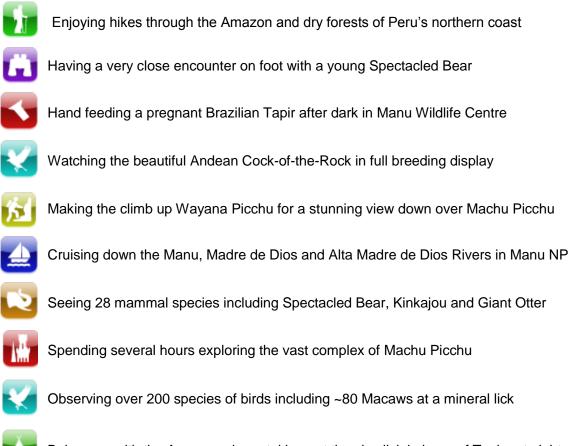


# Peru's Upper Amazon, Machu Picchu & Chaparri

**Destination:** Central, South-Eastern and Northern Peru **Duration:** 18 Days **Dates:** 10<sup>th</sup> September – 27<sup>th</sup> September 2015



Being one with the Amazon when staking out the clay lick in hope of Tapirs at night

#### **Tour Leader / Guides**

Martin Royle (Royle Safaris Tour Leader) Derek Howes (Photography Tour Leader) Gustavo (Amazonia Guide) Vilma (Machu Picchu Cultural Guide) Juan & Anne & Daniel (Chaparri Guides)

#### Participants

Mr. Peter Cattee Mr. Bharat Patel Mrs. Damini Patel Mrs. Jane Cattee Mrs. Uri Patel Mrs. Sally Howes Mr. Umesh Patel

# **Overview**

Day 1:CuscoDay 2:Cloud ForestDays 3-9:Manu NPDay 10:CuscoDay 11:Machu PicchuDay 12:CuscoDays 13-16:Chaparri













# Day by Day Breakdown

# Overview

Peru is one of the world's premier tourist destinations and with very good reason too. With some of the world's greatest cultural sites, pristine Amazon rainforest, exquisite Andean hikes and a varied habitat that makes Peru number 3 in the world for bird species and also very high up for mammals, reptiles, amphibians, invertebrates and plants; Peru really does have something for everyone. Most of the more remote areas of the Amazon and northern dry provinces have only recently been available for tourists to explore and enjoy but Peru was famous for inspiring two very different but equally loved fictional characters. Firstly came the cute and marmalade sandwich loving bear from deepest, darkest Peru; Paddington. And also the archaeologist Hiram Bingham is widely acknowledged as being the main inspiration behind Indiana Jones.

But cartoon bears and Hollywood action heroes aside Peru has many incredible claims to fame in the real world. Not least the stunning ruins of Machu Picchu, the 'lost' or 'hidden' city of the Incas, may not have been that lost or hidden, or even culturally important to the whole Inca civilisation as the old stories would have us believe. More and more is being found out about the site and more romantic layers are being peeled away to leave what was likely to be a Royal Palace, used at certain times of the year by royalty but was mostly a small outpost of priests and famers who kept things running whilst the royalty were elsewhere. It was probably continually inhabited right up until 1911 when Hiram Bingham was led directly to it, by local people who know all about the ruins and some of which were living in the old Inca houses and cultivating corn and potatoes on the terraces. But whatever the true reason behind such a magnificent city in a stunning location the ruins (if they are can called such as thing, as many of the buildings and stairs, temples and terraces are in very good condition) are one of the world's most important archaeological, cultural and historical sites. We would of course be visiting Machu Picchu as part of this mini exploration of Peru, but before we board the train and travel from Cusco up into the Andes to Aguas Caliente (the gateway to Machu Picchu) we would ascent to the Andean paramo before delving into the Andean cloud forest and then setting sail (so to speak) into the Peruvian upper Amazon.

The Amazon is the largest continuous rainforest in the world and also one of the most biodiverse locations and it is the biological wonders that are our reason for spending the first 10 days here. We would visit various different sites in the vast and ecologically significant Manu National Park, including the Aguje camp deep into the forest, Manu Wildlife Centre with its abundance of mammal life and the world famous mineral lick at Blanquillo in which many species of parrot and macaw come to take in the essential minerals to help neutralise the toxins in most of the food that they consume from the forest.

But we are not content with traveling to the upper Amazon, Andean slopes around Machu Picchu and the picturesque city of Cusco (that would act as our base as we headed out on these excursions), we also flew north to the coast and the special Tumbes ecosystem and the very special and unique Chaparri Eco Reserve. This private reserve is working hard with local people to bring conservation to a local level and it is working incredibly well. They have a rehabilitation centre for the endangered Spectacled bear as well as other animals that are injured or orphaned and given to the centre and they have established a large protected area that encompasses the territories of several totally wild bears and various other species that are poorly protected elsewhere, endangered or vulnerable to extinction.

All in all this is was to be a true exploration of some of Peru's most well know, biologically diverse and remote regions. An exploration that resulted in some truly incredible and once in a lifetime moments and memories as well as showcasing some of the natural world at its best. All done with the expert help of wonderful local guides, some nice local cooking and friendly staff at all of the locations. There are not many places where you can tick off some of the worlds most endangered and elusive animals one day, then visit a wonder of the world the next and wash it all down with a tasty Pisco sour.

We at Royle Safaris hope you enjoy reading this trip report and that it takes you back to Peru and the places we visited as well as the sightings log that will hopefully help you identify some of the animals you took pictures of. Please contact us if you have any questions or queries we are always happy to help.







#### Day 1 Cusco

#### Arrival & Rest

Today the group was met at the airport in Cusco by Martin and Balvina and transferred to the hotel in the centre of Cusco. The group was all intact however Umesh and Daminis' bags were still lost in transit somewhere. After speaking to the staff at the airport and the airline Umesh had decided that he would stay and wait in Cusco until their bags arrived and would come down to the cloud forest or Amazon and meet us once the bags arrived. As the bags were expected to arrive the next day, this would not be a problem and we would meet up again with Umesh at the Cock-of-the-Rock Lodge in the lowland cloud forest on the eastern side of the Andes tomorrow night. We couldn't delay our departure from Cusco tomorrow morning (as the bags were due to arrive on the 5am flight from Lima) because we had to leave at 4:30am in order to make it past some roadworks being done on the Andes by 6:30am as the construction closes the road after this time. The only other route would increase the length of the journey to the point where we would not be able to enjoy any of the wildlife viewing we had planned for the journey. But with Balvina in Cusco to make sure Umesh could get too and from the airport and also arrange the accommodation, transportation and translate when talking to airport staff we were all quite confident of a quick and problem free resolution. So after a short briefing we decided to meet up in a couple of hours to head to eat, the group all went for a walk around the main square in Cusco and 5pm we met Gustavo Bautista who would be our naturalist guide for the next few days in Manu National Park. He briefed (well it wasn't too brief) on what to expect for the next few days before we then went to the restaurant for dinner. After dinner the jet lag and prospect of a very early start tomorrow and long day in a coach all amounted to an early night for all concerned.

# Day 2 Cloud Forest (Manu National Park) Traveling & Wildlife Watching

Today the first thing we did was split, with Umesh staying in Cusco and due to meet Balvina and head to the airport at 5am to collect his bags and then be shortly behind us on the road over the Andes, as then the rest of the group with our drivers Raul and Julian, cook Aurelio and guide Gustavo heading up and over the Andes in the main coach. We departed Cusco in the gloomy dark of pre-dawn but it wasn't long before the sun was peeking out from behind the jagged peaks of the Andean foothills as we climbed up the valley towards the higher altitude passes. As the sun rose we started to get beautiful views out over the Andes and down into the valley of Cusco and the surrounding settlements including lots of farm land and small villages. We kept on climbing until we reach the tussock grass ecosystem known in South America as the paramo, the main difference with this high altitude grassland when compared with other high altitude grasslands around the world is that large specialised bromeliads and a plethora of brilliant orchids dominant the flora and provide food for endemic hummingbirds and the endangered Spectacled bear. As we continued to climb we crossed the Pachutambo pass at around 4,400m above sea level. Just beyond here we had views of the Saywa Segwi mountain which rises over 5,000m. We stopped at Amina Marca which is around 3,700m above sea level, this is a pre-Inca site with tombs and circular stone structures some 3,000 years old. Much of the stone work here would be replicated and enhanced by the Incas and in fact would become a trademark of the great Inca civilisation, of which Machu Picchu is probably the greatest example. Continuing along we started to descend and we breakfasted just outside of the town of Paucatambo and it was around here that we received word from Umesh that only one of the two bags had arrived (on the 8am flight and not the 5am one as originally stated from the airline), it now looked increasingly unlikely that Umesh was going to meet us today and also that the airline actually had any desire to rectify this problem as quickly and efficiently as possible. We carried on and started our descent onto the eastern slopes of the Andes, we breakfasted just outside of the small town of Paucotambo, located on the Paucotambo River this old colonial town was here long before the Spanish and in the surrounding hills many Inca and pre-Inca walls and ruins are still to be seen and found. We walked around a little bit and watched a torrent duck battling with the current as it dived into the stream looking for aquatic invertebrates. The bridge we viewed the torrent duck from was an original Spanish bridge built in the 1830's and looking downstream from the bridge some original Inca homes are still inhabited. Carrying on after breakfast we made it the start of Manu National Park, being such a world famous rainforest national park it is odd that it starts in the high altitude paramo (grassland) ecosystem of the high Andes, but this is our entry to the park. We stopped at the gate and had a quick break and watched as creamy-crested spinetail sat on its mossy nest and a pair of white-crested flycatchers flew around in the undergrowth. Along the roadside many species of orchid grow and we stopped for some and also for views of the paramo and cloud forest spreading out below us and about to be the next ecosystem we arrive in. On one of these breaks a variable hawk soared above us, hunting this hawk was using the wind to 'hover' and scan the hillsides for any rodents. The 'hovering' is achieved by flying into the oncoming wind at exactly the same speed, making so many small adjustments of the shape of the wings and the feathers to maintain a near perfect stationary position in the sky, which allows the eyes to focus greater on the potential prey. The clouds were rolling up from the cloud forest and when the visibility got a little too bad for pictures we boarded the coach once again and headed off down into the cloud forest itself. We reached a traffic jam around another 1 hour into the journey, this was expected and is the result of a small bridge undergoing repairs. Here we would depart from the coach and walk the small distance past some of the traffic, through a tunnel, over the bridge and into a vehicle waiting for us on the other side. We did this and transported all of our luggage along too. Hilma and Renee would be our drivers from here, with Hilma taking us and Renee our





luggage in two separate vehicles. We then stopped at Pacchayog waterfall for lunch, the waterfall being 2,484m above sea level and here we spent some time looking for the golden-headed guetzal. An endemic to the cloud forests of the eastern Andes the impressively coloured bird is well worth looking for. We searched and called and Derek spotted a pair of green birds flying on the other side of the valley, we went for closer views and couldn't find them again, they were responding to Gustavo's recorded calls and so we knew that they were around, but this notoriously elusive bird remained just so. We persisted and were rewarded with great views of a female masked trogon, perched nicely at eye level and only around 15m away from the road. The trogons are related to quetzals and despite not having the iridescent colours of the quetzals and the impressive long tails that some quetzals sport they are still very pretty birds. We then started to drive a bit and walk a bit and the quest for the quetzal was on. A little further on we (well some of us) were rewarded for our efforts when Bharat spotted the quetzal perched low down the slope off the road and in dense vegetation, trying to point out a green bird in a green forest at distance is not the easiest thing in the world, particularly when the angle of view changed the trees that were being used to describe the location of the quetzal and needless to say not everyone got views. We carried on and arrived at the Andean cock-of-the-rock lekking site that makes the Cock-of-the-Rock Lodge such a famous and popular location. This lek is the most accessible in the world and is just located off the road, the walkway and wooden hide, perched on the steep slope are under lock and key and we had private access this afternoon. On walking to the hide we could hear the strange croaking call of the males as they tried to impress the females. As well as the calling they would bob up and down and hop along the branches, rarely staying still and also in the low light of the afternoon and in the dense forest photography is difficult. But of the 6-8 males that were performing around us we had fantastic views and managed to get pictures of videos of this most iconic bird of the Andean cloud forests. In fact it is the Andean cock-of-the-rock that is Peru's national bird; and with the vibrant red and contrasting black and grev of the plumage and the curved crest that runs along the head and onto the base of the bill it is not hard to see why. We spent around 30 minutes here and we saw the males all leave, with no warning they all just started to up and leave and we assumed that the lek was over for the night, but then they came back and started over again. Whether they had spotted a female or two when they started to fly off and thought that they had better try and little longer to win her over, or if some of the males with a lower standing in the pecking order decided to return to take the best spots along the lekking trees we do not know, but as they got a second wind so did we. The was also a Bolivian squirrel scurrying around the cock-of-the-rocks before coming back into his nest in a large bromeliad. As the light was rapidly going and the rain started to sprinkle down we decided to depart and travel the next 5 minutes to the lodge.

