VULTURES IN AFRICA CRITICALLY ENDANGERED

Extinction hovers over vultures

They get eaten, poisoned by farmers and poachers, and used in traditional medicines. As a result African vulture populations have fallen by 80 percent in the last 50 years. Without vultures, rotting carcasses could become breeding grounds for diseases that are harmful to both humans and animals.

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A dead zebra on the savannah does not go unnoticed for long. In no time, dozens of Rüppell's and white-backed vultures are tugging at the carcass, hissing and squabbling over the tastiest morsels. Then in flies the giant among African vultures, the lappet-faced vulture. 'It is a magnificent sight as it hops into the fray with its wingspan of more than 2.5 metres and makes its way to the carcass,' says animal ecologist Ralph Buij in his office at Alterra Wageningen UR, jumping up and down and flapping his arms by way of demonstration.

'I've had a pair of binoculars around my neck since I was six,' says bird expert Buij (39), who has been working in Wageningen on geese and field birds for two years now. But he also makes regular trips to Africa. Ever since he studied birds of prey and vultures in Cameroon for his doctoral research, Buij has been a member of the Vultures Specialist Group, an advisory body at the UN's nature conservation organization IUCN.

The members of this group sounded the alarm last summer in the journal *Conservation Letters*. The spectacle Buij describes is going to become a rare sight, they warn. They compared distribution data on African vultures and analysed the population estimates from the past 50 years. Admittedly there are sizable blank spaces on the map where no studies have been done >

– 40 percent of the land surface, mostly in central Africa – but whichever way you look at it, the trend is alarming. Buij: 'Counts reveal a massive decline across the entire continent, but especially in East and West Africa. A small vultures such as the hooded vulture, which lives in and around cities as well, is still doing reasonably well but large vultures such as the white-headed and the lappet-faced vultures have not been spotted in the game parks in Nigeria, for example, for years.'

Seven of the eight species, the study reveals, have declined in numbers by 80 percent or more in the last 50 years. There was an awareness that it was not looking good for vultures but that it is so dramatic came as a surprise, says Buij. By the end of this year he expects four African vultures to have made it onto the IUCN list of 'critically endangered species', and two onto the 'endangered' list.

The situation in West Africa is particularly worrying. 'No more than a couple of vultures – if any – home in on a carcass now. Locals say that carcasses nowadays lie rotting until they start stinking. That is worrying. Without vultures, rotting carcasses could become breeding grounds for diseases harmful to both humans and animals, such as anthrax and salmonella bacteria or the viruses that cause foot & mouth disease and rinderpest.'

VULTURES AND DICLOFENAC

European vultures are faring better than their African counterparts. There are concerns, however, about the white scavenger vultures which spend the winter in Africa and are therefore subject to the dangers there, as well as often getting electrocuted by high-voltage cables.

The main vulture territory in Europe is in Spain, but the bird is under threat there now that the anti-inflammatory drug Diclofenac has been licensed for use in livestock. Vultures are extremely sensitive to this drug, which cost India and its neighbouring countries 97 percent of their populations of three species of vultures in ten years in the 1990s. The drug was banned there in 2006 and largely replaced by the harmless Meloxicam, but with their slow rate of reproduction the vulture populations are recovered very slowly.

There are strong indications that the death of so many vultures caused a big increase in the number of stray dogs in India, because there was more food left over. As a consequence, 3000 more Indians have been contracting rabies each year. 'It is remarkable that the EU allows the use of Diclofenac when there is a good alternative,' says Ralph Buij. 'Millions of euros have been invested in species conservation plans in Europe, for bearded vultures and cinereous vultures for instance. The success of that can be wiped out at a blow.'

Vultures usually descend on a dead animal and pick it clean in no time. The vultures' stomachs are 'a one way street for most pathogens. The gastric juices of a vulture are like battery acid with a pH of about 1, which very few pathogens come through unscathed.'

