

A year of extremes - 2009 at the Pacuare Reserve

by John Denham, Trustee of Rainforest Concern

2009 was best Leatherback turtle season in our 20 year history but also the worst in terms of flooding. The nesting figures were a cause for celebration, the floods for real concern.

Heavy rains throughout January and February flooded the countryside, burst the riverbanks and raised the canal by several feet. Inevitably, the Mondonguillo lagoon burst through to the sea and quickly became a 10-knot river 100 metres wide as the floodwaters poured into the sea. It was a bad start.

However, we were about to have the best ever Leatherback season, with 1,172 nests counted and negligible loss to poachers. 80% of the turtles were 'worked', i.e. they were tagged if not already tagged, measured, inspected for injury and, if feasible, the eggs counted. This meant long nights on the beach, especially during the peak months of April and May, for our leaders and a great team of research assistants. They were supported by 34 student groups both US and Costa Rican, brought by Ecology Project International (EPI), and 10 other groups, giving a total of nearly 650 visiting students who came to support the project.

The Leatherback nesting season peters out during June but patrolling is still intense and continues until the end of September, as the hatchlings are emerging after their two-month incubation, and the green turtles beginning to nest, albeit in much smaller numbers.

While the leatherback season was getting under way, our shoreline around the south station was being pounded by the sea. The beach sand had been washed away earlier and there was no protection against the waves. The sea got behind the gabiones (barrier cages filled with rocks) we had previously built and we could only watch and pray as the waves broke nearer and nearer to our two main buildings. We were losing a metre a day of the reserve's precious land and the sea got within five metres of the main house before a big tree was so undermined by the waves that it crashed sideways into the sea, thus providing us with a 'lifesaving' breakwater.

The flooding did not affect the working of the reserve in any way, and the turtle programme was unaffected. However, it forced us to doubt whether the south station could survive another



Peter Bennett, John Denham and Carlos Fernandez at the Pacuare Reserve

Photo: Rainforest Concern

such flood, and perhaps the next one could be even worse. We were fortunate to have the support of the British Civil Engineering company Halcrow, who kindly sent, at their own expense, an expert on coastal erosion to assess our problems. His conclusion was that, while we might take some temporary measures to buy a little

time, sooner or later we would have to relocate the south station.

I am pleased to report the new student/volunteer facility has just been completed and now located some way up the coast where there is no threat from coastal erosion".



Carlos Fernandez with the 2009 Pacuare team

Photo: EWT

We would particularly like to thank Rainforest Rescue International (Australia), Martin Stanley and the Scotts Hill Trust for their contributions towards the construction costs.

The Research Assistants, though working most nights on the beach, are also expected to do a small individual research project of their own choice – any subject with the exception of turtles – and to present it at the end of the season. The presentation took place during the last week before a small select audience. A wide range of subjects was an indication of the activity in the reserve and included an environmental plan for the Reserve, the nesting season of the rare and elusive Agami Herons, a small reforestation project (in which the local community school participated), working and teaching in the school, and a guide to the local reptiles and amphibians.

The accent last season was on turtles and coastal erosion, but our 1,000 hectares of forest, though small compared to other reserves, continues to reward us with sightings of rare animals.

Spectacular examples included jaguar (seen for the first time this year), puma and ocelot, mammals normally associated with much larger reserves.

Once again an American researcher studied the white-faced capuchin monkeys at the reserve, which with howler and spider monkeys are easily seen. The great number of animal and plant species found in the reserve being bordered by the sea on one side and the canal on the other, make it ideal for research.

The end of September marks the end of the turtle season. Wonderfully organized by the Reserve Manager Carlos Fernandez and brother Arturo, the customary party was held on the last Saturday for everyone connected in any way to the reserve. Together with family and friends, around 100 people were ferried along the canal to the south station to enjoy music and dancing on a still, dry, mosquito-free night. It was a fitting closure to an eventful season. Let us hope the 2010 nesting season will be at least equally successful as last year.



Creativity at the Reserve's North Station

Photo: EWT



A volunteer interacting with local children

Photo: EWT



The newly rebuilt and greatly improved South Station

Photo: EWT

With thanks to Halcrow for their assistance.