Here we unpacked, showered and relaxed in the bar area (where we updated everyone on the situation regarding when Umesh could meet up with us) before dinner. Regarding Umesh and the current situation with the luggage and him being able to meet us: it basically boiled down to him having to get to us (either on the road, at the small village of Atalaya) before 6pm tomorrow, so he could get over to the lodge on our boat, (no boats would leave after this time in the evening) or at worse he would have to get to the Amazonian Lodge (on his own boat) by 5am the day after tomorrow. So that he could carry on in our chartered boat to the Agaje camp located deep into the forest. There is no regular boat to make these transfers if he could not make it with us on our boat. If these two options were not possible then he would not be able to meet us until we had finished the Amazon section of the trip, which would be big shame as this is a major section of the holiday. So we hoped for good news tomorrow and that Umesh was going to be able to meet us at some point. After dinner we got an early night as another long day of travelling awaited us tomorrow, with our final destination being the Amazon Rainforest.



## Day 3 Amazon Rainforest (Manu NP)

#### Traveling & Wildlife Watching

We were all up at 6am to see the birds come to the feeders set up just outside of the restaurant, however the skies were eerily quiet this morning. Whether there was a hawk around and keeping the smaller birds away from the free fruit on offer or if they just didn't feel like coming to the food today we will never know, but for an hour we had very little activity. We did have a brown agouti make an appearance and eat some of the fruit that had fallen to the ground and a handful of tanagers and hummingbirds started to come around, the hummingbirds staying for very short periods around the nectar feeders (and a few preferring to take the nectar from the natural flowers in the little garden instead of the sugar water provided) and the tanagers stuck to the periphery of the feeding area. It looked suspiciously like there birds were nervous of coming down to the food. It cannot be that they are not used to this as they are feed like this every day and the chances of there being a predator around or a recent kill from a hawk on a bird feeding at the fruit would be a reasonable explanation. The hummingbirds feeding around us were violet-fronted brilliants and sparkling violetear; with the blue-necked, silver-beaked and paradise tanagers being so





beautifully coloured. It seemed like the fruit was being left by the birds and a Sandborne squirrel was not going to pass up this chance and came down a couple of times to feed, but then the big guns arrived. Firstly a couple of russet-backed oropendulas and then a large family of brown capuchins. These most intelligent of all monkeys were here for the fruit and whatever other handouts they could steal or bribe from the kitchen. There were also a couple of fruiting trees next to the dining room that served as their base from which to pose, groom, raid and ransack the fruit and kitchen. We were treated to some excellent close up views of the capuchins including a large male and several young ones as well. But once a couple of the younger capuchins had come down and seen the fruit on offer the rest of the troop came down and took over the feeding station and by 8:30am no fruit was left for the birds. So we gathered our stuff together and departed, we once again proceeded through the cloud forest heading down towards the Alto Madre de Dios River. We drove a ways and then walked and birded for a while. We spotted a male and female long-tailed tyrant in a dead tree near the road and had great views of them before brief and frustrating views of a very rare and major target bird (for the diehard birders who come here) the umbrella bird. The unusual black bird with a forward facing crest is very elusive but we saw one fly parallel to us and away around the corner, Gustavo pursued but couldn't find it again. We stopped to have views out over the valley and the clouds coming in and the rain starting to come down too. Here we had views of a few species of birds including a pair of magpie tanagers amongst others including yellow-browed sparrows, blue-and-white swallows, a speckled hummingbird, hooded siskins and smooth-billed anis. Down in the valley we could see the rain clouds coming in and so we carried on further along the road, amazingly the jungle drums had been playing and we passed no less than 3 vehicles (all tourist mini buses and taxis) that stopped us and told us that Umesh had left Cusco and should be meeting us either along this road later today or at least at the boat port before we departed for Amazonia Lodge. Balvina had sent message to the town and asked the drivers to look out for our vehicle as our mobile phone reception was hit and miss along the road. We made a brief stop at the small village of Pilcopatta and here Gustavo was told of a biological research station along the way and that we would be welcome to have a look around, as we had made good time and we would have to wait for Umesh to catch us up anyway we decided this sounded like a good idea. So we paid them a visit, the centre is mainly used for agricultural research, into how to sustainably produce crops and medical plants that have minimum impact on the surrounding forest. They also research the wildlife to an extent as well as having a small fishery. The name of the centre is the Villa Carmen Estacion Biologica, once we arrived and parked the vehicle we found a large male yellow-footed tortoise and heard a couple of macaws cawing in a nearby palm tree. The macaws were a scarlet and a blue-and-yellow, seeing these two species together was a tell tale sign that these were pets and not wild, none the less a nice sighting as they flew through the trees. We then met Nicole who would give us a tour around the grounds and give us some information about the place and its history, including the eccentric beginnings including the rich former owner; Vladimir Absamhovich, who tried various businesses (some legal and others...more suspect) including his own airline. In fact one of his original planes is still here and has now been commandeered by the forest and is home to a small colony of short-tailed fruit bats. Before heading off into the forest and to the plane we found several small rain frogs in the grass, these micro frogs are easy to miss, being around the size of a fingernail when fully grown. As well as the plane we were also shown several plantations including a medical plant garden (including the infamous Erytroxyllos coco plant which cocaine is produced from) and then the fish ponds after lunch, on the way to the dining room Gustavo found one of the most unusual insects in the world, the bizarre white-tailed grasshopper. With the head and body of a grasshopper but a long and feathery tail in pure white, it was a bizarre sight on the side of a tree. During lunch we watched several orependulas coming and going from their nests in the rain and then once the rains had subsided we headed to the fish ponds, the frog chorus was in full force and the birding around the ponds was very good including hoatzins, redcapped cardinals, smooth-billed anis, greater and lesser kiskadees, blue-and-white swallows and great close views of a turkey vulture which came down and perched on a fence post right next to us.

After saying goodbye to Nicole and some of the other staff including many American students as the project is heavily supported by US universities nowadays we departed towards Atalaya, stopped at a nice view point with a great view out over the Pillcopatta River. Around the corner from here we had great views of a greater potoo, this nocturnal bird uses its amazing camouflage and its ability to remain perfectly still for hours and hours to "become" part of the tree that it is perched on. This one however had decided to use a conspicuously dead tree and the "stump" it pretended to be was obvious to a great birding guide such as Gustavo. They are so well adapted to this stationary approach to avoid to being detected by predators that even their eyelids are feathered, but the feathers have distinct gaps in them, so even when the eyes are closed they can still see out of the holes in the feathers of the evelids. This allows them to hide their large (and otherwise conspicuous) eve whilst remaining vigilant. As we watched and photographed the greater potoo we had great views of one of the rarest birds around here as a pair of blue-headed macaws came and flew past us and landed (briefly) in a nearby tree. It was whilst here that we met Umesh, his driver had made up very good time and so we all stopped and exchanged stories of the journey so far and as Atalaya was only another couple of kilometres we stayed in our separate vehicles and made our way to the dock. We arrived at around 15:30 and departed for the short journey over the river to the lodge as soon as we had loaded all of our gear into the boat. We arrived just around sunset and after settling into the rooms we had some time to rest and relax, just before dinner some of the guides (including Gustavo) had decided to catch a swallow that was nesting underneath one of the buildings, they had been unable to identify the species and thought it was a rare record for the area. Once it was caught they realised it was a more common species (white-thighed swallow), but still nice to see up close. After dinner Gustavo took us out into the grounds of the lodge and his expert hearing





and the help of a pre-recorded call managed to find a tawny-backed screech-owl, we had great views of this little owl as it eat a large grasshopper quite low down in a tree. This incredible little predator was the last sighting of the night and after a long journey we all retired to our rooms for a well needed night's sleep. Tomorrow would be another long journey as we headed deep into the Amazon to our next location.

# Day 4 Amazon Rainforest (Manu NP)

## Travelling & Wildlife Watching

This morning we had breakfast at 4:45am and then departed the lodge at 5:30, the journey was going to take pretty much all day and it started with rain, not a great start but then again this is the rainforest so showers are to be expected. The rain soaked pretty much everyone even with the 'protection' of waterproofs and ponchos. We first journeyed along the Madre Dios River and made very good time along this stretch as the powerful current of the rain laden river advanced our speed, along this river we spotted a couple of capybara and many birds including neotropical cormorants, fascinated tiger herons, ringed kingfishers, russet-backed orependulas, blue-and-yellow macaws, snowy egrets and many other common riverside species. The rain stopped shortly before we left the Madre Dios River and joined the Manu River, we would continue up the Manu River for another 4-5 hours, this would be at a slower pace we would be going against the current from now on. Just after joining the Manu River we stopped to sign into the park at the butterfly rich park headquarters. A combination of travelling at a slower pace, being further away from people and without the visual hindrance of rain we started to see more wildlife. Firstly we had nice views of a capybara feeding on minerals in the clay on the river bank, before good views of several macaws flying overhead, a large and loud horned screamer on one of the many sandy beaches and a few large black caiman. This is the Amazon's largest predator and one of the largest reptiles in the world, with large individuals growing up to 6m long, however these are few and far between and the biggest we saw was around 3m long. We had good views of a 2m long individual basking on a sand bank, the caiman allowing us to approach it quite close before it slowly closed its large mouth and slide silently down into the water and away from us with barely a ripple. Some of the other caiman we approached were not as smooth and relaxed as they entered the water, running down and using their powerful tail to propel them into the water with a splash. We also saw a few spectacled caiman (sometimes called white caiman here, as they are paler in colouration to the black caiman, however in reality the colour of the black and white caimans are very similar and colouration is not the best diagnostic feature). Other than maximum size the best ways of telling these two species apart are the heads, with black caiman having a very pronounced bony ridge between the eyes and the spectacled caiman having a more smooth and rounded ridge between the eyes which is often coloured darker than the rest of the head, giving the appearance of glasses (hence the common name). Another common reptile along the banks of the river and on partially submerged trees were Amazonian side-necked turtles. We also found some rare birds for this part of the Amazon, whilst common in the north and particularly the Venezuela wetland ecosystem of Los Llanos the Orinoco goose is endangered in Peru and we had great views of a pair, equally common in the wetlands of Brazil's Pantanal a southern lapwings, but being very rare in the Peruvian Amazon we were lucky to have a nice sighting of this species too; as well as feeding sunbitterns, a pair of this beautiful birds were feeding on diurnal moths along the shady banks of the river. Other interesting birds we saw before stopping for lunch were black skimmers, these large terns have specialised lower mandibles that are longer than their upper mandible. They use this elongated appendage to skim through the top layer of water as they fly low and fast along the river. Once the lower mandible feels something solid it is snapped shut and if the bird is lucky it is a fish, however unlucky birds have their bills broken or damaged as they hit branches or rocks. But the amount of skimmers which damaged and broken lower jaws that are still alive suggests that they have other hunting techniques and losing the extended lower mandible is not an automatic death sentence. We also spotted a crane hawk being mobbed by some tropical kingbirds before stopping on a beach for a toilet break and also lunch. Along this little stretch of beach Martin found fresh jaguar tracks from that morning, they didn't have any rain marked in them and as the rest of the sand was pockmarked with rain drops these had been made after the rain, and assuming the rain (that was moving in the same direction as us) had stopped here at a similar time to when it stopped with us this morning the tracks were around 3-4 hours old. Carrying on after lunch we didn't see as much wildlife and arrived at 17:30 after a very long day on the river, shortly after arriving and as our rooms were being finalised (as this camp is so remote they have no phone line and so they are never 100% if the people booked to stay here will actually show up, delays because of problems with the boat, low river levels of bad weather all result in some people having to stay somewhere else, so they only finalise the bedding etc once the guests arrive as to keep everything fresh and clean), we went for a short walk into the forest with Gustavo. Quickly we found a family of Peruvian spider monkeys guite low down (for the canopy loving spider monkeys) and playing. The family of 5 spider monkeys (which is one of the rarer species of primates here) included an adult male, 2 adult females, a youngster and a young baby. The baby was being carried by its mother and was a much paler colour, they turn black like the adults at around 2 months of age, so this was a very young individual as it was much paler than the adults and had not started to turn darker yet. They were moving through the forest, using their long and agile limbs and slender prehensile tail to gracefully and quickly move through the trees to get to their preferred roosting tree before nightfall. We returned to the camp in the dark and Gustavo showed us the bioluminescent click beetle (similar to a fire fly), a wonderfully patterned sphinx moth as well as describing the symbiotic relationship between a species of ant and a bush, the bush allows the ants to nest inside hollow bulb like bodies on the plants stems and also the plant produces a sweet sap which the ants love and





in return the ants aggressively defend the bush against the buses main predators such as beetles and caterpillars. This unlikely pairing of small, aggressive ants with sweet-teeth and a 'warty' looking bush is just one of the billions of inter and intra-specific interactions in the Amazon rainforest. On our return to the camp we showered, changed and had our dinner before another well needed nights rest. We were originally planning on having two nights at this camp, but a planned strike by the park staff means that we would not be able to leave (via the Manu River) the day after tomorrow and so we had decided to leave tomorrow and have any extra night in Manu Wildlife Centre instead tomorrow. So we would be starting early and exploring an ox-bow lake here before heading back down the river tomorrow.



