

CONSERVATION

Assam's Manas National Park Re-opens

Manas, a national park, a tiger reserve, a world heritage site and home to three of the rarest mammals in Asia (the pygmy hog, hispid hare and Indian rhino), re-opened to the public on 1 October 1995. Located in the Indian state of Assam, it had been closed in 1989 due to political disturbances and following a serious attack on the Park's staff. Not many people have visited the area since then, as they have been afraid of Bodo tribal extremists who wish more political control. But in 1994 the Bodos gained some autonomy and realized that the economy of the area could be improved if Manas was re-opened to foreign and local tourists.

Only about 20 rhinos are thought to be left from the estimated 90 in 1990. The present Field Director of Manas, R.P. Agarawalla, stated recently, 'I have not seen a single rhino, although the area could support about 300', but two mothers with calves were spotted by forest staff in late 1995. Many were poached by Bodos and Bangladeshi immigrants in 1992 and 1993. In March 1993 a range officer, Ajoy Brahma, was nearly stabbed to death by a gang who stole rifles and shotguns, and nine horns weighing six kilos from the safe. In the few days that followed, 13 rhinos were poached.

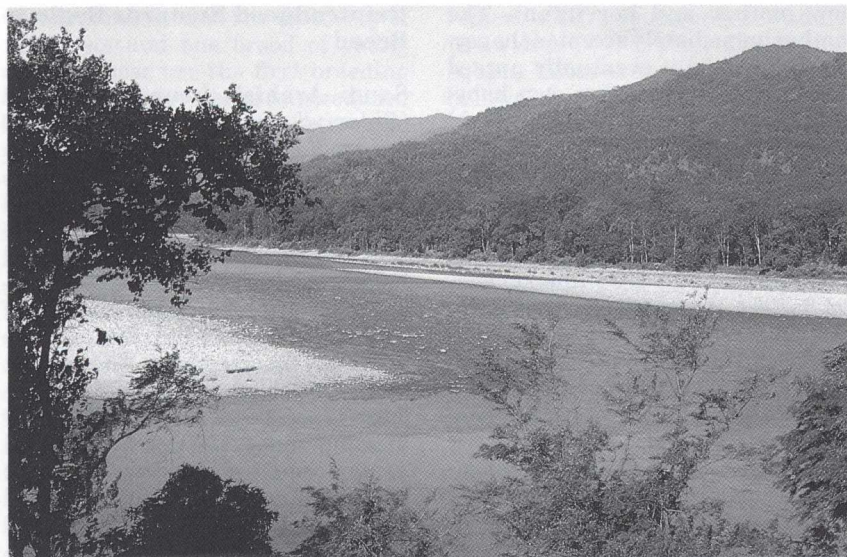
Recently, a poacher was caught and interrogated, having killed a rhino in 1994. His gang of four had carried four guns and had been paid 50,000 rupees (US\$1,597) for a medium-sized horn of about 600 grammes. The poacher was in prison for a few days and then was unfortunately released,

as is usually the case in India, because of the flawed legal system for wildlife cases.

Due to the breakdown in law and order in Manas since 1988, not only rhinos, but many other animals, as well as six government staff, have been killed, and serious damage to the park's infrastructure has occurred. But now at last, Manas officials can rectify the situation. More patrolling will be needed than ever, however. Across the river in Bhutan is the adjacent Royal Manas National Park. The king of Bhutan has recently built a royal lodge in walking distance from Assam's Manas; of further concern is the building of the first road through Royal Manas Park very near the tourist bungalows on the Indian side, creating easier access for poachers and smugglers into the whole area.

Furthermore, Manas needs much rehabilitation. Only 20 of the 43 camps for the forest guards are occupied, due to lack of facilities such as basic accommodation, wireless sets, arms and ammunition. Ideally, the number of camps should be increased to 60 or 70, according to Brahma. There is just one all-weather road through the park, and more must be constructed. The tourist bungalows need to be revamped after several years of disuse. Forest guards require shoes, warm raincoats, night vision equipment and walkie-talkies. To increase staff morale, money is needed to help pay medical and education bills. Funds are also required to pay informers to reduce poaching incidents.

In 1994 the National Government of India gave the Assam State Government about 8,800,000 rupees (then worth about \$281,150) for rhino



India's Manas National Park overlooks the forested hills of Bhutan, and is an area rich in endemic wildlife. (Photo: Esmond Bradley Martin)

conservation, but the money has not yet reached any of the parks. Without the political will to release these funds, and allocate additional money to revamp Manas, the surviving rhinos in this park have little future. Help from NGOs is urgently required to equip Manas; so far virtually nothing has reached the demoralised forest guards. Effective conservation measures to protect rhinos and the other rare and endangered species in this unique area are impossible unless Manas receives a significant injection of extra funding soon.

Lucy Vigne and Esmond Bradley Martin

Researching Pygmy Lorises and Komodo Dragons

Pygmy lorises are severely threatened in the wild and intensive management is needed to assure their

survival both in the wild and in captivity. Since the first captive births took place in North America in 1988, the average infant survival rate has been less than 50%. Researchers at San Diego's Center for Reproduction of Endangered Species (CRES) have undertaken a variety of research projects to address the low reproductive rates and high infant mortality. These efforts have resulted in a high degree of success. Detection of ovulation and pregnancy is achieved by hormonal evaluation of females through analysis of fecal samples. Pygmy lorises show seasonal breeding patterns, and births occur in early spring after a six-month gestation. Results from experiments with various pairing methods indicate that mate choice is more important than pairing duration in influencing pregnancy rates. Pygmy lorises often have twins and may accept unrelated infants. Researchers experimentally introduced an orphaned infant to a

To Keel, with best wishes, Esmund

P.O. Box 15510

Nairobi

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Cover Illustration: The front cover of Chester Zoo's new guide.

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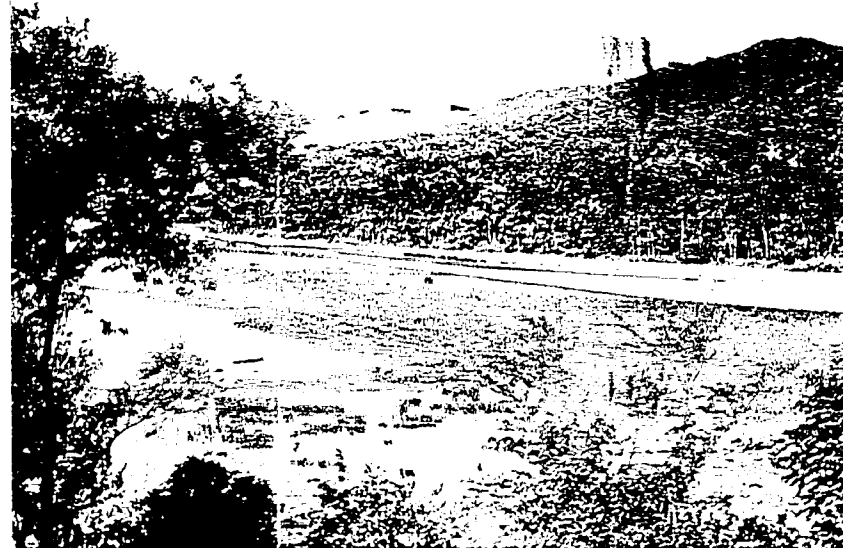
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