## Wildlife Conservation International

## The Horns of a Dilemma

Since 1970, more than 60,000 black rhinos have been killed for their horns. Fewer than 3,500 of these large mammals remain in Africa today. Despite efforts to provide sanctuaries, deter poachers with armed patrols, and crack down on illegal smuggling of rhino horn, poaching threatens to drive the black rhino to extinction.

The demand for rhino horn comes from two regions: Asia, where it is used in traditional medicines, and North Yemen, where the horns are fashioned into handles for jambias, daggers worn by Yemeni men. It may be possible to persuade these peoples to use other

substances someday, but conservationists fear that by that time the rhinos may have already disappeared.

In Namibia, scientists are taking drastic measures to save rhinos-removing the horns from selected males and females to prevent the animals from falling victim to poachers. De-horning, however, is a controversial conservation tool. First and foremost, because the animal must be tranquilized, it is a stressful process for the rhino. In addition, the horn will grow back, but no one knows how quickly, making it impossible to know when removal will be necessary again. It is impossible to remove the horns from all the rhinos in an area, and horned animals may have some reproductive advantages and may be better able to defend themselves and their young.

WCI is supporting a new project in Namibia and Zimbabwe to investigate the effects of de-horning on

desert-dwelling black rhinos. Dr. Joel Berger of the University of Nevada is gathering data on horn growth and regrowth, comparing reproductive behavior among rhinos with varying horn sizes, and examining the ranges of males and females in relation to their horn and body sizes. Berger's findings will help conservationists evaluate the effects of de-horning and decide whether to try it in other African countries.

## New Hope for the Golden Monkey

The Wuling Mountains rise dramatically in Guizhou Province in south-central China, their tops carved into spectacular shapes by wind and water. Buddhists have long considered the region—known as Fanjingshan—a sacred place of pilgrimage. This attribute, along with a high density of deadly snakes and value as a vital watershed, has helped the area retain nearly 80 percent of its forest.

Fanjingshan is home to the endangered golden monkey—one of the most dazzling of all primates. It is estimated that no more than a few hundred of these robust, honey-golden, snubnosed monkeys exist in the wild. Tourist development of Fanjingshan and encroaching cultivation elsewhere are the chief culprits. Besides golden monkeys, Fanjingshan has many other fascinating animals-among them, the Temminck's tragopan pheasant, the clouded

leopard, the giant salamander, and the Chinese sun bear.

WCI Assistant Director for Asian Programs Dr. Mary Pearl, WCI Principal Investigator Dr. William Bleisch, and Professor Xie Jiahua of Guiyang University are collaborating on a project to census and study the behavior of the Guizhou golden monkeys. On a recent trip there, Bleisch and Xie saw a group of as many as 100 monkeys foraging voraciously on leaves, buds, fruits, bark, and bamboo shoots. Golden monkeys are highly selective and probably require large tracts of forest for feeding, particularly in such big groups.

Timber cutting is a continuing problem. The local villagers are desperately poor, and wood-gathering is one of their few sources of income. Dr. Xie has suggested that Guizhou Province sponsor a bamboo handicraft industry and reforestation projects, before more damage is done.

Data from the study will be used to recommend specific conservation measures to the Forestry Bureau of Guizhou, including zoning areas for pilgrim/tourist use. And long-term monitoring of the monkeys will be carried out by university students and provincial officials. By understanding the needs of the golden monkey and by working closely with the local people to develop nondamaging agricultural and forestry techniques, the ecosystem of Fanjingshan may survive intact well into the twenty-first century.