## Day 5 Amazon Rainforest (Manu NP) Travel

Travelling & Wildlife Watching

This morning we had breakfast at the camp before crossing the river and walking for 15 minutes through the forest to get to Cocha Salvador, this ox-bow lake is home to a family of giant otters that we hoped to see today. The giant otter is the largest of the mustelids (a diverse family of carnivores that include weasels, martens, otters and badgers) and they are also one of the most endangered large mammals in the Americas. Having been hunted mercilessly for decades in the fur trade, the naturally rare aquatic predator suffered sharp declines. The Peruvian Amazon has a good sized population but they are now largely confined to ox-bow lakes and are seldom seen on the main river channels. The main rivers only used when newly mature otters leave their natal home range in search of mates and their own territories. On the walk to the lake a brown agouti crossed the pathway in front of us quickly and fresh jaguar tracks (from this morning) guided the way. The prints an ever present reminder that the lord of the Amazon was always around, seldom seen but always present. In the trees high above us Gustavo spotted a double-toothed kite perched and then a mixed group of white-fronted capuchins and black-capped squirrel monkeys foraging and moving through the canopy together. It is not unusual for squirrel monkeys to associate with other primate species. This small, fast moving and very observant monkey is quick to spot danger and alert the rest of the troop (as well as any other primates that are around) of the predator. They tend to avoid competing with each other for food, with the squirrel monkeys feeding on smaller berries, fruits and insects that they find on the very thin branches that cannot support the weight of the larger capuchins. We watched as they fed over the pathway and then moved off a little way into the forest. We then arrived at the lake and as we waited for the small barge to arrive we spotted a basking side-necked turtle on the stump of a half submerged tree. Cruising slowly around the lake we didn't find the giant otters unfortunately but we did see several bird species including very nice views of hoatzin, this unusual bird was (until very recently) believed to be a very primitive bird, the chicks are born with claws on the wings. These claws are used to climb the tangle of branches back into the nest, the reason for this is the defensive strategy for hoatzin chicks is to dive into the water beneath the nest (for they always make their nests over water bodies) when escaping a snake, opossum or other predator and need to climb back up into the nest once the threat has gone. The claws were believed to be a throwback to early birds when they were first evolving from therapod dinosaurs in the mid Jurassic period. True the early birds back then did possess claws such as these, but recent genetic studies suggest that the claws of the hoatzin have evolved recently. An example of a once lost trait coming back in the face of a new environmental pressure. Other than their bizarre croaking call, wonderful appearance (complete with blue eye markings and rock-star style Mohican), and clawed wings they are unusual in that they produce a huge amount of methane. They are vegetarian and like ruminant mammals they have a hind gut fermentation system, where bacteria breakdown the cellulose for them. This means they have enlarged guts, making them poor flyers and also means that they tend to smell, with the production of methane. We also had good views of another unusual (and this time genuinely primitive) bird, the spotted limpkin is a distant relative of the herons and storks and like the hoatzin is the sole member of its entire family, having no close relatives still alive today. Further along we were treated to close views of a bluish-fronted jacamar, this is an example of convergent evolution. The New World equivalent of the Old World's bee-eaters, in appearance and behaviour they are almost identical but they have completely separate evolutionary pathways and are not closely related at all. However faced with the same problems of a riverside habitat and preference for fast moving flying insects they have solved the same problems in remarkably similar ways. We watched the jacamar hunting, catching and eating bees, banging the bee on the branch it was perched on, this is to kill the bee but also to dislodge the sting so that when swallowed the bird doesn't get a nasty surprise. Jane then spotted a king vulture soaring above the forest, this is the largest of the New World vultures (excluding the two mighty condor species of course) and is also the only white vulture in the Americas. It was soaring quite high and so we couldn't see the vibrant and distinctive coloured wattles that adorn the head and neck of the king vulture; but the prominent white





plumage with contrasting black primaries was clearly visible. Other notable sightings along the way included the huge and colourful blue morpho butterflies, members of this genus are the largest in the world and many have large eye markings on their ventral surfaces and rich blue iridescence on their dorsal wing surfaces; scarlet macaws flying across the lake and over the forest as well as the rare sungrebe. The sungrebe is not as unique as the hoatzin, limpkin or similarly named sunbittern who are all members of their own families (the hoatzin actually takes this one step further and is the sole member of its entire order!), but the sungrebe is one of only 3 species in its family and what is unusual about this is that the distribution of the three species is one in South America (sungrebe), one in Africa (African finfoot) and one in South Asia (masked finfoot). We then left the lake and headed back through the forest to the river, crossed the river, packed up and left for Manu Wildlife Centre, as we cruised along the Manu River we saw hundreds and thousands of butterflies, the recent rains drawing up salts and other minerals to the surface of the sand when the rain is evaporated off. This salt being much needed by most wildlife and in particular the very conspicuous butterflies that aggregate in clouds of yellow, white or blue and then explode into the air in the presence of a kisadee or kingbird. Along the way back to the park headquarters a fallen tree had snagged a capybara carcass, the presence of a large flock of black vultures betraving its location in the matted vegetation that was aggregating in the branches of the tree. In a tree on the river bank overlooking this scene of scavenging was a solitary king vulture, possibly the same one that Jane spotted this morning at the lake. We had good views of this king vulture and this time were able to see the various folds and wattles of bare skin on the head and neck, coloured red, yellow, black and orange and making this one of the most unusual birds in the region if not the world. Shortly before arriving at the headquarters we found a family of Jurua red howler monkeys feeding in a tree next to the river, and then at the headquarters we watched as a large and blind female golden orb spider caught and fed on a couple of flies and the much smaller male golden orb spiders (three in this particular web) clung to the outskirts of the web. The males, being much smaller run the risk of being eaten by the blind female in their attempts to mate with her (as well as trying to steal some of her food), strum on the threads of the web at a particular frequency that the female likes and tells her that he is a male spider and not food. The idea is that this works long enough for the male to rush into the females proximity to deliver his package of sperm and then run off before being captured and eaten. We stayed and watched this interaction, but instead of mating the male had food on his mind and used his stealth to sneak up onto the fly that the female had left (as she subdued and bound a newly caught fly) and begin to feed a little before she returned and he was forced to flee to the outskirts of the web again. We then left the headquarters and carried on down the Manu River after it met with the Madre Dios River, we then passed the village of Boca Manu, around 300 people live here and the village is famous in the region for making very good boats (including the one we were in). Further on we spotted a capybara with a giant cowbird on its back, the cowbird picking off ticks and other parasites off the capybara in a symbiotic relationship. At around 18:00 we arrived at the Manu Wildlife Centre and on the approach to the centre along the shallow inlet off the main river we started to see sandy-coloured nighthawks taking to the air and replacing the diurnal insectivorous bird as the night shift started. After dinner Martin and Gustavo went into the forest to set up the camera traps, along the way they heard owls calling including the Amazon crested owl and tawny-breasted screech owl. On arrival back at the lodge we were met by Vanessa, this is a female Brazilian tapir that was rescued as a baby by the lodge and hand raised. She was then allowed to leave and head into the forest, which she did and she very rarely returns to the lodge (even though she knows she will get fed in the lodge), however whenever she is pregnant and therefore having an increased demand for food she comes back to the lodge more and is happily fed with extra fruit. So we hand fed South America's largest terrestrial mammal in the darkness before heading to bed after another long day on the river.



# Day 6 Amazon Rainforest (Manu NP)

#### Wildlife Watching

This morning we went into the forest on foot, the particular part of the forest that we were exploring was secondary forest and this is exemplified by the tangle of vegetation growing at all heights. This is because the largest trees are relatively young and so there has (and still is) good amounts of sunlight penetrating down to the forest floor and thus promoting the growth of bushes and other herbaceous plants. These understory plants are lost in old growth, primary forest which is typically characterised by tall trees that form a closed canopy, resulting in very little sunlight making it all the way down to the forest floor. A very common misconception of secondary forest is that it is not as good for wildlife as primary forest. Whilst it is not ideal to have large amounts of secondary forest at the expense of primary forest, both forest types are beneficial to a whole host of wildlife. Certain species only being found in primary and others only in secondary. This particular secondary forest was rich in socopria trees and palms, which are both fast growing trees that quickly colonise a bare patch of ground. Walking through the thick forest it was





difficult to see far, but with persistence we did see a couple of Southern Amazon red squirrels as they moved quickly through the tangle of branches and vines on their never ending and energetic quest for food. Another interesting inhabitant of the forest we saw was a huge communal spider's web, the communal spiders (there are hundreds of different species throughout the world) live together in groups of several hundred if not thousands and over time develop huge dense mats of webs that can be dozens of square metres across in some cases. This is to help catch large amounts of prey as well as providing protection from predators, the old 'safety in numbers' principal. The largest mammal we saw this morning was a small troop of white-fronted capuchins who were moving quickly through the forest, one of which was carried its youngster. They were heading to fruiting trees in the area after only recently getting up and finishing their morning grooming and socialising session in their roosting tree. Gustavo took the time to show us several of the interesting species of trees including the well known and impressive strangler figs, one of which had succeeded in killing its host and now towered above the stump of the once mighty host tree. The fig sending down large vines to act as support roots, which would eventually develop into a curtain of vertical branches. We were also introduced to the chicken's foot tree (chichoma) which has rubber like sap that has medicinal properties and is used heavily by the local people around here. Another tree was the naked tree, the bark of the tree is very thin and paper like (its other common name is the paper-bark tree) and it flakes and peels off very easily, leaving a smooth and 'naked' tree. The tree sheds its bark once every 8 months or so and is presumably to remove any parasites which may be harming the tree, such as young strangler figs. As we continued our botanical trip around the forest pathways we noticed a large amount of glasswing butterflies in the understorey, these largish clear-winged butterflies are very nice to look at, but being largely see-through, very difficult to photograph. Carrying on we were shown the monkey comb seed pod with its thick bristles (not unlike a hair brush) used to cling to the fur of animals and therefore be transported to new areas of the forest. The large leaved helicornius plants and their flowers began to dominate the area of forest we had entered and we could see the intimate relationship that they have with ants closer than the other night when it was a little too dark to fully appreciate. Another animal that loves the very sweet secretions that the plant produces for the ants are hermit hummingbirds and interestingly the hummingbirds often nest on the plant and are left alone by the ants. How the hummingbirds avoid the fate of other animals that try and utilise the plant is unknown but the evolutionary reason would be that the hummingbirds are good pollinators of the plant and so are very beneficial to both the plant and ant. Along the pathway were many climbers, these parasitic plants move along the ground in their search for new host plants, before wrapping around them and beginning their journey up and towards the canopy and the promise of sunlight. We then found a couple of particularly large strangler figs that had completely killed their host trees and the decayed trees had left vast cavernous hollows in which the strangler fig surrounded. We went inside a couple of them and could see the natural 'architecture' of the fig, these hollows are home to a host of wildlife including bats, snakes and many insects, but we didn't see anything to worry about, certainly no bushmasters (the world's largest pit viper). Further along the pathway and on our way back to the lodge we found the fresh (from last night) remains of a tinamou, this partridge like ground dwelling bird was probably killed by an ocelot and all that was left were the wings and some feathers on the pathway. We then found evidence of one of the continent's most elusive (yet largest) mammals, the giant armadillo, its borrow coming off the main pathway and down to at least 2m (or so judging by the torch) the burrow was quite old (but had been used recently - within the last week or so, but the latest excavated soil on the lip of the burrow). We learnt about more interesting plants before getting back to the lodge, including the chicua tree whose berries are used to make chewing gum by the indigenous people (as well as a commercial product in Peru and Ecuador now) and the papalluyu tree which produces a fruit very much like papaya, but the branches and trunks have a huge number of very long and needle sharp thorns. We believe this defence evolved to stop the megatherium species around 10 million years ago until around 20,000 years ago. These animals were giant ground sloths that could grow up to around 5m tall and weigh several tonnes. But nowadays the plant's defences are still very effective against monkeys. Our last wildlife sighting before having a few hours to rest and relax back at the lodge was a brief view of a basking golden tegu. This large lizard is the New World equivalent of the Old World's monitors, the monitors evolving in the same group as crocodiles and snakes and the tegus from skinks. This afternoon we went for another walk into the forest and this time on a pathway close to the riverside, here the canopy was broken and the dominant plant was bamboo as opposed to trees, we hoped to see one of the centre's speciality species the emperor tamarin here in this habitat. But quickly we found a much rarer tamarin species, the Weddel's saddle-backed tamarin. Tamarins are small primates that are unique amongst monkeys in that they do not have nails but claws. They are very social and tend to be very opportunistic feeders and take a variety of food including insects, small vertebrates, seeds, fruits and tree sap. We watched this troop move through the forest parallel to the pathway, then over the pathway and to the other side and away into the forest. They were moving in almost single file and this made their movements easy to predict for photography. They were also a very curious monkey and came quite close (but just far enough away that they were confident of their ability to quickly get away) and watched us as intently as we watched them. After the last of the troop had moved off we carried on around the trail. We were then shown the walking palm tree, this thin trunked tree has lots of tripod like legs that grow in larger numbers in the direction of sunlight, at the same rate of the sunlight loving 'legs' growing the ones with less sunlight begin to die and so over time the tree 'walks' towards the sunlight. They are capable of moving over 50m in the course of a year, which is quite impressive for a plant! We then left the riverside trail and headed to the other side of the lodge and towards a 35m tall canopy tower built on a large kapok tree. Being this high up and within the canopy we had excellent views out over the forest and some of the birds as they came back





to their roosts were viewable. In between managing the persistent sweat bees we spotted several species of colourful birds such as mealy parrots, chestnut-fronted macaws, white-rumped syristras, black-fronted nunbirds, white-browed purpletufts, russet-backed orependulas and a distant view of a noisy white-throated toucan. We also heard the screaming of a troop of spider monkeys, making their final territorial calls before bedding down for the night. Walking back to the lodge the sun was setting and the fireflies were out in force, then after dinner we all went out to meet Vanessa who came back for more bananas, this was the last time she would come to the lodge during out stay and even though the food here is free and abundant she doesn't often come to the lodge, we were very lucky to have her come twice whilst we were here.

