged seriema CAN
- 61. Razor-billed curassow U
- 62. Bare-faced currasow FSF

- 63. Blue-fronted piping guan FSF
- 64. Chaco chachalca FSF
- 65. Rufous-sided crake REG
- 66. Wattled jacana REG, FSF, U, CAN
- 67. Blackish rail REG, CAR
- 68. Grey-necked wood rail CAN, FSF
- 69. Slaty-breasted wood rail REG, CAR
- 70. Common gallinule REG, FSF, CAR, CAN
- 71. American purple gallinule REG, FSF
- 72. Sungrebe FSF
- 73. Black-necked stilt FSF
- 74. Lesser yellowlegs FSF
- 75. Solitary sandpipier REG, FSF
- 76. Southern lapwing REG, CAN, IG
- 77. Giant snipe REG
- 78. Large-billed tern U, FSF,
- 79. Yellow-billed tern U
- 80. Black skimmer U
- 81. Kelp gull RIO
- 82. Common ground dove MANAUS
- 83. Picui ground dove FSF, CAN
- 84. Ruddy ground dove REG, CAN, CAR, IG, FSF
- 85. Ruddy quail-dove REG
- 86. Scaled dove CAN, FSF
- 87. Eared dove CAN, FSF
- 88. White-tipped dove REG, CAN, CAR, FSF
- 89. Gray-fronted dove REG, CAR,
- 90. Pale-vented pigeon REG, CAN, CAR, FSF
- 91. Plumbeous pigeon REG, CAN
- 92. Picazuro pigeon REG, U, CAN, CAR, FSF, IG, RIO
- 93. Chestnut-fronted macaw U
- 94. Scarlet macaw U
- 95. Yellow-collared macaw FSF
- 96. Blue-and-yellow macaw FSF
- 97. White-eyed parakeet FSF, REG, CAN
- 98. Golden-capped parakeet CAN
- 99. Nanday parakeet FSF
- 100. Plain parakeet REG
- 101. Yellow-chevroned Parakeet FSF
- 102. Peach-fronted parakeet CAN, FSF
- 103. Maroon-bellied parakeet REG
- 104. Blue-bellied parrot REG
- 105. Blue-winged parrotlet REG
- 106. Tui parakeet U
- 107. Orange-winged parrot REG
- 108. Festive parrot U

- 109. Blue-fronted parrot FSF
- 110. Scaly-headed parrot REG, CAR, CAN,
- 111. Greater ani REG, U
- 112. Smooth-billed ani REG, CAN, FSF
- 113. Guira cuckoo REG, CAN, FSF
- 114. Dark-billed cuckoo REG
- 115. Striped cuckoo FSF
- 116. Squirrel cuckoo REG, CAN, CAR, FSF
- 117. Tropical screech owl REG
- 118. Ferruginous pygmy owl REG
- 119. Burrowing owl REG, CAN, FSF
- 120. Striped owl REG, FSF
- 121. Tawny-browed owl REG
- 122. Black-banded owl REG
- 123. Barn owl REG
- 124. Common potoo REG
- 125. Sickle-winged nightjar CAN
- 126. Common pauraque REG, CAN, FSF, U
- 127. Rufous nightjar U
- 128. Band-winged nightjar CAN
- 129. Spot-tailed nightjar REG, FSF
- 130. Nacunda nighthawk FSF
- 131. Great dusky swift CAN, IG
- 132. White-collared swift REG, IG, RIO
- 133. Fork-tailed palm swift MANAUS
- 134. Gray-rumped swift REG
- 135. Planalto hermit REG, CAN
- 136. Reddish hermit REG
- 137. Rufous breasted hermit REG
- 138. Saw-billed hermit REG
- 139. Fork-tailed woodnymph CAN
- 140. Violet-capped woodnymph REG, CAN, CAR
- 141. Glittering throated emerald REG, CAN
- 142. Sapphire-spangled emerald REG
- 143. Glittering-bellied emerald CAN
- 144. Swallow-tailed hummingbird CAN, REG,
- 145. Hyacinth visobearer CAR
- 146. Stripe-breasted starthroat CAN
- 147. Black Jacobin REG
- 148. White chinned sapphire REG
- 149. Versicoloured emerald REG
- 150. Brazilian ruby REG
- 151. White-throated hummingbird REG
- 152. Black-throated trogon U, REG
- 153. Surucua trogon REG, CAR
- 154. Rufous-capped motmot REG

