

Gold in the ground is threatening the golden-crowned sifaka, a critically endangered



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A golden curse

Madagascan lemur, as the forests it lives in are destroyed by desperate miners.

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I was in north-east Madagascar to look for the golden-crowned sifaka *Propithecus tattersalli*, one of the planet's 25 most critically endangered primates. This is a relative newcomer to the scientific register, not having been described until 1988. It's found only in a very small area, centred on the tiny town of Daraina, and none of the highly fragmented forest patches it inhabits are protected. More personally, it was also one of the few lemurs I had yet to photograph in the wild.

After several hours limping along a hopelessly potholed road, my bush taxi dropped me off in Daraina. I was hor-

rified by the sight of the denuded, sun-baked hillsides all around – where would I find sifakas here? I sought the help of Astrid Vargas, co-ordinator of FANAMBY, a Malagasy non-governmental organisation (NGO) that has been working to combat the environmental problems facing the area. She assured me that seeing sifakas would pose no problem: "Just follow the trail over the ridge and continue down to the village of Andranotsimaty."

An hour later, sweat stinging my eyes, I reached the ridge top. In the valley below, I could see the beginnings of pockets of forest, some interlinking to

form larger tracts in the distance. As I neared the village, parched grasslands gave way to stands of leafless trees, and either side of a dry riverbed, more vibrant gallery forest formed a green corridor connecting with a larger area of forest: much more promising.

Lucienne, the *chef de village*, greeted me and offered to be my guide. I pointed to my cameras and said the magic words, "*Ankomba mandy*" – the local name for the sifaka. There was instant understanding. He grabbed a hand of bananas from the corner of his hut and motioned for me to follow.

We picked our way through to the

Top left: Slim pickings. It takes hours of back-breaking panning to collect just a few grains of gold. Miners' average earnings are £4-5 a week.



Against the odds. Its habitat is shrinking around it, yet the golden-crowned sifaka is hanging on – thanks in part, ironically, to its special relationship with local people (left).

edge of the forest, scrambling to avoid the ruts and cavernous holes of redundant gold diggings. There was already movement in the canopy ahead, then Lucienne whistled. Boughs bounced, leaves rustled and three gorgeous golden-crowned sifakas bounded up to us. Within seconds, they were sitting on a branch next to me. Lucienne held out his hand and one sifaka gently plucked the banana from it. I looked on, too frozen by surprise to take pictures. The two other sifakas each took their turn in accepting the hand-outs and soon they were joined by the rest of their group. Before long, we were faced

by six sifakas happily munching away.

I followed Lucienne further into the forest and we soon found another troop resting high in the trees. Unused to being fed, these lemurs were curious but less eager to leave the safety of the canopy – though they remained relaxed about our approach. Lucienne explained that it had always been *fady* (forbidden) for his tribe to hunt these animals, and through continuous interaction and the regular offering of food, there were four troops around the village that had become approachable. Beyond these, numerous other sifaka groups tolerated the daily traffic

of villagers through the forest.

Andranotsimaty is a tiny village – about a dozen huts and perhaps 20 or so people, who eke out a living digging for gold, excavating tonnes of soil for a very meagre reward – a day's panning produces little more than a few grains of metal. On average, this backbreaking endeavour earns them around £4-5 a week. Yet they have built a remarkably touching relationship with their sifaka neighbours. Even more remarkably, the sifakas seem able to survive in forests ravaged by the mining.

For the next five days, I walked back and forth between Daraina and ►

Andranotsimaty to photograph the sifakas. Several times, I sat on the ridge-top and scanned the forest fragments with my binoculars, delighted to be able to pick out groups of gleaming white sifakas feeding in the canopy. Once I watched a troop of four move hundreds of metres from one fragment along a thin ribbon of forest (a corridor no more than two or three trees wide) to an even more isolated patch. Here they stayed and fed for two days, before returning to the

species' total population was estimated between 6,100 and 10,000 individuals, with an effective population (potentially breeding adults) of 2,500 to 4,000.

And while illegal logging continues, and slash-and-burn agricultural practices constantly gnaw away at the forest margins, there is still cause for concern. The whole area is littered with low-concentration gold deposits that, over recent years, have attracted a major influx of prospectors. Much of the gold mining

ship – an emblem for a shift in lifestyle for future benefit. And one of the principal aims is to create protected areas – not a conventional single block, more a network along 'conservation gradients', where different levels of protection and resource utilisation are implemented. Education is a key, and one way in which the message is being spread is with a song about sifakas, which schoolchildren delight in singing. One Daraina school has painted a huge sifaka mural on its walls.



Where have all the forests gone? The hills around Daraina are a denuded shadow of their former, wildlife-rich glory.



Canopy dweller. As a rule, the sifaka likes to stay high up in trees, where it can eat leaves, flowers and fruit.

sanctuary of the larger fragment.

With each trek I made across the barren hillsides, I mused: there was once forest here, therefore there must also have been sifakas. How much forest had already gone? How many sifakas were left? And what might the future be for this charming, beautiful primate?

I hoped Astrid Vargas would have some of the answers. She told me that a team from FANAMBY had recently completed a survey of all the forest areas within the sifakas' range. This confirmed that fragmentation is severe – more than 70 separate patches of forest were looked at, and sifakas were found in about 60 per cent of these. But most of these patches were small and isolated, and fewer than 10 fragments were considered large enough (over 1,000ha) to support long-term viable populations. Nonetheless, where good habitat remained, the sifakas appeared to be thriving: the

occurs outside forests, but not all of it. Astrid explained that mining also takes place in dry riverbeds within forests, and much of this involves digging deep pits near and under tree roots, an activity that ultimately kills the tree.

The gold mining operations are small-scale, but they are very numerous and widespread, and so their cumulative impact is considerable. The threat they pose to the sifaka and the other rich biodiversity of the region means the forests around Daraina have long been recognised as a major conservation priority. There have been several efforts to establish a national park, but these have all proved unsuccessful, partly because this has been seen as an obstacle to mining.

FANAMBY is hoping to alter this perception. Adopting a low-key, community approach, it aims to establish a framework for sustainable natural-resource management, with the sifaka as the flag-

But even as FANAMBY's efforts begin to bear fruit, new problems loom. Within the past year, semi-precious stones have been found in the area, and there is already widespread international interest in developing these sites. And, south of Daraina, one of the largest gold reserves the region has seen has been unearthed – something that is bound to herald a new wave of uncontrolled mining. FANAMBY is urgently looking for ways to repel these threats. But they leave the future of the golden-crowned sifaka far from assured. ■

Contact, book

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Mammals of Madagascar, by Nick Garbutt (Christopher Helm, £30, ISBN 1873403526).



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