# Day 7 Amazon Rainforest (Manu NP)

#### Wildlife Watching

Today started earlier than usual with us leaving the centre at 5:20am and heading on our boat further along the Manu River to a nearby lodge property and the world famous mineral clay lick of Banquillo. The clay cliffs being very rich in salts and other minerals which is utilised by many species of forest animals and most spectacular are the dozens of macaws that arrive here each morning. The boat journey took around 1 hour and then we walked for 20 minutes or so through the riverine and bamboo forest, along the way a large troop of fast moving black-capped squirrel monkeys crossed our path. We then arrived at the large hide located opposite the cliff, the noise of the macaws and parrots that roost around the cliff was audible long before we arrived at the hide. For the first hour or so only a few parrots (mealy parrots, blue-headed parrots and the rarer orange-cheeked parrots) came down to feed on the clay, the larger macaws (mostly scarlet but also a small amount of blue-and-yellow and red-bellied macaws) staying in the trees above the cliff. Despite being larger and also more numerous than the parrots it was amazing how cautious the macaws were being. In fact it was over 1.5 hours from our arrival before the macaws plucked up the courage to come down to the cliffs. As we waited for the macaws we had our breakfast and listened to the very noisy birds, occasionally a few would take off and fly around the cliffs and then land in another tree, teasing us and keeping us on tender hooks. And then all of a sudden and as if commanded by some unseen or unheard omnipresent power they all descended, firstly from the tallest trees (emergents) to the main canopy, then to the understorey, then to the trees that were growing out of the side of the cliff and then as if one organism down onto the cliff. The sight of the 80 plus (a good number and one of the larger gatherings for several weeks here by all accounts) scarlet macaws in the nice early morning sunlight was stunning. They stayed around and picked at the clay and took what they needed for around 25 minutes. Watching the many interactions between the different birds was fascinating. The exact interactions being very hard to interpret but it was clear that there was a hierarchy between the birds and there were several small scuffles and many dominance displays. The reason animals as diverse as macaws to jaguars and tapirs to anteaters come and use this cliff for minerals is that the diet of rainforest herbivores (and therefore carnivores) is very poor in salts and in some cases high in toxins. Many plant species aggressively defend themselves with toxins that they produce in their leaves, the clay (as an absorbing agent) and the minerals contained in the clay not only provide valuable nutrients but also help to neutralise the toxins. Then as if the inaudible commander summoned once again they all took off in an explosion of red, blue and green and flew off and away into the forest. It was 9am and we left and headed back to the lodge. After a short break in the middle of day we hit the riverside trail again and our second attempt to try and find the emperor tamarins, hopefully we had not used all of our luck on the rarer saddle-backed tamarins yesterday. We didn't find the tamarins, but did see at least five white-fronted capuchins moving quietly through the forest high in the trees and then Gustavo showed us a very large and impressive donkey's ear fungus, this is one of the few edible fungi in the forest, he also showed us the ironwood tree, its very dense wood which sinks and large hollows in the main tree being great nest sites for macaws. In fact this particular ironwood has a pair of scarlet macaws that nest here every December. The tree is very important for shamanic rituals and the tree has a rich cultural tradition with many of the indigenous peoples of the Amazon. In general it was very quiet this afternoon, one of the highlights being a Spix's guan that Peter spotted, this rare guan is a birders target and we were lucky to get fleeting views as a pair of them fluttered around the trees nearby the pathway. We then came across a marauding colony of army ants, the only thing to do when you encounter the million or so strong mat of ants is to run through them and immediately check our boots, socks and trousers as they are so adept at grabbing hold of anything and clinging on. They are also very painful when they bite and if you get a few on you then the pain can be intense. Luckily we all escaped without any bites, although we all had at least one that managed to get a grip of our boots or trousers as we ran through the advancing army. The army ants spread out (around 1.5m across and 10m deep) in the forest and catch everything that is in their way, usually beetles, spiders, caterpillars and other small invertebrates are caught, then dismembered and carried back to the bivouac. But animals the size of lizards, tarantulas, frogs and even small birds and rodents have been killed by these incredibly successful predators. As we turned around headed back to the lodge Gustavo dug down into the earth at the site of a small round hole and produced a solid tunnel in the soft sand. This small tunnel (around 15cm long) is the home of a cicada, this species of cicada spends 7 years in this hole below the surface, they tap into the roots of trees with their needle like mandible and suck the sap out of the root for 7 whole years. Then the cicada climbs out of the hole, up onto the tree and moults into the adult form, with wings (that are not just used for flying but also for communication as they vibrate them together to produce very loud calls, which are all specific to individual species). They then live as an adult for one day, in this day they are expected to find a mate (with the help of their loud calls), mate and if they are female lay their eggs. 7 years underground for one day as an adult may





seem like the most bizarre system for any animal, but cicadas are one of the world's most successful groups of animals. With hundreds of species, found on all continents (excluding Antarctica) and present in the fossil record for hundreds of millions of years. The last notable sighting was listening to a Lawrence's thrush, this is one of the expert mimickers in the Amazon, they are capable of mimicking over 30 other bird's calls and they use them to produce unique combinations in an attempt to tempt the females with a diverse and special song that has never been heard before. Back at the lodge we had dinner and then afterwards Martin and Gustavo went to see if we could spotlight the unusual black-headed night monkey. There is a family that is known from the centre's grounds and we did find them shortly after dark, around 5 of them moving quickly through the trees near the river, we had some good views of the wide eyed, round-faced monkeys as they stared down at us and then jumped and scampered away and into the thick forest.



## Day 8 Amazon Rainforest (Manu NP)

#### Wildlife Watching

This morning we had a visit from a small troop of Weddel's saddle-backed tamarins at the dining room, they were very close and in great sunlight for photography. It turned out that whilst we had two fantastic sightings of this much rarer tamarin the more 'common' emperor tamarin would remain elusive for us. When we did the riverside walk again this morning in search of the emperor tamarins we did hear them responding to Gustavo's calls but we couldn't find them in the dense vegetation. We did have great views of the stunningly colourful scarlet-headed barbet and also a roadside hawk perched in a sparsely leaved socoperia tree. Gustavo then found another interesting insect of the forest, the crying beetle, that when caught cries, not unlike a crying baby. We then had the highlight of the morning's walk as a male and female golden-green woodpecker we spotted on a nearby tree. The female was busy drilling into a termite nest on the side of a tree and the male watched on from the same tree. The male flew off the female stayed behind and fed for some minutes more before also flying off and into the forest. We then heard a white-throated toucan calling and tried to find it, we did eventually see a pair of the toucans, but the views were poor as they were right at the top of the canopy. They were in the same tree as a family of Jurua red howler monkeys, they sat in a row looking down at us around 30m below them. Then came the distinctive patter of water hitting the dry leaves on the path, this is a typical response from howlers to new things in their environment. They pee from the tree and are quite accurate, they then started to defecate too, so we were extra cautious of where we stood as we watched them waking up and going about their morning ablutions. The howler monkeys in South and Central America are foliovores and with a diet of nutrient poor leaves (often also full of toxins) they have to spend a large amount of their time digesting. The breaking down of the cellulose in their stomachs resulting in their bloated, bulbous appearance and it is also the reason why they are by far the least energetic of the primates here and spend most of the day resting or sleeping and it was no surprise to see them slowly starting their day and walking along the branches from this large kapok tree where they had slept to their feeding trees. Starting our walk back to the lodge we once again had to run past an advancing platoon of army ants and then just near the dining room Martin and Derek had nice views of a basking Amazon whiptail lizard just next to the path. During the middle of the day the lodge grounds were visited by white-fronted capuchins and black-capped squirrel monkeys. Then in the midafternoon we left for a tapir mineral lick deep in the forest, there is a raised hide located there and after dark the area is regularly visited by tapirs who eat the soft mud here for minerals. The area has also had deer, jaguars, anteaters, armadillos and primates visit the site. So we would spend a few hours here, the hide is equipped with mattresses and mosquito nets and see what showed up. Along the way a pale-winged trumpeter crossed the trail, this rare ground dwelling bird was a great sighting and according to Gustavo a bird that is very hard to see nowadays. The larger ground dwelling birds (as well as the more aerial guans) have all suffered as they are the birds chosen as food by the indigenous people. We also found a pair of golden-collared toucanets and Gustavo found a poison dart frog (Ameerega hankeli) on the forest floor and a caravan of leaf-cutter ants crossing the road. These industrious insects where the first agriculturists to evolve. Long before our ancestors had even begun out descent from the trees the ants were harvesting fresh leaves, carrying them down into their subterranean nests where they were broken down by chewing on them and fed to a special fungus (that can now only survive with the ants and vice versa), this fungus is then cared for by specialist ants and the waste product of the fungus is skimmed off the surface and this is what is fed to the grubs and the rest of the ant workforce. This complex agriculture is akin to dairy farming and has resulted in a three way symbiotic relationship between the ant, fungus and tree that all now only can exist because of the others. We arrived at around 15:30 and the lick itself had plenty of evidence of tapirs, their large and distinct three toed prints were everywhere, prints of brocket deer and capybara were also present here. Martin set up his camera traps overlooking the main clay bank and we waited. Our dinner was brought to us and we had it in the dark and noisy forest, the noise of the cicadas, frogs and other animals of the night is a natural





orchestra that defies description but makes you feel strangely at one with the surrounding environment. We also heard large breaks in the vegetation and loud footsteps, but we never saw a tapir coming down, whether the tapir could smell us and decided to stay just out of sight in the forest is a possibility. There were many bats flying around the lick including the large and very distinctive fringe-lipped bat. This species has many small tube like nodules on its lips which it uses to 'taste' frogs. The bat flies very low over a suspected prey animal (specialising in frogs) and with them very sensitive nodules tastes the back of the frog. If the frog is not poisonous the bat comes back and snatches it up. We then left a couple of hours after dark and walked back through the forest at night, the clear sky showing the stars and crescent moon glowing through the canopy. Along the way we found a couple of large whipscorpions, some spiders (but no tarantulas), cane toads, a milky-tree frog and then a small spectacled caiman before getting back to the lodge and retiring to our cabins for the night. Tomorrow would be the last full day in the Amazon and we would once again try for the giant otters before heading to the Andes and then north to the dry scrub forests and semi-deserts later in the trip.

# Day 6 Amazon Rainforest (Manu NP)

Wildlife Watching

This morning was another early start with us departing on our boat at dawn, this time we would be headed half way between here and Banquillo and to another oxbow lake. Cocha Camungo has another family of giant otters that inhabit its waters, the make up of the lake is different from Cocha Salvador as it is older and has been isolated from the main river for longer. This noticeable in that there is a large amount of aquatic vegetation and the trees that line the lake are different from the forest, this occurs when the structure of the forest changes from rainforest to riverine forest. The river was very low today, being the end of the dry season all of the rivers here are getting lower and lower and despite the heavy rain the other day the water levels would continue to fall for another couple of weeks before the start of the wetter season. Once we arrived at the lake we had nice views of a large-billed woodcreeper as well as many hoatzins which seemed to be all along the lake on both sides. As we cruised on the small barge our boat driver spotted the giant otters moving off ahead of us, at a distance of around 100m away and in the glare of the morning sun that had just started to burst through the overcast sky, they were barely visible as dark shapes at the surface, swimming away from us. We went off in their general direction and at a distance we got occasional views of them as they surfaced, looked back at us (presumably looking to keep a certain distance between us and them) and came to the surface to eat a fish they had caught. There were at least 3 giant otters but we never got very close to them and they eventually disappeared into the matted water hyacinth which was too thick for us to pursue them into. Along the way we did have good views of another pair of white-throated toucans in a large fig tree, they were calling to each other in a loud duet before taking off and flying away. We also found flocks of smooth-billed anis in the waterside grasses, a couple of swimming sungrebes, hunting pourus jacamars and greyish saltators all around the lake. We also had a visit from a beautifully marked '88' butterfly, the wings looking like someone had drawn the number 88 on them with a black marker. Amazingly around the Amazon and cloud forests of South America there are so many butterflies that are marked with numbers and letters that are so similar to our characters that it is hard to believe that they are naturally occurring. Cruising back to the dock we passed many small kapok trees which had lots of their cotton laden seed pods ready for the wind to pick them up and disperse them to new areas in the forest to germinate. After arriving back on terra firma we climbed up a 50m tall kapok tree and to the canopy tower here. This tree was enormous and gave a much better view out over the forest that the 35m canopy tower at the Manu Wildlife Centre. Taking in the views we stayed up there for a few minutes before coming back down as the day began to warm up and the likelihood of seeing primates and attracting birds to the tower faded. Walking back to the main river and our awaiting boat we passed a column of army ants, these behaving differently from the predatory raids we had to run through on previous days. This was a caravan, the army ants regularly move from one bivouac to another and when they do so, the worker ants make a guick passage in a direct and thin column, carrying the grubs and eggs with them as the huge, blind soldiers stand guard over the column with their enormous jaws a gap and waiting to rip into anything that crosses the steady stream of ants. The procession is rarely stopped by anything, the workers form living bridges by biting the legs of other ants and forming stable bridges that the other ants use to walk across, even when confronted by water and sometimes huge rivers they form living rafts (in which several hundred of the first ants will drown) for the majority of the colony to climb aboard and float on the current to the next dry land. The only other wildlife sighting of note we had this morning being a roadside hawk before boarding the boat. On our return to the lodge at around midday the temperature and humidity had soared and we rested for a couple of hours. We tried one last time for the emperor tamarins on the riverside walk and once again we were left disappointed, in fact the whole afternoon was rather quiet and the highlight was the rush of a large (unidentified) hawk coming down from the canopy, grabbing a small rodent and flying off into the canopy. It all happened so quickly we were all taken by surprise and we couldn't find where the hawk had landed, possibly finding an emergent to perch on and feed.

