

A Tight Squeeze for Udzungwa Elephants

By Lara Jai Gasser

Wildlife researcher Dr. Kate Nowak still remembers the first time she laid eyes on a forest-dwelling bush elephant. For months she had been tracking them in one of Africa's most biologically diverse forests: the Udzungwa Mountains of Tanzania. Kate and her field assistant Paulo were going about their usual routine- counting and measuring elephant droppings, evaluating them for evidence of seed dispersal and germination, and mapping them to establish the elephants' whereabouts- when they heard a sound. An elephant was close by. They froze. Elephants can be fiercely aggressive if they feel threatened. And, accidentally getting too close counts as a threat. Waiting with bated breath, they finally heard the elephant moving away, up the mountain. Then, they saw him: a bull elephant with massive tusks, trunk in the air, smelling them from about 50 meters away!

Although three to five million elephants once roamed the continent, African elephant populations today are estimated at 500,000, and their range is a fraction of what it once was. While this number sounds large, history has demonstrated how vulnerable elephants are to human activities.

In Tanzania, the Udzungwa Mountains are one of only three areas where elephants inhabit montane forest, and the only Eastern Arc forest with year-round resident elephants. The rich, fertile valleys that make up this region have also attracted a disproportionate number of people. In recent years, human populations have swelled by as much as 10% per year, rendering the Udzungwas an island of wildness within a sea of human-altered landscapes. Elephant populations are growing, too, but the elephants have nowhere to go. Each elephant consumes an average of 400 pounds of vegetation per day, and they can do considerable damage to the forest if they become too densely populated. Also, when the elephants can no longer find easy access to food in the forest, they turn to farmers' crops and can decimate a family's food supply in a short time, causing human-elephant conflicts. For these reasons, protected pathways that connect Udzungwa National Park to adjacent protected areas are urgently needed to ensure that the increasing elephant populations are able to move into other suitable habitat.

Kate's colleague, Trevor Jones, has mapped the elephants' most commonly used routes between forest patches and other protected areas near the Udzungwa National Park. Together, they are working with park and government officials to secure the passageways for elephant migration. This will not only ensure healthier forests in the region, but will decrease human-elephant conflict.

Mapping the elephants' distribution and movements was done with the help of a GPS donated by Idea Wild. Paulo Mndeme, the lead field assistant on the project, uses the GPS daily while monitoring transects throughout the park. He is one of many Tanzanian nationals who have received training through this study.

Kate and Trevor are establishing a long-term elephant monitoring program that dovetails with the park's management plan, so that the Udzungwa elephant population will be effectively managed in the future.

* Kate Nowak is affiliated with the Oxford, UK- based Wildlife Conservation Research Unit and Trevor Jones with Anglia Ruskin University.