PROJECTS ABROAD PERU – THE OFFICIAL CONSERVATION NEWSLETTER **MARCH 2011**

Whilst February is the shortest month of the year it is no surprise I find it hard to decide where to begin as we have been working hard in several different areas over the recent weeks. Our emphasis has been on the exciting new mammal census, the new turtle house and large scale clearing and recovery work on the pilot farm. With the effects of "El Niño" being felt around the world, it has manifested itself in our corner of the Amazon rainforest in the guise of torrential rains and thunderous storms. This year's wet season is undoubtedly the heaviest we have seen for many years and with the turbulent Madre de Dios River coming within inches of bursting its banks it was touch and go for a few days as to whether the lodge would be flooded and emergency measures implemented. Fortunately the rains eased off for a couple of days and water levels dropped to non-critical levels and it was time to head out into the forest and assess the damage!

The worst hit trails were those along the edges of the river as huge chunks of earth were swept away by the raging currents and it was soon apparent that we would have to open new sections of trails further back from the river. The continual erosion is becoming a real problem near the centre as well. The volunteer recreation area is now just a few feet from the river's edge (when built it was over 5m from the river bank!) so when the dry season comes we shall have to try and reinforce the sandy banks with a system of stakes and long stretches of protective covering and hope that this is enough come the next wet season. Elsewhere the reserve weathered the storms surprisingly well. Generally the worst tree-falls happen at the start of the wet season in the first heavy rains but these last few weeks brought unusually strong winds. Fortunately it appears that the weakest trees had already been felled in the earlier storms and the trails were amazingly intact. The biggest inconvenience is that huge areas of forest have become flooded by rainwater and the lodge area is almost an island surrounded by temporary swamps, even access to the canopy walkway requires wading through rain-filled depressions. The end result of this freak weather system was a greater sense of adventure heading out into the forest. Work continued as usual.

Every week this month we headed out along the five designated transects in search of the mammals in the reserve. We performed four surveys by day and one at night. The results were very interesting; as the swamps became fuller our sightings

became fewer. This is a logical discovery as the animals will obviously search out drier areas for foraging and sleeping, but even the large troops of monkeys seemed to have retreated to the higher terraces at the back of the reserve and in the adjoining national park. We cannot enter the national park but our limiting trail at the back of the reserve provided us with the most sightings. This transect crosses the end of the reserve and is a few hundred metres from higher forest dominated by Brazil nut trees and emergent canopy species. Here we encountered large groups of peccary (white-lipped and collared) and fresh tapir and jaguar tracks. Elsewhere the long stretches of water had forced most of the mammals further back into the forest and we encountered a few smaller species of mammal such as the Southern Amazonian red squirrel (*Sciurus spadiceus*) and the brown agouti (*Dasyprocta variegata*) which is a large terrestrial rodent. The night census was less productive as it is hard to concentrate on the tree tops when wading through large swamps especially with the beady eyes of caiman glistening in the distance! The caiman will not attack, unlike the more aggressive crocodile and alligator species, but it is disconcerting, especially if this is your first such adventure!

While it would be amazing to see a huge variety of mammals on these surveys the results are of great importance. The abundance of food available during the wet season means that animals do not need to cover large areas when foraging and so can concentrate in the areas that are not seasonally flooded without suffering competition for resources. As the Taricaya reserve is crossed by seasonally flooded depressions the larger mammals have obviously moved to the higher areas and the unusually high water levels have forced them further back yet. It is also harder to move quietly through the forest when wading through water, often swimming small stretches, and this coupled with the extra concentration needed to stay upright means that we are more likely to miss some animals that will move on quietly before we notice them. When we analyse all the final data we must consider the climatic conditions and its influence on our findings. With two more months of study in the wet season I am certain that these initial conclusions will be justified further.

Ironically, as our mammal census was demonstrating a scarcity of mammals around the reserve we did have a couple of great sightings from our various observation platforms. One sunny afternoon a lucky group of volunteers saw two

independent troops of red howler monkeys (*Alouatta seniculus*) from the canopy platform. Then, just a few days later, a different group was treated to a spectacular sighting of a Southern tamandua (*Tamandua tetradactyla*) from the HOB blind. The tamandua is a medium-sized arboreal anteater and it was feeding right in front of the hidden platform...unfortunately no-one had taken a camera as a large swamp needed to be crossed to reach the blind!

Back at the pilot farm it was time to tackle the dense undergrowth of quick growing pioneer plants eager to choke our flowers and fruit trees. The heavy rains followed by bright sun meant that it was a tough challenge to clear away all the "weeds" that were flourishing in the perfect growing conditions. As we headed out to the farm in large groups it was a case of tackling the task by sections and over the weeks we regained the advantage leaving the lines of flowers and trees clear. Elsewhere at the farm, in the far corner of the grass plot, we were continuing with the construction of our turtle house. The heavy rains had caused the shade netting to stretch with the weight of the water and so we had to re-tense the guide ropes and provide support for the roof with internal bamboo struts. The next stage is to dig the pools and cover them with cement but we must wait for the ground to dry out a little first.

It was not all work this month however, and even though it is a difficult time of year to find caiman in the rivers I gave a talk on these prehistoric reptiles and after dinner we headed out onto the river scanning its banks for tell-tale orange eye shine. The presence of large flooded areas in the forest interior means that the river-dwelling caiman move back into the forest during the wet season to avoid continually changing river levels and raging currents. Thus, I was not surprised that after over an hour of cruising up and down the river I had yet to spot any caiman. In a final attempt we crossed the river and headed up a branch of the river that is only accessible this time of year with the high water levels. At the very top of this ribbon of water I caught a glimpse of orange eyes in amongst some tall reeds. It was my one and only chance to catch a caiman and as I fished it out from the water in a desperate lunge I was astounded to see it was an incredibly rare dwarf caiman (*Paleosuchus trigonatus*). The dwarf caiman is the smallest species of Crocodilian in the Americas, maybe the world, and thus it is very elusive. They usually inhabit

small streams or swamps, too small to support the other three larger species of caiman. Why then, was it in the river? The heavy rains have filled even the smallest swamps to unusually high levels and so this dwarf caiman had obviously been displaced by transient caiman big enough to temporarily take over its territory. Nonetheless it was a fantastic capture and these heavily armoured reptiles make up for their size deficiency with a serious attitude and at no point was the caiman relaxed until I released it back into the water.

So, as you can see, it has been another eventful and exciting month here in the Amazon rainforest and next month will see us welcome back Hugo Zamora for a visit as we search for more individuals of the exciting fruit bat captured at the end of last year in nets hung from the canopy walkway. With more samples of the same species we will be able to confirm whether it is a new species to science and that would be a truly breathtaking discovery. We shall be continuing with the mammal census, rebuilding a new primate enclosure, re-installing our herpetology traps and much more……so until then!

Stuart Timson
Conservation Director,
Projects Abroad
1st March, 2011