Just after sunset and before dinner today everyone decided to try and find the night monkeys, standing by one of their known roosting trees they didn't see any, but Martin who had gone back to his cabin found the troop. Coming from the backside of the centre complex and making their way across the lodge grounds towards the dining room. The troop carefully, yet quickly moving their way through the palm trees. They disappeared into the forest at the back of the kitchen before Martin could get everyone else to the location, but later on a kinkajou was spotted a short walk into the forest, this was only seen by Martin, Gustavo and Umesh after dinner. As everyone retired for the night Gustavo marched through the forest to collect the camera traps we had left overnight at the tapir hide, in the





morning we found out that the tapirs (at least 2 different males) did come to the lick the night we were there, but the first one did not arrive until 9pm which was 2 full hours after we left, the other staying around between 1-2am. Tomorrow we would leave the Amazon and make the long journey back to the city of Cusco, saying goodbye to Gustavo along the way.



#### Day 10 Cusco

#### Travelling

This morning we left the Manu Wildlife Centre at 5am and luckily there had been rain overnight and so the river had increased in depth, this would help us make better time in getting to the airport as it meant less chance of getting stuck. The boat journey to Porto Colorado was uneventful, the usual riverside birds such as great & snowy egrets, cocoi herons, neotropical cormorants, greater kiskadees and anhingas being the main animals of note. On arrival at the small port village we said goodbye to our dependable boat as well as Luis and Augusto and took 3 different vehicles for about one hour as we moved inland and to a crossing point of the Madre Dios River, from here we took a small ferry (just a normal Amazonian long boat really) across the river and to our mini bus. We then loaded everything onto the bus, had our packed lunch and drove the 2 hours or so to the airport at Puerto Maldonado. Despite it looking unlikely as we made slow progress along the river and with the various methods of transport to get here we did make it to the airport with plenty of time to spare, the flight being 10 minutes delayed as well. The journey back to Cusco was perfectly fine and once back at the accommodation we checked in and Bharat, Uri, Peter, Jane, Umesh and Damini went on a guided tour of the Incan ruins of Saksaywaman on the surrounding hills of the city. Saksaywaman is an old Incan citadel and was an important location in the historical capital of the Incan Empire. Originally built by the Killke culture at around 1100 it was expanded by the Incas in the 13<sup>th</sup> Century. The citadel was an impressive fortress and had withstood many sieges through the years; eventually succumbing to the Spanish 1536, after the Spanish had defeated the Inca in Cusco they plundered the citadel and took the gold and silver back to Spain, but Pizarro's men were said to have left the royal mummies draped in robes and sat on gold embossed chairs alone. During the construction of Spanish Cusco the site was used as a source of stone; leaving the site in ruins. After exploring the site everyone returned to the hotel in Cusco, before heading out for dinner in the city.

## Day 11 Machu Picchu

This morning Balvina was unable to meet us and so Wendle met us at the hotel at 5:30am and took us in the mini bus to Poroy, this is the train station that serves the Cusco - Machu Picchu line and our train was due to depart at 6:40am. The village of Porov is located at 3.673m above sea level and is the highest point along the journey. On leaving Porov the train (equipped with a glass roof, allowing everyone to see the valley at the surrounding villages that we would be passing through), passes through the villages of Cachimayo and the livestock area of Pampa de Anta and then to the main pig farming area in the Sacred Valley, Huarocondo. From here the train completes a marvel of rail technology, the zig-zag route allows the train to descend (or on the return ascend) over 500m in altitude in little over 10km. This marks the descent into the Sacred Valley and at the foot of the zig zag river we will see the Pomatales River meeting the Urubamba River which is the one that Hiram Bingham followed to find the site. It is also where we will begin to see old Incan terraces along the hillsides of the narrow valley. From here we pass through the largest town in along the route, Ollantaytambo. During the Incan Empire this was the royal estate of Emperor Pachacuti, and when the Spanish invaded the area it was an important stronghold for the then emperor Manco Inca Yupanqui and in fact becoming a temporary capital of the Incan Empire during that time. Today the town is an important tourist destination with many people starting and ending their Inca trail hike here. Our next point of interest on the train journey is the raising mountains and the snow covered peak of Veronica, standing at 5,682m it is one of the highest peaks in Peru and seeing it means we are only around 20 minutes away from our first views of Wayana Picchu. This is the tall and imposing mountain that overlooks the city and is often draped in clouds on photographs of Machu Picchu. The rest of journey took us through dense cloud forest until we arrived at the final station and disembarked. Once we arrived at the station at Aguas Caliente we met our guide for this section of the trip Vilma Zuniga and were straight away our bags were transferred to the hotel in the town and we were taken to the bus stop and boarded the next tourist bus to take us up the 200m to the ancient city of the Incas. We arrived at the entrance to the incredible and almost magical site of Machu Picchu at around 11am, after entering the site we were taken on a comprehensive tour of the ruins by Vilma. The first thing that strikes most people when arriving here for the first time is the size of the place, the ruins are enormous, a true town sized area of buildings,

#### Traveling & Sightseeing





terraces and temples all well preserved and in some cases restored. Located at 2,430m above sea level the spectacular city of Machu Picchu (meaning Old Person) was believed to be the royal estate and retreat for the Inca emperor Pachacuti (1438-1472). Despite it commonly being called the 'Lost City of the Incas' this name is more accurately applied to the ruined city of Vilcabamba deeper in the forest. It was established around 1450 and was abandoned around a century later after the Spanish colonisation and despite being locally known and even inhabited by a small group of farmers the Spanish never found it or knew of it. It was not until 1911 when the American historian Hiram Bingham arrived here was the site accurately mapped and brought to the world's attention. The site we see today is largely restored with around 30% of the ruins being restored by 1976 and the work continuing today. The site was declared a world heritage site in 1983 and has been declared one of the New Seven Wonders of the World. The construction is in typical Inca style with neatly polished dry-stone walls carved to perfectly match the others shape and dimensions. The construction is so structurally sound that the whole city has survived earthquakes that quote frequently ravish the Peruvian Andes. There are three main structures in the city and these are the (1) Inti Watana, this is a temple dedicated to Inti the sun god and most powerful deity to the Incas. The room itself is believed to be an astronomical clock that would have worked as a calendar for the lncas to base their harvests and festivals around; (2) The Temple of the Sun, which is once again a dedication to the sun god Inti. There is a sculpture carved out of the rock floor of the temple which is believed to be a water mirror which was used to observe the sun, without having to look directly at the sun and damaging your eyes; and (3) The Room of the Three Windows, which is another temple complex that has the three windows aligned to allow light into the temple at certain auspicious times of the year. This is also the largest temple and one that was used for sacrifices made to appease the gods. The layout of the city is split into sectors and we explored the various ones, from the religious sector, complete with the temples, the residential sector in which some of the Incan houses are well restored and give you a perfect impression of their size and how it would have been to live here; as well as the agricultural sector and the various terraces for growing crops. Many of the plants that were grown here and present at the time of the Incan occupation are now being grown in a small new garden. These plants were selected by looking at the pollen that was found in the soil and in the ground of the Incan houses and accurately dated to the age of the Incas living here. We spent a few hours here and walked around all of the site that we were able to, ending in the storage sector and entering an example of the larders that were used to store the food. Some of these larders have had their thatch rooves reattached and the temperature difference once you entered them was remarkable. Being very warm now outside there must have been a 10°C difference on entering the store. This section then took us past a naturally occurring rock (that had been carved to extenuate certain features) that appeared like a condor (a sacred animal to the Incas), in this room animals (and possibly people - although the evidence for this is not conclusive at all) were sacrificed. After here we walked out of the main entrance and then had our lunch at the restaurant at the site before boarding the bus and driving down the 600m to Aguas Caliente. Tomorrow we would return to the site and climb the imposing Wayana Picchu which stands proud overlooking the city and offers incredible views over the whole site. For this afternoon everyone exploded the small town of Aguas Caliente, this once very small village has grown under the constant weight of tourism. Being the railhead for the ruins the town is now full of hotels, resturants, bars and souvenir shops as well as thousands of people, some of which are only here for the day and get the train in and out, some having hiked the Inca Trail (a trail that can be taken at various lengths depending on where you start from) and looking for a hot shower and comfy bed and others like ourselves just wanting a night or two here so that the full history and splendour of the place can be appreciated.



## Day 12 Machu Picchu

#### Sightseeing

This morning at 08:45 we departed from the hotel and reached Machu Picchu at around 9:30, on entering the ruins we made a bee-line to the far side of the city and to the entrance of the climb up Wayana Picchu. It was a very sunny day and the walk would be hot and steep but well worth it with the reward being breath-taking views out over the ruins. Martin had to turn back with stomach problems and Derek & Sally did not make it all the way to the top, but everyone made it to the summit with Vilma guiding them along and pointing out interesting features of the climb that included terraces and other ruins, the peak being an important feature in the lives of the resident Incas here, all those years ago. Wayana Picchu means Young man and stands opposite Machu Picchu, reaching a peak of 2,720m the summit is said to have been the residence of the high priest and local virgins. Every morning at dawn the priest and some of the virgins would walk down the peak to the city to announce the start of a new day. The major temple and structure on the mountain is the Temple of the Moon, the rest of the structures are small homesteads and terraces for agricultural. The walk is steep and includes some slippery sections and the idea that people would walk up and down this every single morning is remarkable testimony to the power of religion and the





importance of the daily cycle of the sun and moon. The importance of this is lost on many western cultures now with 24 hour lifestyles negating the need to live by the natural circadian rhythms of nature. Once completed everyone met up at the restaurant in Aguas Caliente, after eating lunch we made our way to the train station (our luggage having already been brought there by the hotel staff) and we send bye to Vilma and boarded the train which would take us some of the way towards Cusco. This train would only go as far as the old Incan town of Ollytaytambo, from there we had a mini bus waiting for us to take us the next 2 hours back to the city. On arrival we checked in and made our way to the restaurant for our last night in the historical capital of the Incas. Tomorrow we would say bye to Balvina and Cusco and travel north-west to the coastal dry forests and semi deserts and hopefully into the land of the mysterious spectacled bear and majestic Andean condor.

## Day 13 Chappari Eco Reserve

#### Travelling

This morning was a relatively relaxed start as we left the hotel at 9:50am to make it to the domestic airport in time to catch the first of our flights (to the capital Lima) at midday. We left Balvina here and made our way north, the flight was delayed by an hour but was otherwise uneventful and then the connection further north to Chiclayo was not affected by this delay and had nothing of interest to note. We were then met at Chiclayo airport by our guide (and manager of the reserve Juan Blitz (son of the famous photographer Hans Blitz, who established the reserve with the help of the local community and thus making Peru's first fully protected area which is managed sustainably by the local people for the benefit of the wildlife, ecosystem and local land use systems). We were driven the 3 hours or so into the semi desert scrub of the Chaparri ecosystem, being dark when we arrived we did spot a couple of ecosystem-endemic Sechuran foxes on the road. These small foxes are common around the reserve and are endemic to this dry forest and semi-desert of northern Peru and southern Ecuador. Once we arrived we were shown to our rooms, then had dinner in the outdoor dining area before getting a good nights rest after a long day of travelling.