- 155. Ringed kingfisher REG, CAN, U, FSF, IG
- 156. Amazon kingfisher REG, U, FSF, IG
- 157. Green kingfisher REG, U, FSF
- 158. Rufous-tailed jacamar REG, CAR
- 159. Three-toed jacamarREG
- 160. Black-fronted nunbird U
- 161. White-eared puffbird REG, CAN
- 162. Crescent-chested puffbird REG
- 163. Chestnut-eared aracari U, FSF
- 164. Saffron toucanet REG
- 165. Spot-billed toucanet REG
- 166. Channel-billed toucan REG, RIO,
- 167. White-troated toucan U
- 168. Toco toucan FSF, CAN, IG
- 169. White-barred piculet REG
- 170. Yellow-throated woodpecker REG
- 171. yellow-eared woodpecker REG
- 172. green-barred woodpecker REG, FSF
- 173. campo flicker REG, CAN, FSF
- 174. blond-crested woodpecker REG, CAR
- 175. yellow-fronted woodpecker REG
- 176. yellow-tufted woodpecker U
- 177. lineated woodpecker CAR
- 178. Little woodpecker FSF
- 179. cream-coloured woodpecker U
- 180. White woodpecker REG
- 181. thrush-like woodcreeper REG
- 182. olivaceous woodcreeper REG
- 183. white-throated woodcreeper REG
- 184. Strong-billed woodcreeper U
- 185. planalto woodcreeper REG
- 186. lesser woodcreeper REG
- 187. scaled woodcreeper REG
- 188. black-billed scythebill REG
- 189. Narrow-billed woodcreeper FSF
- 190. Wing-banded hornero REG
- 191. Rufous hornero REG, CAN, FSF
- 192. Rufous-capped spinetail REG, CAN
- 193. Spix's spinetail CAN
- 194. Yellow-chinned spinetail REG, FSF, IG
- 195. Rufous-fronted thornbird REG.
- 196. Rufous cacholote FSF
- 197. Firewood gatherer REG, CAN
- 198. Pale-browed treehunter REG
- 199. Ochre-breasted foliage gleaner REG
- 200. Buff-fronted foliage gleaner REG

- 201. Black-capped foliage gleaner REG202. White-eyed foliage gleaner REG
- 202. Willte eyed follage gleaner REG
- 203. Rufous-breasted leaftosser REG
- 204. Plain xenops REG
- 205. Streaked xenops REG
- 206. Spot-backed antshrike REG
- 207. White-bearded antshrike REG
- 208. Chestnut-backed antshrike REG
- 209. Sooretama slaty-antshrike REG
- 210. Large-tailed antshrike REG
- 211. Tufted antshrike REG
- 212. Great antshrike FSF
- 213. Variable antshrike REG
- 214. Spot-breasted antivero REG
- 215. Plain antviero REG, RIO Botanical gardens
- 216. Star-throated antwren REG
- 217. White-flanked antwren REG
- 218. Salvadori's antwren REG
- 219. Unicoloured antwren REG
- 220. Streak-capped antwren REG
- 221. Serra antwren REG
- 222. Rufous-winged antwren
- 223. Ferruginous antbird REG
- 224. Rufous-tailed antbird REG
- 225. Rusty-backed antwren FSF
- 226. Scaled antbird REG
- 227. White-shouldered fire-eye REG
- 228. White-bibbed antbird REG
- 229. Rufous-capped antthrush REG
- 230. Rufous gnateater CAR
- 231. Black-cheeked gnateater REG
- 232. Variegated antpitta REG
- 233. Slaty-bristlefront REG
- 234. Bare-throated bellbird REG
- 235. Black-and gold cotinga REG
- 236. Gray-winged cotinga REG
- 237. Bare-necked fruitcrow U
- 238. Red-ruffed fruitcrow REG
- 239. Helmeted manakin CAN
- 240. Pin-tailed manakin REG, CAR
- 241. Sharpbill REG
- 242. White-bearded manakin REG
- 243. Blue manakin REG, CAR
- 244. Serra do mar tyrant manakin CAR
- 245. Black-tailed tityra FSF
- 246. Southern antipipit REG

