



A Science-Based Approach to Restoring Gorongosa's Wildlife

[NARRATOR:] Prior to a devastating civil war, Gorongosa National Park was home to some of the biggest populations of wildlife in southern Africa. During the war, huge numbers of animals were killed, with some species driven to near local extinction.

[music plays]

[NARRATOR:] The Gorongosa Restoration Project is a long-term effort to return the Gorongosa ecosystem to a healthy and balanced state. [MUTEMBA:] We use science-based approach to restoring the park, we've got a science department and a high involvement of scientists who conduct very specific studies that advise us.

[STALMANS:] Today is a full count. So we want to have a good idea of...

[crosstalk]

[NARRATOR:] Marc Stalmans is the lead scientist on the restoration project. He and his scientific team have been monitoring large animal populations by doing aerial counts every few years.

[helicopter rotors]

[TONGAI:] Kudu One

[NARRATOR:] These surveys have revealed that preserving habitat and protecting animals from illegal hunters resulted in an increase in many populations, without the need of additional intervention.

[helicopter rotor]

[TONGAI:] Twelve.

[NARRATOR:] In fact, some species, like the waterbuck, have made a remarkable recovery. While most herbivores are now at 10 to 50% of their historic population sizes, the waterbuck are ten times more abundant than they were before the war. On the other hand, species like the zebra are so few in number that they are in danger of disappearing.

[STALMANS:] We used to have 3,500 zebra in historical times in Gorongosa. And those dwindled to less than 20. So it's a reduction of more than 99%. [NARRATOR:] Zebra play an important role in maintaining productive grassland. They eat the fibrous grasses, making room for tender, nutritious shoots that other species rely on.

[STALMANS:] It's one of the cogs in the ecosystem and we need them. If you start taking out too many of those cogs or too many of those links in the network in an ecosystem then it is going to collapse or it's going to change dramatically.

[NARRATOR:] The less-than-twenty survivors are likely too few to reproduce to healthy population sizes. So scientists are turning to the expensive and risky strategy of bringing in additional zebras from other parks and reserves.

[BRANCO:] When we're talking about reintroducing animals, it's very easy to say, oh, you don't have this species, just bring. You don't have this, you don't have that, just bring. And they will all sort themselves and it will be a huge success. Unfortunately with nature it's not like that.

[NARRATOR:] In 2011, scientists tried to reintroduce cheetahs to Gorongosa by bringing in four animals from South Africa. They lost one on the inbound flight and the others died in the park. For the zebras the situation is more hopeful as the park provides a good habitat for these animals to thrive in. Gorongosa has a rare subspecies of zebra called the Crawshayi zebra. The challenge has been locating a population of the same subspecies to help restock the park. Fortunately they find one in a nearby reserve. After working out the legal details, they now have to capture and bring these animals to their new home. [engine noise] Relocation is stressful and dangerous for both animals and people. Rui Branco, Gorongosa's chief veterinarian, oversees the safe capture, transport, and handling of the zebras.

[BRANCO:] So on this relocation we decided to go for a mass capture, using a plastic funnel. [helicopter rotor] The principle is basically a visual barrier to the animals. The animals see the barrier, they don't know it's plastic, so they just think they cannot go through. Which is a very old strategy, being used for many years, always with great success. When these animals are being chased by a chopper of course they're under stress. So the shorter you can bring them the better.

[NARRATOR:] The funnel leads the animals to a truck that will transport them to Gorongosa.

[JOSH:] After the next one, close, close, close. Let's start moving. Let's start moving.

[music plays]

[NARRATOR:] Once they arrive to Gorongosa, the zebras are first released into holding pens in a specially-designed sanctuary where they are closely monitored and guarded. After a month, they are released into a larger enclosure, protected from the pressures of predators and illegal hunters. Once the population has grown to a healthy size they will be released into the park at large. In addition to zebra, buffalo, eland and wildebeest have also been successfully reintroduced in the park.

[MUTEMBA:] All of the relocations we made so far are yielding very positive results. Using our latest census as an example, we reintroduced buffalo a few years ago. From the early 2000s, where we had less than 100 individuals, now in 2014 we are counting around 650 in this population.

[NARRATOR:] At Gorongosa, science is guiding the decisions for what actions to take, and park managers are prepared to adjust strategies based on the results they see on the ground.

[MUTEMBA:] We use a lot of adaptive management approach, and this allows us a lot of flexibility to experiment, realize where the challenges are, where are the failures or the potential failures, and then improve and build a much stronger pace toward the success that one can witness today.

[NARRATOR:] The lessons learned here may help direct conservation efforts in other parks. [music plays] Seven years after the restoration project started, Gorongosa is on track to reclaiming its legacy as a stronghold for some of the largest wildlife populations in Africa.

[music plays]