## Day 14 Chappari Eco Reserve

#### Wildlife Watching

This morning some of the group decided to wake up at dawn (around 6:30am) and head down to a small stream just behind the dining area, here a small outflow is where numerous hummingbirds come for their morning bath. Mostly Amazalia hummingbirds but also grey-chinned hermits and long-billed star-throats abounded around the water. A small feeding station at the dining area also produced many species of birds, most of which were very close for photography, including west Peruvian doves, groove-billed anis, white-tailed jays, long-tailed mockingbirds croaking-ground doves, red-collared sparrows, Swainson's thrush and a small group of one of the rarest birds in the world; the white-winged guan. With only around 200 of this species remaining in the wild the entire world's population lives in this habitat and at times around 10% of that population could be seen in and around the lodge grounds. In fact around 5 were permanent residents of the dining area, as elsewhere the guans had suffered badly through hunting for food by the local people. When we settled down for breakfast we were joined by a female Sechuran fox, this very tame animal likely had a litter of cubs nearby and she was looking to scavenge any scraps she could find. After breakfast we went for a walk in the dry scrub forest, we were guided by both Juan and Daniel, Daniel being a local guide who has been trained by the lodge and is an example of the community being heavily involved in the running and management of the reserve and ecosystem. We were told about a very interesting reforestation project that was occurring around the area, because the place is very dry they had lost many of the small herbaceous (shade-loving) plants as the larger trees had been cleared and too much sunlight was getting to the forest floor. As the native trees take a very long time to grow, non-native tree species were planted and they quickly grow. This provides shade for the small native herbaceous plants to grow (which provide the majority of the food for the animals here). This in time when the native trees are large enough to take over the non-native trees in terms of providing the forest with the much needed shade, the non-native trees are then removed. The main focus of the reserve (when it was established) was to rescue, rehabilitate and monitor the spectacled (Andean) bear population. Many bears are captured and kept as pets and when they are rescued the bears are often too dependable on people to be released into the wild. So they are brought here (Peru's only bear sanctuary) and provided a semi-wild life in their natural habitat. The bears are encouraged to mate with the young being kept as wild as possible and then when they are large enough they are released. This has resulted in several bears being released into the wild and so far with no problems with the local people. This is partly to do with the large area of the





reserve (being 364km<sup>2</sup>) there is space for the bears to live without ever coming into contact with people, but probably most importantly is that the whole community around here and all of the traditional land owners earn money from the eco-tourism here (in the form or rents and wages). So if they do have a 'problem' bear, that may be spending too much time around the village or raiding crops, they do not treat the bear as a threat and shoot it for example. So the attitude of the local people to living around bears has changed, a fantastic example of eco-tourism really working, only when the local people benefit financially from having a species or ecosystem around or intact will that species of ecosystem have a real chance of survival in the long term. As the reserve started to rescue bears from all over Peru, the local people also brought other animals that had either been pets or injured or orphaned and over the years the reserve has had ocelots, tayras, armadillos, military macaws, Andean condors and collared peccaries. At the moment the only captive animal they had, in addition to the bears, was a male collared peccary that was kept as a pet until it became too large and aggressive. They used to have him roaming free with the local wild group of peccaries here, but he was too approachable by the tourists and had a habit of biting when petted. So for his and the tourists safety he has his own pen in a shady area of the forest. Further on we walked to an area opposite the imposing cliff faces of the mountains around here, there are several camera traps set up around there and Juan told us about the pumas, Pampas cats, bears and condors that have been caught on the camera traps. There are several water holes up there which attract the wildlife (particularly the bears) and they have caught some fascinating social behaviour from the bears, showing that they may not be as solitary as previously believed. As we waited here and were shown the pictures a male Sechuran fox trotted along the boulders on the opposite side of the stream and away into the scrub, then Bharat spotted a small flock of the diminutive but wonderfully coloured Pacific parrolets. We carried on walking towards the bear enclosures and we heard whitetailed jays alarm calling near the path, this usually marks a snake such as a boa constrictor but could also mean a Pampas cat, fox or something larger. We looked into the bushes to try and find the source of the commotion and all of a sudden a young female bear emerged from the forest. The bear was around 3 years old and is independent of its mother, the mother being a captive and rescued bear. As is normal for the bears here the captive bears rarely explore their enclosures fully and are happy to remain in them and get the free and easy meals, but their young often test the fences and are always looking for ways out. They sometimes escape and are then left to their own devices (before they are scheduled for release) and this is what this female bear had done. Escaping the cage and now living as a wild bear. However her confidence around humans was evident when she approached us to within 2m away, before Juan and the other rangers from the reserve scared her off. Young and used to people she may be, but this was a wild bear for all intents and purposes and we were not going allow her to come within touching distance of us. So she disappeared into the forest and the group split, with Peter, Derek, Martin and Daniel going down to the stream to see if we could see her again and the rest heading on towards the captive bears and the rest of the hike. Peter, Derek, Daniel and Martin did find her again and as Peter and Martin walked down a pathway to the stream (with Daniel and Derek already ahead) we inadvertently blocked her path and she climbed up a tree. The speed that she got up and then down the vertical trunk showing why they are regarded as the most arboreal of all of the bears and as a huge source of their food are arboreal bromeliads they spend large parts of their lives high up in the trees. We the followed her as we moved amongst the rocks and long grass of the stream and got some excellent close up views and photographs of her, before she moved deeper into the vegetation and we decided to head back to meet up with the rest of the group. We were then shown 3 of the captive bears, all given excellent quality of lives and are now working ambassadors for their species and this entire ecosystem as around 8,000 visitors arrive here every year. With this level of local awareness of the bears and their plight the population in northern Peru may have a long term future. Walking further along we stopped at a large rock with strange round bowl like impressions in it, they were obviously man made and possible evidence of stone age tool use. We were then told a little about the Mochika culture, this is one of the earliest cultures in South America and was particularly prominent in northern Peru. They are well known for their expertise in clay work and several pots and vases have been found around here. Whether these depressions in the rock are Mochika or even earlier is unknown at present and the fact that this easy to find and well known location still has archaeological question marks hanging over it, it makes you wonder what else there is out here that we have not discovered yet. Climbing further up the slope and in between the large bear enclosures we watched through binoculars and spotting scope a pair of 1 year old captive The breeding was going well in the centre and the success of the releases unprecedented, cubs playing. everything we had seen so far in the way that the reserve operated was excellent and the model should be followed by other communities to increase sustainable development and eco-tourism throughout northern and coastal Peru. We were then taken an old shaman alter, this location is still used occasionally by the local shaman for spiritual reunions and festivals, several wooden idols were present including a pig, bear and squirrel and spears. The spears are made from the chanta palm from the Amazon rainforest far to the east. Juan then showed us the Pallo Santo tree (Holy Wood tree) which is also a natural insecticide and the locals use the sap as mosquito repellent. Then as we made it back to the lodge ground in time for lunch we had excellent views of a pair of scarlet-backed woodpeckers feeding. At lunch we met Juan's wife Anne who would be taking us around with Daniel for some of our walks in the coming days. This afternoon we went to a drier area and were introduced to some more of the fruiting plants around here including the interesting and edible chacydong tree, this large tree had two pale-legged hornero nests in it. The nests of the hornero are made of clay and being rounded resemble the large clay ovens used traditionally in Brazil. The name hornero means oven in Portuguese. We also found wild tomatoes growing in the dry riverbed along with many cacti (such as the beautiful foxtail cactus) and acacia trees. This species of acacia is





covered in a black crust, giving the appearance that it has been burnt. However this is natural and these crusts produce a sweet sap, this nectar attracts many bees, flies, ants and hummingbirds to the tree which all help to pollinate the tree. The bees and ants also provide protection from predators that may otherwise burrow into the bark and feed on the leaves. We then heard the distinctive alarm call of the long-tailed mockingbird, finding the three birds in a tree near the path and all staring down at the base of the tree and alarm calling was a clear sign that there was a snake in the base of the tree. So Martin and Juan went to investigate, but with a few venomous species of snake around here and the dry leaves forming a layer of cover enough to conceal a snake we didn't search thoroughly. Around sunset we begin to return to the lodge and visited the La Huerta Encontada and Interpretation Centre, this small education centre, picnic spot and swimming pool is where the majority of visitors and school trips come to learn about the reserve, wildlife and ecosystem here. Martin set his camera traps up in the lodge grounds and found a puma track around 50m away from the dining room and from the last 48 hours. Then before dinner we watched as a small group of collared peccaries including 2 young ones came and walked past the kitchen and towards the museum, they were joined by a Sechuran fox, possibly the resident female who joined us for breakfast. We then had dinner and retired to our rooms for the night.

## Day 15 Chappari Eco Reserve

#### Wildlife Watching

Once again just before dawn some of the group gathered down at the stream to photograph the many grey-chinned hermits and Amazalia hummingbirds as they came down to bathe. The smaller and more colourful long-billed star throats didn't come down and bathe but instead hunted for mosquitos around the water. The after breakfast we went on a hike with Anne and Daniel, it was very overcast this morning and there was almost a chill in the air, certainly it was much cooler than yesterday. We first visited the serpentarium, this is an important part of the education system that the reserve has. Teaching the locals about the snakes and that they are not all evil and need to be killed instantly. The mostly Christian belief here meaning that all snakes are evil, results in hundreds of needless deaths annually (snake deaths that is) and here the aim to get people close to snakes and to appreciate them as the incredible animal that they are. Beyond here we travelled past the enclosures again and we saw a female and her 3 year old cub as we hike up and away from the bears. We had excellent views again of a scarletbacked woodpecker pair (possibly the same pair as we saw yesterday) as well as golden-bellied grosbeaks and white-winged guans. We walked to a dry river bed with large boulders, showing the power of the water cascading down here during the brief but ferocious rainy season. We then headed back to the lodge as the temperature began to increase, the morning mist and cloud cover being fully burnt off and the sun blazing through and quickly warming up the atmosphere. After lunch we travelled out of the mountainous area to a large reservoir where many birds can be found. Along the way we came across an old male llama, the llamas here have been reintroduced to help control the vegetation growth as well as provide food for the pumas in the area. This individual was very old and Juan explained that they did not expect him to survive very long in the wild, but he had proven them wrong and it seemed he had enough energy and wits about him to carry on surviving a little while yet. On the drive down we also saw a few green iguanas crossing the road as well as a pair of burrowing owls occupying their nests, none standing alert next to its hole and one perched on the a nearby bush. They were very close to the road and allowed for good views and photographs. Once we arrived at the reservoir we had guite a bounty of birds including a savanna hawk. northern crested caracaras, collared plovers, pectoral sandpipers, black-faced ibis and Peruvian meadowlarks all inhabiting the grasslands bordering the water. On the water we had a wealth of waterfowl including Andean coots, common moorhens, cinnamon teals, white-cheeked pintails and pied-billed grebes all in large flocks. All of these birds were complimented by a mass gathering of snowy egrets making their way from their feeding grounds (probably around the agricultural fields nearby) to their roosts on the far side of the reservoir. They arrived in large flocks of white passing down past us and on to their roosting sites. All of this occurring in the beautiful evening light of a fantastic sunset over the domed hills on the opposite banks of the reservoir. Once the sun had set beyond the hills we returned to the mini bus and drove back to the lodge, on the way we saw several lesser nighthawks and also a brief view of a wonderfully small Peruvian pygmy owl perched on a telegraph wire next to the road.



# Day 16 Chappari Eco Reserve

#### Wildlife Watching

This morning we started at 6am and today we took a drive with Anne and Daniel towards the cloud forest habitat located around 2 hours from the lodge. At this time of the year this particular cloud forest experiences a dry season and there is not much cloud at all. This difference from other cloud forests that are perpetually saturated in cloud means that a different flora and fauna are found here, with birds being the most conspicuous group of animals and it





is this wealth of bird life that we would aim to experience at its fullest this morning. Most of the flowering plants are not in bloom at this time of year and that made the intense red blossoms of the yaruma trees stand out even more than they would ordinarily. The explosions of red dotting the largely brown and dull green hillsides as we drove up and down valleys. As we entered the cloud forest from the dry scrub forests from around the lodge the size, number and diversity of trees increased as did the number of bromeliads, vines, epiphytes and mosses on the trees, some of which looked like they would give way under the weight of so many parasitic species. We arrived at a wonderful view point looking out over the Andean Colleria, these are the foothills that lead into the Andes further to the west. Just like the llamas had been reintroduced to the lowland, dry forests around the lodge we were told of an alpaca reintroduction that had been successful in the higher elevations to the west. Bringing the camelid species back to large parts of the Andes is being mirrored in Ecuador and Chile as the policy of brining species that live in more harmony that the non-native cattle, sheep, horses and goats is gathering pace. We switched from walking and driving our way back down the hills and through the cloud forest, birding along the way. We were very fortunate as there were many species around, including many that are endemic to this habitat. We had great views of arid dove, rufous flycatcher, streaky flycatcher, eared dove, vermillion flycatcher, Pacific parrolets, variable hawk, Harris's hawk, saffron finch, pearl kite, red-masked parrots, fascinated wren, white-eared oriole, thick-billed euphonia and some really nice views of the small Ecuadorian piculet, streak-headed woodcreeper, tropical peewee, bananaquit, three-banded warbler, smokey-coloured peewee and even a rare mammal here as the Guayaquil squirrel was spotted scurrying around the trees in search of food. The air was warming up and the intensity of the sun increasing so around midday we headed back towards the lodge in the mini bus, stopped briefly along the way to photograph the yaruma trees and their fantastic red blooms. We then passed the old male llama in almost exactly the same place as we had seen him yesterday, before a pair of aplamado falcons flew past us on their way to their nest on top of a cactus. After lunch and later in the afternoon (after the hottest part of the day had past) we went for another walk around the dry forest. But as we were just getting our gear ready to head out the white-tailed jays were heard alarm calling just down near the hummingbird bathing area and Martin and Juan headed down there in the hope of seeing a snake, some of the group followed. Whilst Juan was up in the vegetation looking for the snake the snake was spooked and came slithering out of the grass and along the boulders in front of Martin. The non-venomous Mastigodryas heathii snake (which it was later identified as) came out into the open and then away into the thick grass on the other side of the dry stream bed. Just after leaving for the walk we saw a collared peccary near the kitchen, along with the female were two babies, still with their stripy coats; like many intelligent and adaptable animals they have quickly learnt that the people here mean them no harm and they can also provide food. So the peccaries (like some of the foxes and many birds) stay around the lodge grounds as the pumas tend to avoid the area (although we would find out that this is not a fixed rule later on today). The walk produced more nice bird sightings including a pair of feeding olive-green woodpeckers on a guava tree, a white-winged guan and her chick of the year, white-eared orioles and many long-tailed mockingbirds opportunistically feeding alongside white-tailed jays. We then watched as a boldly coloured lineated woodpecker next to the road was being chased through the forest by the defensive jays. We then arrived at the compost heap and small vegetable patch, that despite being fenced in was being raided by some of the collared peccaries that we disturbed. Back at the lodge Daniel trained the scope on the full moon and the views of the craters, shadows and shapes on the surface of the moon were great to see so well magnified. He then also located and showed us a Peruvian screech owl just near the kitchen. We were told by the rangers that they had found a puma kill (a llama) just up near the serpentarium, we would investigate this tomorrow, but the kill was made only 24 hours ago. So whilst we were here in the lodge a puma had come into the area, made a kill and fed on the animal. All without being seen or heard, incredible. After dinner we went for a night walk along the dry river bed, along the way several freshwater crabs were seen along with tarantulas and then a cat snake (Leptodendra septetranakis) was seen staking out a small pond for frogs and maybe small fish.