- 247. Greenish schiffornis REG
- 248. Shrike-like cotinga REG
- 249. Green-backed becard REG
- 250. Crested becard REG
- 251. Chestnut-crowned becard REG
- 252. White-winged becard REG
- 253. Black-capped becard REG
- 254. Planalto tyrannulet REG
- 255. Rough-legged tyrannulet REG
- 256. Gray-capped tyrannulet REG
- 257. Yellow-bellied elaenia REG, CAN,
- 258. Highland elaenia REG, CAR
- 259. Yellow tyrannulet REG
- 260. Gray-backed tachuri CAN
- 261. Southern beardless tyrannulet REG, FSF, CAN
- 262. White-crested tyrannulet REG
- 263. Serra do mar tyrannulet REG
- 264. Sooty tyrannulet CAN
- 265. Oustalet's tyrannulet REG
- 266. Mottle-cheeked tyrannulet CAR
- 267. Ochre-bellied flycatcher REG
- 268. Gray-hooded flycatcher REG
- 269. Sepia-capped flycatcher REG
- 270. Bran-coloured flycatcher REG
- 271. Sharp-tailed grass tyrant CAN
- 272. Drab-breasted bamboo tyrant REG
- 273. Eye-ringed tody tyrant REG
- 274. Hangnest tody tyrant REG, CAR
- 275. Eared pygmy tyrant REG
- 276. Yellow-lored tody flycatcher REG, CAN
- 277. Common tody flycatcher REG
- 278. Whiskered flycatcher REG
- 279. Cliff flycatcher REG, CAN, CAR,
- 280. Fuscous flycatcher REG
- 281. Yellow-olive flycatcher REG
- 282. Olivaceous flatbill MANAUS
- 283. Yellow-breasted flycatcher REG
- 284. White-throated spadebill REG
- 285. Russet-winged spadebill REG
- 286. Tropical pewee REG
- 287. Vermillion flycatcher FSF
- 288. Crested black tyrant CAN
- 289. Velvety black tyrant CAR, REG
- 290. Blue-billed black tyrant REG
- 291. Yellow-browed tyrant REG
- 292. White-rumped monjita REG, CAN

293. White monjita FSF 294. Streamer-tailed tyrant CAR, REG 295. Shear-tailed gray tyrant REG, CAR 296. Masked water tyrant REG 297. White-headed marsh tyrant REG Cock-tailed tyrant CAN 298. 299. Long-tailed tyrant CAR, REG 300. Cattle tyrant REG, FSF, CAN 301. Rusty-margined flycatcher CAR 302. Social flycatcher REG, FSF, CAR 303. Great kiskadee Everywhere Boat-billed flycatcher REG, CAN, FSF 304. 305. Streaked flycatcher REG Tropical kingbird REG, FSF, U, CAN, CAR, RIO, IG 306. Fork-tailed flycatcher REG, FSF 307. 308. Grayish mourner REG, 309. Brown-crested flycatcher REG, CAN 310. Short-crested flycatcher REG, CAN 311. Large-headed flatbill REG 312. Gray-hooded atilla REG 313. Tropical parula REG 314. Golden-crowned warbler REG, CAN White-bellied warbler CAR 315. White-browed wabler CAR 316. 317. Rufous-browed peppershrike REG 318. Chivi viero REG 319. Lemon-chested greenlet REG 320. Gray-eyed greenlet REG 321. White-winged swallow IG 322. White-thighed swallow REG 323. Blue-and-white swallow REG, IG, CAN, CAR 324. Gray-breasted martin IG, REG, RIO 325. Brown-chested martin Everywhere 326. Tawny-headed swallow CAN 327. Southern-rough winged swallow Everywhere 328. Black-capped donacobius REG, FSF 329. Thrush-like wren FSF 330. Long-billed wren REG 331. Southern house wren REG, CAN, CAR, FSF 332. Yellow-legged thrush REG 333. Rufous-bellied thrush REG, CAR, FSF, IG 334. Pale-breasted thrush Everywhere 335. Creamy-bellied thrush REG, FSF 336. White-necked thrush REG 337. Chalk-browed mockingbird REG, FSF, CAN

