PROFILE IAN REDMOND

An 11th-Hour Rescue for Great Apes?

A globetrotting conservation biologist is spearheading a last-ditch effort to save these embattled primates from extinction—but the clock is ticking

LONDON—Ian Redmond was grief stricken when he heard last May of Muraha's murder. He first met her 25 years ago, just 2 days after her birth in Rwanda. They grew so familiar that Muraha had sidled up to him on a visit last year, enraging a jealous suitor. She was one tough cookie: Despite losing a hand and a foot as a teenager, Muraha later gave birth and started raising a baby. And she was doing a good job: The 13-month-old infant was still healthy when biologists found it clinging to her corpse in the Virunga forest. Nearby lay another dead mother whose infant is presumed to have been kidnapped by the unknown assailants. Their motive? A stolen baby could fetch nearly half a million dollars on the black market: Gorillas like Muraha have never been bred successfully in captivity.

Redmond looks dazed. He's in London for just a day before setting off to Malaysia to help the BBC on a story about a criminal ring of gorilla traders. This morning he met with the prime minister of the Central African Republic to offer advice on conserving that country's endangered apes. Just the day before, Redmond, an independent conservation biologist, had been at the World Summit on Sustainable Development in Johannesburg, South Africa, acting as technical adviser to the United Nations Great Apes Survival Project (GRASP). This was one of the few science-based projects to get a real boost at the summit, where delegates designated ape conservation a global priority.

Muraha was a mountain gorilla (*Gorilla beringei beringei*), a species discovered exactly 100 years ago in the mountains east of the Congo River Basin and made famous by the 1988 film *Gorillas in the Mist*. Poaching and human-transmitted pathogens have since taken a heavy toll, leaving fewer than 650 mountain gorillas in the wild. Down in the valleys, eastern lowland gorillas (*Gorilla beringei graurei*) are not faring much better. These so-called Grauer's gorillas are being devastated by a mining spree reminiscent of the Klondike gold rush. The soil in this region is rich with coltan, an ore that's refined into the rare metal tantalum, which is used to make tiny capacitors within cell phones and laptop computers. In 2000, the price of tantalum shot up to $80 per kilogram, a small fortune by Congolese standards. Thousands of prospectors have trekked deep into gorilla country, digging up tons of soil in search of coltan-rich mud. Redmond has documented their destruction. To sustain themselves in the rainforest, miners hunt for "bush meat," a catch phrase for any large mammals, including gorillas. A 1996 survey by the World Conservation Society reported 17,000 Grauer's gorillas. This year there are roughly 2500.

Field biologists today are becoming scientist-activists by necessity, says Redmond. Ape conservation, he says, is in "a state of emergency." Doing ape conservation is like doing triage—"a situation I know well and like very little," says Redmond, referring to his days as a medic in the Royal Army Medical Corps in the early 1970s.

Gentle giant. Ian Redmond comes to grips with Pablo, a mountain gorilla, while checking the silverback's body for parasites.

Redmond began his biology career by moving to Africa in 1976 to study the parasites of mountain gorillas, identifying two new nematode species. The turning point for both Redmond and his mentor, the late Dian Fossey, came 2 years later when he discovered the headless, handless body of a long-studied gorilla. Since then he has devoted an ever-increasing share of his time to the politics of conservation. At times he has put his life on the line, once getting speared while confronting a poacher.

Mountain gorillas are not the only apes at risk of extinction. Although they are legally protected in every country they inhabit, all great ape species—gorillas, orangutans, chimpanzees, and bonobos—are listed as endangered or critically endangered by the Convention on International Trade in Endangered Species (CITES). Hunting and habitat loss are the main threats, exacerbated by political instability (*Science*, 31 March 2000, p. 2386). At its present rate of decline, the bonobo (*Pan paniscus*) is predicted to go extinct within a decade. The Sumatran orangutan (*Pongo abelii*) is thought to have 5 years left. Only 150 individuals remain of the Cross River gorilla (*Gorilla gorilla diehli*).

Apes have been in the limelight since the late 1960s, but their populations have dwindled in spite of numerous conservation efforts. Until now, says Redmond, these efforts have lacked funding, been poorly enforced, or ignored the interests of people who share forest resources with apes. At a meeting of CITES member states in 2000, Redmond suggested unifying existing ape conservation initiatives under a single banner. Klaus Töpfer, director of the U.N. Environment Programme, agreed, and a year later, 22 organizations came together to form GRASP.

The hope is that GRASP will succeed in protecting apes where others have failed because of its scope and credibility as an international partnership. "GRASP is the last and best possibility for saving apes from extinction," says William Travers, chief executive of Born Free, an ape conservation organization, "and Redmond is the dynamo at the heart of it." There are 23 countries with viable populations of great apes. Most of these countries are among the poorest in the world, making sustainable solutions a challenge. The top priorities are to halt the sale of ape meat by finding alternative sources of income for hunters and to shut down illegal logging. Within a year's time, GRASP will convene a meeting between representatives of countries with apes and those willing to fund conservation. Redmond hopes to have an action plan for all ape populations ready for this meeting.

In the midst of this explanation, Redmond pauses to receive an urgent message. Illegal logging has just penetrated the orangutan study area in Indonesia. "This is very disappointing," says Redmond. "They're always one step ahead of us." In spite of such setbacks, Redmond is confident that GRASP will be able to pull the great apes back from the brink. When asked how he remains optimistic, he replies: "I have to be."

–JOHN BOHANNON

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