## Day 17 Chappari Eco Reserve / Lima

#### Wildlife Watching & Travelling

Today would be our last full day on the tour and we started early again with the bathing hummingbirds and today we were treated to a rare and highly endemic Tumbes hummingbird. We then walked up to the puma kill, by now many black and turkey vultures had been attracted by the scent and sight of the carcass. Higher in the sky were two larger and easily recognisable king vultures soaring in circles, for the rest of the morning we kept a keen eye out on the horizon and checking the thermals in case the sight of the many vultures gathering would attract an Andean condor to the kill. We first went downstream (or so to speak with the river being dry at this time of year), this is a good place to see the white-tailed deer in the early morning, but the sun was coming up fast and Juan was the only person that saw a white-tailed deer running away from us in the riverside scrub forest. We once again saw the male llama, clearly he had found a good place in which to stay as for 3 days he had barely moved. We then moved up to the puma kill, being followed a short way by a Sechuran fox, we then arrived at the site of the kill, the tracks showing the approach of the puma and then the drag marks showing where the puma had moved the carcass up and into the shaded area under a bush. This is to try and hide the kill from the vultures, but the large numbers of vultures in the trees and soaring around proved that their noses and eyes are far better than the puma's ability to hide the kill. As well as the adult puma's tracks we also found tracks of a puma kitten walking to the kill and also fox tracks, showing that more than the vultures benefited from the puma kill and it was great to know that the puma





population here was breeding successfully. Back around the dining room were the peccaries feeding on the bird seed left out for the birds and then we got a great call from Daniel, he had been patiently scanning the hillsides and thermals and had found us an Andean condor. The views (even through the scope) where distant but the size and bold black and white plumage of the two adults and one chick Andean condor were clear to see. They perched on the very top of the Chappari peak overlooking the lodge, occasionally one of the adults taking to the sky and soaring around and the chick flapping its wings. Whether this was the nest of the condors and it had come unnoticed until now or the whole family had moved here (possibly being attracted by the presence of the vultures in the valley) we do not know. This was the last notable wildlife sighting of the trip as from here we packed up our luggage and headed back to the city of Chiclayo, said our goodbyes to Daniel, Juan and Anne and then flew the hour back to Lima. After checking into the accommodation we had our evening meal in a nearby restaurant and enjoyed our last evening together in Peru.



#### Day 18 Home

#### Departure

This morning the group was splitting up with Bharat, Uri, Umesh, Damini, Peter and Jane spending an extra night in Lima and so being transferred to their new hotel, Derek and Sally would be staying in the current hotel until the evening and their return flight to the UK and Martin was leaving in the afternoon for his flight back across the Atlantic. And so with farewells at the entrance to the hotel, the tour was over and a very successful (if not tiring) tour it was too.

# Species List Peru's Upper Amazon, Machu Picchu & Chappari - Sep 2015

# *Mammals* (\* = heard or signs only / CT = camera trap only)

											Septe	mber								
	Common Name	Binominal Name	10	) 11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	Jurua red howler monkey	Alouatta juara				*	5	*	*	7	2									
2	Black-headed night monkey	Aotus nigriceps						*	3		5									
3	Peruvian spider monkey	Ateles chamek				5														
4	Eastern lowland olingo	Bassaricyon alleni						*												
5	Silky short-tailed bat	Cariolla brevicaudata			~50															
6	White-fronted capuchin	Cebus albifrons					~10	~10												
7	Woolly false vampire bat	Chrotopterus auritus															2			
8	Amazonian bamboo rat	Dactylomys dactylinus					*	*												
9	Brown aguoti	Dasyprocta variegata			2		1													
10	Northern ghost bat	Diclidurus albus													3					
11	Little black serotine	Eptesicus andinus						3												
12	Capybara	Hydrochaeris hydrochaeris				4	2			*										
13	Llama	Lama guanicoe											3				1	1	1	
14	Ocelot	Leopardus pardalis						*												
15	Sechuran fox	Lycalopex sechurae													2	3	4	2	1	
16	Red brocket deer	Mazama americana								*										
17	Riparian myotis	Myotis riparius								2										
18	White-tailed deer	Odocoileus virginianus																	2	
19	Jaguar	Panthera onca				*	*													
20	Collared peccary	Pecari tajacu													1	9		12	7	
21	Greater spear-nosed bat	Phllyostomus hastatus		2																
22	Kinkajou	Potos lavus									1									
23	Giant armadillo	Priodontes maximus						*	*	*										
24	Giant otter	Pteronura brasiliensis									3									
25	Puma	Puma concolor														*			*	
26	Lesser sac-winged bat	Saccopteryx leptura				1														
27	Saddle-backed tamarin	Saguinus fuscicollis						12		6										
28	Emporer tamarin	Saguinus imperator								*										
29	Black-capped squirrel monkey	Saimiri boliviensis					14		~2	~10										

							0						
30	Large-headed capuchin	Sapajus macrocephalus		7			5	6					
31	Bolivian squirrel	Sciurus ignitus	1										
32	Sanbourne's squirrel	Sciurus sanborni		1									
33	Southern Amazon red squirrel	Sciurus spadiceus				3	1	1					
34	Guayaquil squirrel	Sciurus stramineus									1	1	
35	Brazilian tapir	Tapirus terrestris			1	1		*					
36	Fringe-lipped bat	Trachops cirrhosus						1					
37	Andean bear	Tremarctos ornatus									1		
38	Alpaca	Vicugna vicugna	1										

# **Birds** (\* = heard or signs only / CT = camera trap only)

	Common Name	Dineminal Name	1								Septe	ember	,							
-	Common Name	Binominal Name	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	Spotted sandpiper	Actitis macularius				4					1									
2	Speckled hummingbird	Adelomyia melanogenys			1															
3	Andean swift	Aeronautes andecolus											~10	~25						
4	Tumbes sparrow	Aimophila stolzmanni														1				
5	Amazalia hummingbird	Amazilia amazilia														11	3	16	13	
6	White-bellied hummingbird	Amazilia chionogaster						1												
7	White-browed purpletuft	Amazilia chionogaster						1												
8	Mealy parrot	Amazona farinosa					2	2	31											
9	Yellow-browed sparrow	Ammodramus aurifrons			3		3													
10	White-cheeked pintail	Anas bahamensis															~30			
11	Cinnamon teal	Anas cyanoptera															6			
12	Horned screamer	Anhima cornuta				9	1													
13	Anhinga	Anhinga anhinga				2	2				6									
14	Blue-and-yellow macaw	Ara ararauna				13	49	12	7		2									
15	Red-and-green macaw	Ara chloropterus				6	7		~75		4									
16	Scarlet macaw	Ara macao				2	5		7											
17	Chestnut-fronted macaw	Ara severus			1		13	8	2		5	6								
18	Dusky-headed parakeet	Aratinga weddellii				*														
19	Limpkin	Aramus guarauna			2		1													
20	Great egret	Ardea alba				8	4				1	~25					1			
21	Cocoi heron	Ardea cocoi				38	8				1	~15								
22	Black-capped sparrow	Arremon abeillei																3		
23	Burrowing owl	Athene cunicularia															4			

24	White-winged brush finch	Atlapetes leucopterus																3		
25	White-banded swallow	Atticora fasciata			5	7			6	~15	9									
26	Three-banded warbler	Basileuterus trifasciatus																8		
27	Variable hawk	Buteo poecilochrous		2	2													1		
28	Savanna hawk	Buteogallus meridionalis															2			
29	Striated heron	Butorides striata					1													
30	Yellow-rumped cacique	Cacicus cela				~15		3	2	6	~20									
31	Muscovy duck	Cairina moschata				7														
32	Pectoral sandpiper	Calidris melanotos															~160			
33	Crimson-crested woodpecker	Campephilus melanoleucos							2											
34	Grey-breasted sabrewing	Campylopterus largipennis			1															
35	Fasciated wren	Campylorhynchus fasciatus																4		
36	Northern crested caracara	Caracara cheriway															1			
37	Turkey vulture	Cathartes aura			2	5	2				4				~10	4	15	12	6	
38	Greater yellow-headed vulture	Cathartes melambrotus				8	3		1		7									
39	Swainson's thrush	Catharus ustulatus														1				
40	Amazonian Umbrellabird	Cephalopterus ornatus			1															
41	White-bellied woodstar	Chaetocercus mulsanti						1												
42	Short-tailed swift	Chaetura brachyura			3															
43	Grey-rumped swift	Chaetura cinereiventris									~10									
44	Collared plover	Charadrius collaris				8					2						~5			
45	Swallow-winged puffbird	Chelidoptera tenebrosa				1														
46	Amazon kingfisher	Chloroceryle amazona				6	1				1									
47	Short-billed chlorospingus	Chlorospingus parvirostris		2	2															
48	Lesser nighthawk	Chordeiles acutipennis													2		6			
49	Sand-coloured nighthawk	Chordeiles rupestris				4	41					1								
50	Magpie tanager	Cissopis leveriana			2															
51	Bananaquit	Coereba flaveola																1	1	
52	Andean flicker	Colaptes rupicola		1	-															
53	Sparkling violetear	Colibri coruscans			1															
54	Long-tailed tyrant	Colonia colonus			2															
55	Feral pigeon	Columba livia	~10	0 ~70	)							100's	~50	~100	10's					
56	Croaking ground dove	Columbina cruziana														~40	44	44	~55	~50
57	Plain breasted ground dove	Columbina minuta														9	~10	12	2	
58	Lemon-browed flycatcher	Conopias cinchoneti			1															
59	Tropical peewee	Contopus cinereus														1		1		
60	Smoke-coloured pewee	Contopus fumigatus																3		
61	Tumbes peewee	Contopus punensis																	1	
62	Black vulture	Coragyps atratus				7	25	4	12	1	27				~100	2	29	12	39	
63	Creamy-crested spinetail	Cranioleuca albicapilla			3															

64	Smooth-billed ani	Crotophaga ani		17		8		5		1	7						
65	Greater ani	Crotophaga major								~20	3						
66	Groove-billed ani	Crotophaga sulcirostris											3		4		
67	Bartlett's tinamou	Crypturellus bartletti					*										
68	Cinerous tinamou	Crypturellus cinereus			*												
69	Undulated tinamou	Crypturellus undulatus				*	*	*	*								
70	White-tailed jay	Cyanocorax mystacalis											12	5	23	9	
71	Violecous jay	Cyanocorax violaceus		3													
72	Black caracara	Daptrius ater			2	1											
73	Northern barred woodcreeper	Dendrocolaptes sanctithomae						1									
74	Straight-billed woodcreeper	Dendroplex picus						1		1							
75	Black-capped donacobia	Donacobius atricapilla								1							
76	Lineated woodpecker	Dryocopus lineatus													2		
77	Little blue heron	Egretta caerulea			1	1											
78	Snowy egret	Egretta thula			61	28		9		8	~30			~230			
79	White-crested elania	Elaenia albiceps													2		
80	Swallow-tailed kite	Elanoides forficatus						1		1							
81	White-throated flycatcher	Empidonax albigularis	1														
82	Scarlet-hooded barbet	Eubucco tucinkae							1								
83	Thick-billed euphonia	Euphonia laniirostris													3		
84	Orange-crowned euphonia	Euphonia saturata											2				
85	Sunbittern	Eurypyga helias			2												
86	Tawny-crowned pygmy tyrant	Euscarthmus meloryphus												1			
87	Aplamado falcon	Falco femoralis													2		
88	White-chested jacobin	Florisuga mellivora		3													
89	Pacific parrolet	Forpus coelestis											4	2	67	5	
90	Andean coot	Fulica ardesiaca												~30			
91	Pale-legged hornero	Furnarius leucopus											1	4	3		
92	Bluish-fronted jacamar	Galbula cyanescens				1											
93	Common moorhen	Gallinula chloropus												~10			
94	Pearly kite	Gampsonyx swainsonii													1	1	
95	Crane hawk	Geranospiza caerulescens			1												
96	Peruvian pygmy owl	Glaucidium peruanum												1	1	1	
97	Rufous-breasted hermit	Glaucis hirsutus					1										
98	Red-crowned ant-tanager	Habia fuscicauda				*											
99	Double-toothed kite	Harpagus bidentatus				1											
100	Violet-fronted brilliant	Heliodoxa leadbeateri		2													
101	Long-billed starthroat	Heliomaster longirostris											3	3	4		
102	Sungrebe	Heliornis fulica				1				2							