338.

Green oropendola U

| 339. | Russet-backed oropendola U            |
|------|---------------------------------------|
| 340. | Crested oropendola FSF, CAN, REG      |
| 341. | Red-rumped cacique REG,               |
| 342. | Yellow-rumped caciqueU                |
| 343. | Chopi blackbird REG, FSF, CAN         |
| 344. | Shiny cowbird REG, FSF                |
| 345. | Giant cowbird REG, FSF                |
| 346. | Chestnut-capped blackbird REG, FSF    |
| 347. | Yellow-rumped marshbird CAN           |
| 348. | Unicoloured blackbird FSF             |
| 349. | Bay-winged cowbird FSF                |
| 350. | Epaulet oriole FSF                    |
| 351. | Orange-backed troupial FSF            |
| 352. | Brown tanager REG                     |
| 353. | Cinnamon tanager REG, CAR, CAN        |
| 354. | Black-goggled tanager REG             |
| 355. | White-rumped tanager CAN              |
| 356. | Magpie tanager REG                    |
| 357. | Hooded tanager REG                    |
| 358. | Guira tanager CAN                     |
| 359. | Silver beaked tanager U               |
| 360. | Chestnut-headed tanager CAN, CAR, REG |
| 361. | Rufous-headed tanager REG, CAR        |
| 362. | Yellow-backed tanager REG, CAR        |
| 363. | Olive-green tanager REG               |
| 364. | Brazilian tanager REG                 |
| 365. | Blue-gray tanager MANAUS              |
| 366. | Sayaca tanager REG, CAN, FSF          |
| 367. | Azure-shouldered tanager REG          |
| 368. | Golden-chevroned tanager REG          |
| 369. | Palm tanager REG, FSF, CAN, CAR, IG   |
| 370. | Flame-crested tanager REG             |
| 371. | Ruby-crowned tanager REG              |
| 372. | White-lined tanager CAN               |
| 373. | Burnished-buff tanager REG, CAN       |
| 374. | Brassy-breasted tanager REG           |
| 375. | Gilt-edged tanager CAR                |
| 376. | Green-headed tanager REG, CAR         |
| 377. | Red-necked tanager REG, CAR           |
| 378. | Swallow tanager REG                   |
| 379. | Fawn-breasted tanager REG             |
| 380. | White-bellied tanager REG             |
| 381. | Diademed tanager REG                  |
| 382. | Red-capped cardinal U                 |
| 383. | Red-crested cardinal FSF              |
| 384. | Red-cowled tanager (Introduced) REG   |
|      |                                       |