TONNES OF MEAT

If there are no vultures at the scene there are always other scavengers such as jackals, hyenas and dogs eager to get their share of the pickings. But these mammals are less efficient carrion-eaters. Moreover, if carcasses lie around longer they have more contact with each other, and could therefore pass on pathogens such as rabies and canine distemper.

'We are wondering,' says Buij, 'what the consequences are if all those tonnes of meat are left lying around. The indications are that the risks of diseases spreading are greater without vultures. We need to find out in the short term which pathogens are involved, how they are transmitted, and how fast.' This is not a far-fetched scenario. The decimation of the vulture population in India when Diclofenac was introduced there in the 1990s had a real impact on public health (see text box).

African vultures could use some positive PR about the useful job they do. At the moment they tend to be the whipping boys of the savannah and they are subject to a wide range of threats. Vultures get eaten, poisoned by farmers and poachers or killed for use in traditional medicines, relates the article in *Conservation Letters*. Although there is no registration of any kind, poisoning seems to be the number one cause of death. Vultures are often collateral damage in the battle against lions and hyenas which steal cattle. To eliminate the carnivores, farmers put out animal carcasses treated with lethal doses of insecticide. And vultures are the unintended victims.

Elephant poachers are liberal with poisonous chemicals too, but in their case vultures are the prime target because they betray where the poachers are at work. After killing five elephants it takes poachers a whole afternoon to remove the tusks. But the first vultures start circling above them within half an hour, alerting competitors or anti-poaching units to their location. So poachers rid themselves of these 'informers' by poisoning the dead elephants they leave behind.

MASS SLAUGHTER

'A large carcass is a major attraction,' says Buij. 'Vultures keep track of each other from a distance and can cover hundreds of kilometres in a day, so they come from far and wide. So this kind of poisoning

‘A vulture can fetch 100 dollars, one or two months’ wages’

PHOTO ANDRÉ BOTHA

PHOTO GERHARD NIKOLAUS

Above: vultures killed by elephant poachers. Below: vulture parts destined for use in traditional medicines.

makes for mass slaughter, sometimes with hundreds of victims. If game wardens don’t get there fast enough, the dead vultures become carrion themselves, attracting still more vultures. Then the catastrophe is complete. Vulture populations are highly sensitive to death among adult birds. These birds have long lifespans and often only fledge one young per year or two years. So the population hardly grows at all.’

Meanwhile, poachers have begun to harvest parts of the dead vultures. The heads in particular are worth a lot of money in West and Southern Africa, where they are an ingredient in traditional medicines. But the claws, feathers and eggs are also used to treat diseases, ward off evil spirits or as lucky charms. ‘In countries like Nigeria and Benin you see hundreds of dead vultures for sale on markets every year, mainly for use in traditional medicines but sometimes for consumption as well. As populations grow in these countries and vultures become rarer, the prices are shooting up. A vulture can now sometimes fetch 100 dollars, which is one or two months’ salary, and in Cameroon 6000 dollars was once offered for four hooded vulture eggs. How can you blame someone for killing a vulture or plundering a nest when he could send his kids to school with the proceeds?’

Although the threats are considerable, the vulture specialist group is not throwing in the towel. ‘We are proposing a set of measures including the regulation of imports, sales and use of insecticides such as carbofuran, aldicarb and parathion, which are often used to poison vultures and lions. They have been banned in Europe but can be bought cheaply all over Africa. An import ban could at least put the brakes on the mass slaughter.’

Buij is also hoping for more funding. ‘In many countries there isn’t even any money to manage nature reserves or equip patrols. When you see what we in the Netherlands invest in protecting species such as the black-tailed godwit or the hamster, it is monstrous how little money there is for conserving much more biodiversity than that.’

Vultures may not be the best of ambassadors for the African savannahs. They are impressive birds but to many people also rather unappealing carrion-eaters with ugly bare necks. Buij thinks more emphasis on its role in cleaning up carcasses could boost the vulture’s image, and he also hopes to make use of the elephant’s greater appeal. ‘Elephant poaching has escalated out of control. We’ve really got to tackle that more effectively in the short term. For every elephant that is killed now, dozens of vultures die too.’ ■