

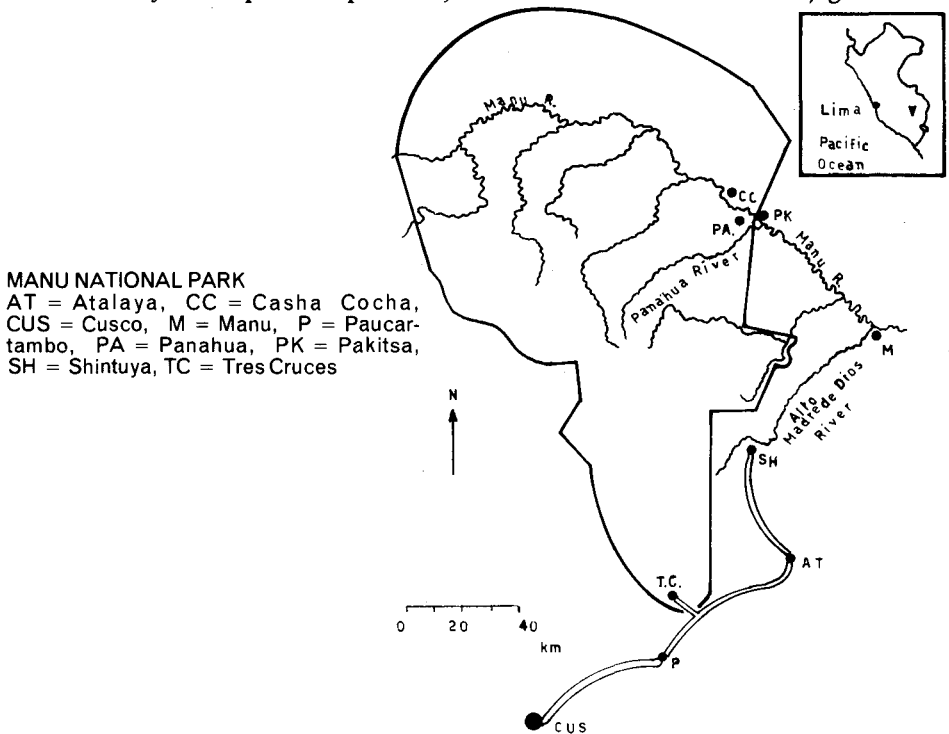
A Visit to the Manu

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To reach the Manu National Park means a day's journey by road over the Andes from Cusco, climbing up to the high puna grassland where one enters the park at the Tres Cruces guard post, 3300m above sea level. The last part of the road down to Shintuya at 300m has four unbridged river crossings that are impassable in the wet season from November to March. At Shintuya, if no park boat is available, the onward journey to Pakitsa, the administrative headquarters where there is accommodation, can only be made by hiring the Dominican Mission boat at \$100 a day plus 30 gallons of gasoline (if you can get it) as well as enough for the return journey from Pakitsa to Cashu Cocha.

Cashu Cocha is the centre of the park's richest area for wildlife. Here, beside an oxbow lake, there is a biological station, originally equipped by the Frankfurt Zoological Society, with comfortable living accommodation for two people and the park ranger, who provides every kind of assistance. Within half an hour of our arriving at Cashu Cocha, Alcibiados Valles had called up the family of seven giant otters which live in the lake and also two caimans. On subsequent days, by walking the various trails he showed me six different kinds of monkey, trumpeter swans, and many interesting trees, including the wild cacao whose seeds are spread by monkeys, which eat the pods.

One highlight was a scheduled cruise in the large park boat, when Manu Park really lived up to its reputation, and we saw no fewer than three jaguars –



the first a big male lying on a sandbank which walked quietly into the forest; the second, lying along a fallen tree, an immature which stayed long enough for both still photographs and film as we ran past it a second time; the third lying on top of the bank under a palm. And while engine repairs were being done a coatimundi walked out of the forest on to the opposite shore. Thanks to four heavy thunderstorms between the outward and return journeys the river was first low and then high on our return. The real low-water dry season is July-August, which is probably the best time for game viewing, as the forest is dry and deer and peccaries are more abundant on the banks. But the insects are more troublesome. Monkeys can be observed during all the dry-season months.

The aboriginal Indians are treated sympathetically by the park administration and allowed to continue their nomadic food gathering and primitive hunting. Others settled around Boca Manu, outside the park, and Shintuya are assisted in various ways, including schooling. At two of these settlements we delivered poultry for livestock improvement. On the return journey we stopped at Tres Cruces, hoping to see spectacled bear, but we only managed to hear one calling in the forest at 6.00 in the evening. The rest house here, 15km from the guard post on the main road, is visited by quite a large number of tourists who come to see the sunrise over the Amazon region in July and August when wind and hot days ensure a clear sunrise. In mid-May there was much cloud and mist. In the cold weather the spectacled bears, which do not hibernate, move down to 2000 metres where the young are born. In the hot months of July and August, they move back to the 3500-metre level at Tres Cruces. Manu National Park is one of the richest and best protected wildlife areas in the world, and the Peruvian Government needs help to continue its protection and improve its communications.

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Turtles Adapt to Polluted River

The Illinois River, which early explorers praised as one of North America's most fertile, is nowadays a sink for almost every imaginable kind of pollution – Chicago's municipal sewage, industrial wastes of all descriptions, and runoff from farms that are saturated with fertilisers and pesticides. It also has the problems of introduced carp, which, needing little oxygen, have outcompeted native fish; a sluggish flow that allows for much toxic siltation; and heavy boat traffic, which keeps the bottom stirred up and the water turbid. Yet in the mid-70s during a survey of the river's turtles, Don Moll of Southwest Missouri State University found that seven species were thriving and possibly even increasing, presumably because being air breathers they were not affected by the water's lack of oxygen. Moreover they used the river's turbidity to hide from predators and had adapted their diet to include algae, garbage and the occasional windfall of a massive carp kill caused by some new chemical influx. They had also learned to eat terrestrial animals and plants living on the land reclaimed from swamp.