- 385. Yellow billed cardinal FSF
- 386. Bananquit REG, U, RIO
- 387. Hepatic tanager CAR
- 388. Red-crowned ant-tanager REG
- 389. Yellow-green grosbeak REG
- 390. Black-throated grosbeak REG
- 391. Grayish saltator MANAUS
- 392. Green-winged saltator REG
- 393. Buff-throated saltator REG
- 394. Black-throated saltator CAN
- 395. (Introduced common waxbill) REG
- 396. (Introduced house sparrow) REG, RIO
- 397. Blue dacnis REG
- 398. Green honeycreeper REG
- 399. Purple-throated euphonia REG
- 400. Violaceous euphonia REG
- 401. Orange-bellied euphonia REG
- 402. Chestnut-bellied euphonia REG
- 403. Blue-naped chlorophonia REG
- 404. Chestnut-vented conebill REG, CAR
- 405. Stripe-tailed yellow finch CAN
- 406. Saffron finch Everywhere
- 407. Purplish jay FSF
- 408. Plush-crested jay, IG, CAN
- 409. Plumbeous seedeater CAN
- 410. Double-collared seedeater REG,
- 411. White-bellied seedeater REG
- 412. Rusty-collared seedeater FSF
- 413. Blue-black grassquit FSF, REG, CAN
- 414. Gray pileated finch REG, CAN
- 415. Uniform finch REG
- 416. Blue finch CAN
- 417. Wedge-tailed grass finch CAN, FSF
- 418. Pale-throated pampa finch CAR
- 419. Bay-chested warbling finch REG
- 420. Rufous-collarded sparrow CAN, CAR, REG, FSF
- 421. Grassland sparrow CAN
- 422. Hooded siskin CAN



(Thoas swallowtail)

# **Butterflies**

I am still working on the identification of most species so this will soon be updated.

- 1. Tropical greenstreak (Cyanophrys Herodotus)
- 2. Many-banded daggerwing (Marpesia chiron marius)
- 3. Red cracker (Hamadryas amphinome)
- 4. Hamadryas arête
- 5. Variable cracker (Hamadryas feronia)
- 6. Clymena Eighty eight (Diaethria clymena janeria)
- 7. Pellenea actinote (Actinote pellenea)
- 8. Southern monarch (Danaus erippus)
- 9. Dirce beauty (Colobura dirce)
- 10. White peacock (Anaritia jatrophae)
- 11. Scarlet peacock (Anartia amathea roeselia)
- 12. Helenor Morpho (Morpho helenor achillaena)
- 13. Tropical Buck-eye (Junonia evarete)
- 14. Two-banded satyr (Pareuptychia ocirrhoe interjecta)
- 15. Periander swordtail (Rhetus periander eleusinus)
- 16. Orange-barred sulphur (*Phoebis philea*)
- 17. Anchises cattleheart (Parides anchises nephalion)

- 18. Lamia pierella (Pierella lamia)
- 19. Ruddy daggerwing (Marpesia petreus)
- 20. Ithomia drymo
- 21. Giant (Brazilian) owl (Caligo brasiliensis)
- 22. Smooth-banded sister (Adelpha cytherea aea)
- 23. Tropical chequered skipper (Pyrgus oileus)
- 24. Aeria Olena
- 25. Pink banded sister (Adelpha lycorias)
- 26. Actinote Pellenea pellenea
- 27. Battus crassus
- 28. Hermes satyr
- 29. Glass-winged skipper (Xenophanes tryxus)
- 30. Black-borderd tegosa (Tegosa claudina)
- 31. Miaba skipper (Colaopsis miabia)
- 32. Orsis bluewing (Myscelia orsis)
- 33. Hanno blue (Hemiargus hanno)
- 34. Dorantes longtail (Urbanus dorantes)
- 35. Plain longtail (Urbanus simplicius)
- 36. Teleus longtail (Urbanus teleus)
- 37. Clearwing (Ithomia drymo)
- 38. Ethilla longwing (Heliconius ethilla narcaea)
- 39. Polymnia Tigerwing (Mechanitis polymnia casabranca)
- 40. Orion (Historis odius)
- 41. Thoas swallowatail (Heraclides thoas brasiliensis)
- 42. Orange-tipped Angled sulphur (Anteos menippe)
- 43. Blue Leaf (Memphis moruus)
- 44. Turquoise emperor (Doxocopa laurentia)
- 45. Blue sailor (Dynamine tithia tithia)
- 46. Candrena Eighty-eight (Diaethria candrena candrena)
- 47. Para mini (Hydaspes Eighty-eight)
- 48. Tiger leafwing (Consul fabius drurri)
- 49. Strymen megarus (hairstreak)
- 50. Chlosyne lacinia

51.



 $\underline{Moths}$ 

I am still working on the identification of most of the moths, dragonflies/damselflies seen so hope to update this list when it is more complete.