103	Laughing falcon	Herpetotheres cachinnans				*												
104	Barn swallow	Hirundo rustica			4	11												
105	White-edged oriole	Icterus graceannae												2		5	1	
106	Plumbeous kite	Ictinia plumbea			1					3								
107	Wattled jacana	, Jacana jacana								17								
108	Northern jacamar	Jacana spinosa								2								
109	Streaky-headed woodcreeper	Lepidocolaptes souleyetii														1		
110	Grey-headed kite	Leptodon cayanensis				1												
111	White-tipped dove	Leptotila verreauxi										~10	~10					
112	Tumbes hummingbird	Leucippus baeri															1	
113	Tropical parula	Leucippus baeri															1	
114	Screaming piha	Lipaugus vociferans			*	5	*	*	*	*	*							
115	Crested owl	Lophostrix cristata				*			*									
116	Ringed kingfisher	Megaceryle torquata			7	3		1										
117	Peruvian screech owl	Megascops roboratus														1		
118	Tawny-bellied screechowl	Megascops watsonii		1		*												
119	Yellow-tufted woodpecker	Melanerpes cruentatus			1													
120	Elegant crescent-chest	Melanopareia elegans														1	1	
121	Torrent duck	Merganetta armata	1									~20	8					
122	Green ibis	Mesembrinibis cayennensis								3								
123	Tyrian metaltail	Metallura tyrianthina	1															
124	Barred forest falcon	Micrastur ruficollis				*												
125	Long-tailed mockingbird	Mimus longicaudatus												26	61	74	~50	
126	Razor-billed curassow	Mitu tuberosum								1								
127	Shiny cowbird	Molothrus bonariensis															6	
128	Giant cowbird	Molothrus oryzivorus			22	26		4			~30							
129	White-frontd nunbird	Monasa morphoeus						1										
130	Black-fronted nunbird	Monasa nigrifrons				3	1	1										
131	Wood stork	Mycteria americana			5													
132	Short-crested flycatcher	Myiarchus ferox		2														
133	Rufous flycatcher	Myiarchus semirufus													3	1		
134	Baird's flycatcher	Myiodynastes bairdii														1		
135	Golden-crowned flycatcher	Myiodynastes chrysocephalus	1															
136	Streaky flycatcher	Myiodynastes maculatus													1	1		
137	Black-crested warbler	Myiothlypis nigrocristata														1	1	
138	Social flycatcher	Myiozetetes similis			1					~15								
139	Black-throated antbird	Myrmeciza atrothorax		1														
140	Long-billed woodcreeper	Nasica longirostris								1								
141	White-thighed swallow	Neochelidon tibialis		1														
142	Orinoco goose	Neochen jubata			4	8												

143	Handsome flycatcher	Nephelomyias pulcher	6														
144	Blue-and-white swallow	Notiochelidon cyanoleuca		100's	26				4	12	13	~10					
145	Greater potoo	Nyctibius grandis		1													
146	Drab-water tyrant	Ochthornis littoralis		1													
147	Starred woodquail	Odontophorus stellatus				*											
148	Hoatzin	Ophisthocomus hoazin		6	14				64								
149	Speckled chachalaca	, Ortalis guttata		2		3											
150	Red-beilled macaw	Orthopsittaca manilatus					12										
151	Osprey	, Pandion haliaetus		7													
152	Harris's hawk	Parabuteo unicinctus											2	1	2		
153	Red-capped cardinal	Paroaria gularis			3		4		11								
154	Pale-vented pigeon	Patagioenas cayennensis		6	4				3								
155	Spot-winged pigeon	Patagioenas maculosa	3														
156	Ruddy pigeon	Patagioenas subvinacea				*											
157	White-winged guan	Penelope albipennis											10	8	9	5	
158	Spix's guan	Penelope jacquacu					2	*									
159	Grey-chinned hermit	Phaethornis griseogularis											3	16	1	~20	
160	White-bearded hermit	Phaethornis hispidus				1											
161	Large-billed tern	Phaetusa simplex		58	10		2		3	13							
162	Neotropical cormorant	Phalacrocorax brasilianus		6 ~125	28		1										
163	Golden-headed quetzal	Pharomachrus auriceps	3														
164	Golden-bellied grosbeak	Pheucticus chrysogaster												4	3		
165	Black-capped foliage-gleaner	Philydor atricapillus				*											
166	Golden-green woodpecker	Piculus chrysochloros						2							1		
167	Ecuadorian piculet	Picumnus sclateri													1		
168	Cinerous finch	Piezorina cinerea													3		
169	Capped heron	Pilherodius pileatus		3	2		2										
170	Black-headed parrot	Pionites melanocephalus			2												
171	Coppery-winged parakeet	Pionus chalcopterus		7	6												
172	Blue-headed parrot	Pionus menstruus		6 9			33		17	4							
173	Blue-throated piping guan	Pipile cumanensis		5													
174	Lesser kiskadee	Pitangus lictor		3													
175	Great kiskadee	Pitangus sulphuratus		1 7	4		1		4								
176	Roseate spoonbill	Platalea ajaja								1							
177	Puna ibis	Plegadis ridgwayi	~40								~100	3					
														~1			
178	Pied-billed grebe	Podilymbus podiceps												0			
179	Tropical gnatcatcher	Polioptila plumbea													2	1	
180	American purple gallinule	Porphyrio martinicus		1													
181	Blue-headed macaw	Primolius couloni		2													

182	Southern martin	Progne elegans			~40	~100												
183	Russet-backed orependula	Psarocolius angustifrons	*	88	~10	52	~15	2	3		36							
184	Olive orependula	Psarocolius bifasciatus					2											
185	Crested orependula	Psarocolius decumanus			~30	34	3	2		4							Í	
186	Red-masked parrot	Psittacara erythrogenys														23	Í	
187	White-eyed parakeet	Psittacara leucophthalma		~10	~10	7											Í	
188	Pale-winged trumpeter	Psophia leucoptera							1								Í	
189	Orange-cheeked parrot	Pyrilia barrabandi						7									Í	
190	Vermillion flycatcher	Pyrocephalus rubinus			2									1	3	4	3	
191	White-throated toucan	Ramphastos tucanus					1		2	2								
192	Silver-beaked tanager	Ramphocelus carbo		7			2			5								
193	Brown-throated martin	Riparia paludicola			28	2				2								
194	Andean-cock-of-the-Rock	Rupicola peruvianus	8															
195	Roadside hawk	Rupornis magnirostris		1	2			4	1	3								
196	Black skimmer	Rynchops niger			113	30					18							
197	Greyish saltator	Saltator coerulescens								2						1		
198	Black-cowled saltator	Saltator nigriceps														2	1	
199	King vulture	Sarcoramphus papa				2		2									3	
200	Black phoebe	Sayornis nigricans	1	1								3	6					
201	Golden-collared toucanet	Selenidera reinwardtii							2									
202	Saffron finch	Sicalis flaveola														7		
203	White-rumped sirystes	Sirystes albocinereus					1											
204	Hooded siskin	Spinus magellanica		6														
205	Olivaceous siskin	Spinus olivacea		3														
206	Andean siskin	Spinus spinescens						5										
207	Parrot-billed seedeater	Sporophila peruviana												11		~140	31	
208	Southern rough-winged swallow	Stelgidopteryx ruficollis			1					1								
209	Yellow-billed tern	Sternula superciliaris			~60	26		1		1								
210	White-collared swift	Streptoprocne zonaris		~30	~20			3								2		
211	Peruvian meadowlark	Sturnella bellicosa													2	1	Í	
212	Fork-tailed palm swift	Tachornis squamata						2		~10								
213	Neotropical palm swift	Tachornis squamata			~30					~10								
214	White-winged swallow	Tachycineta albiventer		11		12		1		12								
215	Tumbes swallow	Tachycineta stolzmanni														8		
216	Paradise tanager	Tangara chilensis		1			1											
217	Blue-necked tanager	Tangara cyanicollis		3														
218	Tourquoise tanager	Tangara mexicana						1									ĺ	
219	Spotted tanager	Tangara punctata		1													Í	
220	Great antshrike	Taraba major			1										1		Í	
221	Swallow tanager	Tersina viridis						2										

222	Fork-tailed woodnymph	Thalurania furcata		1											
223	Collared antshrike	Thamnophilus bernardi									4				
224	Black-faced ibis	Theristicus melanopis										2			
225	Blue-grey tanager	Thraupis episcopus		2			1		1	4					
226	Fasciated tiger heron	Tigrisoma fasciatum		1	19			1							
227	Rufescent tiger heron	Tigrisoma lineatum								1					
228	Masked tityra	Tityra semifasciata			1		2								
229	Black-tailed trogon	Trogon melanurus			1										
230	Masked trogon	Trogon personatus	1												
231	Chicguano thrush	Turdus chiguanco	5												
232	Black-billed thrush	Turdus ignobilis			1										
233	Lawrence's thrush	Turdus lawrencii					*								
234	Plumbeous-backed thrush	Turdus reevei											2		
235	Tropical kingbird	Tyrannus melancholicus		11	24	22	16		~10		5				
236	Snowy-throated kingbird	Tyrannus niveigularis									1				
237	Pied lapwing	Vanellus cayanus			4	1									
238	Southern lapwing	Vanellus chilensis			1										
239	Scarlet-backed woodpecker	Veniliornis callonotus									2	2	1		
240	Andean condor	Vultur gryphus												3	
241	Eared dove	Zenaida auriculata											8		
242	West Peruvian dove	Zenaida meloda									~30	14	4	4	
243	Rufous-collared sparrow	Zonotrichia capensis	6						12		~10				

# **Reptiles** (\* = heard or signs only / CT = camera trap only)

	Common Nome	Dineminal Name									Septe	ember	•							
	Common Name	Binominal Name	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1		Ameavia intracanta															2			
2	Amazon whiptail	Ameiva ameiva						1		2										
3	Giant spotted anole	Anolis punctata									2									
4	Spectacled caiman	Caiman crocodilus				4		2		1										
5	Yellow-footed tortoise	Chelonoidis denticulata			1															
6	Collared forest gecko	Gonatodes concinnatus				1														
7	Green iguana	Iguana iguana															1	1	1	
8		Leptodendra septentranalis																1	1	
9	Two-lined skink	Mabuya bistriata															1			
10	Black-spotted skink	Mabuya nigropunctata																2		
11	Heath's tropical racer	Mastrigodryas heathii																1		

12	Black caiman	Melanosuchus niger		6										
13	Blue-tailed glossy lizard	Microbtephobis maximiliana			1						1	2		
14	Western curly-tailed lizard	Microlophus occipitalis										1		
15	Tiger Pacific Iguana	Microlophus tigris										4	1	
16		Monolophus linearis											2	
17	Yellow-spotted side-necked turtle	Podocnemis unifilis		8	8									
18	Greater Ornate Whorl-tail Iguana	Stenocercus praeornatus											1	
19	Golden tegu	Tupinambis teguixin				1	1	1						

# **Amphibians** (\* = heard or signs only / CT = camera trap only)

	Common Nama	Dineminel Nome										Septe	mber								
_	Common Name	Binominal Name	1	)	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1		Ameerega hakreli									1										
2	Peruvian smooth-sided toad	Bufo glabernius					1														
3	Cane toad	Bufo marinus									2					1					
4	Smokey jungle frog	Leptodactylus pentadactylus						1													
5	Carabaya Rain Frog	Pristimantis ockendeni				8		1													
6		Sinax ruber								1											
7	Amazon milk frog	Trachycephalus resinifictrix									1										

# **Fishes** (\* = heard or signs only / CT = camera trap only)

	Common Nomo	Binominal Name	September																		
	Common Name			10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	Gold saum	Andinoacara rivulatus															~25	~25	~25		
2		Apistogramma barlowi															~50	~50	~50		
3	Chacois fish	Apistogramma huascar															100's	100's	100's		
4	Laulao catfish	Brachyplatystoma vaillantii										1									
5		Chilobrycon deuterodon															~50	~50	~50		
6	Mosquitofish	Gambusia affinis															~30	~30	~30		