



COSTA RICA

population: **3.7 million**
capital: **San José**
total land area: **5,106,000 ha**

primary forest 1990: **255,000 ha**
primary forest 2005: **180,000 ha**
primary forest lost 1990-2005: **75,000 ha**

COSTA RICA

A new target to extend the Pacuare Reserve

by John Denham, Trustee of Rainforest Concern

Conservation, Environmental Education and Research are the aims of the Pacuare Reserve, and we did well in all three in 2006. What was disappointing was the number of Leatherback turtle nests on our 6 km of beach. We counted 590 nests, which was over a hundred less than last year, though better than 2003 and 2004.

Our protection of the beach is both efficient and effective, and the number of nests lost to poachers is negligible. Professional guards, research assistants and volunteers patrol the beach all night and every night throughout the nesting season, so we are making our beach safe for these giant turtles if they choose to come. Unlike Green Turtles however, Leatherbacks are not specific to a particular beach. They lay seven or eight times in a season at 10-day intervals but those nests could be up to a hundred miles apart. From the evidence of tags, we know that some turtles lay several times on our beach in one season but also as far south as Soropta beach in Panama.

Should we be worried by the nesting numbers? It is probably too early to say. Our own beach protection has been operating effectively for 12 years (the age some biologists say it takes a turtle to reach adulthood) but the beaches to the north and south of us have been protected for less than half that time. Farther south in Panama, we are only now close to ending the slaughter of Leatherbacks, so these measures are still to take effect.



Student groups help to patrol Pacuare Beach

There could be other factors too, such as a change in sea temperature which could affect the distribution and whereabouts of jellyfish, the leatherbacks main source of food. If jellyfish move to another stretch of coast, so too will the turtles.

We shall have to wait some years before we can know if we and the leatherbacks are winning the battle for survival.



Banana plantations - a major threat to the reserve

Green Turtle numbers fluctuate greatly from year to year and in 2006 we counted 194 nests. The Green turtles follow on in July and August after the Leatherbacks have finished nesting, and we continue to protect them until the end of September as the poachers will kill for their shells or take the turtles for their meat if given a chance. Only 3 km to the south of Pacuare, 150 Green turtles were slaughtered in 2005 on a beach without protection.



Leatherback camouflages its nest after laying

The Environmental Education programme at Pacuare did well last year with a total of 760 visitors - students, volunteers and tourists coming to join the beach patrolling. They stayed from as little as two nights, up to several weeks. Ecology Project International (EPI), brought a record 37 groups of US and Costa Rican students.

We also had 10 Research Assistants last year, one from Colombia, one from Argentina, three from Spain and five from the US. They worked on the beach at night throughout the season and our Leatherback programme depends on them for the collection of data and for escorting student groups. At the same time, they must carry out a research project of their own. Last year's projects

included studies of poison-dart frogs, fungi, lizards, leaf-cutter ants and our unique colony of agami herons. The latter reached a record 140 nesting pairs, all of them packed together on a few trees on the tiny island in our inner lagoon.

Tracks of puma, anteaters and porcupines have been seen in the reserve, and while primates are common (howlers, capuchin and spider monkeys), among the rarer animals are the kinkajoo. A Phd student from the US came for several weeks last year to study the white-faced capuchins and will be returning for two longer visits.

The forest of the Pacuare Reserve, which backs onto the beach, seems to hold more wildlife than in previous years, perhaps because of the protection it provides from hunting and maybe also because of the diminishing forest areas around us as the banana plantations, with their poisonous aerial spraying, advance from inland. At a nearby sloth sanctuary, six sloths died recently and it is thought that this was due to them eating leaves from trees carelessly sprayed by planes of the banana plantation.

Urgent Appeal!

For the first time since its creation in 1989, the Pacuare Reserve needs urgent protection from advancing banana plantations. It is therefore essential that we purchase and protect a strip of intact forest on the west side of the Tortuguero Canal, which will act as a buffer for the reserve.

If you would like to help us with this specific task, please call us on 020 7229 2093.