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# INTRODUCING THE **COLOBUS GUEREZA** TO KARURA FOREST: A MEANS TO AN END



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**CHANTAL MARIOTTE** has been involved in Friends of Karura Forest from its inception as member of the board in charge of a number of projects she initiated including the Colobus translocation one.

**F**riends of Karura Forest that nestles some of the more opulent northern suburbs of Nairobi have gone the extra mile in their efforts to conserve the woodland, whose proximity to the city was once seen by some as a prime piece of real estate for the expansion of the leafy neighbourhoods.

Restoration of degraded tropical forests generally focuses on replanting indigenous trees. It rarely includes the reintroduction of lost faunal diversity.

The Friends of Karura Forest (FKF) undertook to reintroduce the arboreal Mount Kenya guereza (*Colobus guereza kikuyuensis*), which presumably roamed the rich ecosystem in years gone by.

Guerezas were chosen for the translocation due to their ability to thrive in regenerating secondary forests and subsist partly on eucalyptus young leaves and flowers. Being an arboreal primate, their translocation was a delicate exercise, requiring careful planning, long-term financial consideration and relevant expertise to ensure compliance with the International Union for Conservation of Nature (IUCN) primate translocation guidelines.

Peter Fundi, an ecologist at the Biology of Conservation Department of the Institute of Primate Research provided the necessary expertise as lead scientist and trained



a team of local assistants in the capture and handling of guerezas.

The project, which was funded by the African Fund for Endangered Wildlife (AFEW) and FKF, targeted vulnerable guereza groups for whom translocation was the only management option. Populations status surveys were undertaken in Meru, Nyeri and Limuru areas. Nyandarua county, especially in the Kipipiri area, had the highest number of guereza groups outside protected areas occupying highly degraded riverine habitats.

Some of the groups barely survived in very small and unsustainable fragments, forcing two or even three groups to merge in some areas and subsist mostly on crop raiding. This resulted in human-colobus conflict. Translocation was the only way to save them.

The sink habitat for such a population accustomed to feeding on the easily digestible and nutritious food crops had to be a secure one, away from any agricultural community. Karura forest provided a perfect alternative due to its secondary growth stage, secure with no illegal human activities and surrounded by non-agricultural communities.

To quantify the suitability of Karura Forest as a colobus habitat, the target population was

## GUEREZAS WERE CHOSEN FOR THE TRANSLOCATION DUE TO THEIR ABILITY TO THRIVE IN REGENERATING SECONDARY FORESTS AND SUBSIST PARTLY ON EUCALYPTUS YOUNG LEAVES AND FLOWERS.

**LEFT: Group J tails painted red for identification in the holding cage (for acclimatization) awaiting release.**

**TOP RIGHT: Helping move the new arrivals to the holding cage.**

**BOTTOM RIGHT: Offloading of new arrivals amidst heavy down pour.**

followed to assess food selection and preference from the available wild diet. The habitat fragments and the forest were characterized for vegetation composition, structure and safety and the information gathered compared with the guereza diet at the source habitats and known guereza food plants in other areas.

It was established that leopards and crowned eagles were the major predators at the source with the eagles being the only predators at the sink habitat. Of the 10 trees guerezas were observed feeding on at the source, six were found in Karura. Eighteen trees in Karura had been recorded as food plants by Peter Fashing in Kakamega Forest, a fact that confirmed the suitability of Karura Forest as a colobus habitat.



PHOTOS BY: HARVEY CROZE

## COMMUNITY SUPPORT

After comparing the required home range size and the available indigenous forest area, it was established that a maximum of 100 guereza individuals could be translocated to the main Karura forest block and 30 to the Sigiria side of the forest.

To garner community support for the project at the source, community meetings were held at Tulasha, Machinery and Gathiriga areas of Kipipiri during which locals voiced their support for the translocation of the guerezas, pointing to the continued conflict that often resulted in the killing of crop raiding monkeys.

Guereza group surveys along River Malewa and its tributaries identified a total of 42 groups. The groups were then classified based on habitat size and dependency on agricultural crops to prioritize translocation. Twenty-six high priority groups were identified. IUCN primate translocation guidelines were adopted with slight modifications to suit an arboreal folivorous species.

The exercise was carried out in three phases, with method modification and trial being the first

**LEFT: Released male and female (Baby clinging on the mother) feeding at Karura forest.**

**RIGHT: A newly arrived group being released in the holding cage.**

phase. Out of the 40 individuals permitted by the Kenya Wildlife Service (KWS) translocation committee in phase one, 35 individuals in 6 groups were successfully moved and released into Karura Forest. In the second phase, 45 individuals of the 60 permitted were moved. Forty-two guereza duals out of the 50 allowed were translocated in the third and last phase.

In total, 22 groups were translocated from Machinery, Tulasha, Kangodi and Gathiriga with all guereza groups at Machinery and Tulasha translocated. As a result, the human-colobus conflicts have been eliminated completely, including those caused by the few individuals of Mount Kenya Sykes monkeys who used to follow the guerezas.

The price to pay is that the Kipipiri community had to forgo the aesthetic role of guerezas and the opportunity for future human generations to interact with the species. However, the translocation helped save these guereza groups from the danger of being killed by the irate farmers out to protect their livelihood. Possible outbreaks of zoonotic diseases have also been minimized as the animals will no longer be in close proximity to humans.

Successful breeding, previously affected by the constant feeding stress, was enhanced as the groups moved to a natural and safe habitat dominated by canopy vegetation.

However, the new habitat presented new challenges to a species whose arboreality had been lost after spending the better part of their lives in semi-terrestrial to terrestrial habitats. Jumping distance estimation and reaching out for young leaves while 20-30 metres up the canopy was problematic initially, the difficulty was soon overcome.

The birth of 10 young ones conceived in Karura Forest has so far been recorded, a testimony to the success of the translocation.



**TOP: Chantal and a team from IPR and Chantal release the first group to arrive in Karura at midnight.**

**BELOW: A mother and young baby (approximately two weeks old) on their second day in the holding cage.**

## LIVELY WOODLAND

At Karura, the new species added to the forest's general aesthetic beauty, with the random roars of guereza males bringing the woodland to life. Guerezas in the forest brought in a whole new set of predator-prey interaction with more crowned eagles being sighted. The groups formed polyspecific associations with Kolb's white-collared monkey (*Cercopithecus albogularis ssp. kolbi*), commonly referred to as Mount Kenya sykes monkey, to boost group security.

In addition, the ecological role of guerezas as seed dispersers cannot be overlooked despite

the small percentage of ripe fruits in their diet. Guerezas have a compelling attractiveness due to their conspicuous black and white colour. African kings of yore and high status elders used the animal's pelt as part of their traditional gear. The species popularity and charisma can also be tapped to promote the guereza as Karura Forest's flagship species and rallying point to elicit support for the conservation of the larger Karura ecosystem.

The translocated population has also created a training opportunity for upcoming primatologists and ecologists with nine undergraduate students attached to the project in the past two years, including one Master of Science student.

A biologist from KWS' training institute has also been enlisted to monitor the guereza ecology and behavior, affording him an opportunity to gain valuable field work experience that he will pass on to his students.

The project is an example of how community-based associations, such as FKF, can catalyse cooperative action to implement good practices by regenerating a degraded forest, not only by replanting trees, but also reintroducing lost faunal diversity. Fittingly, the whole process echoes the evolutionary hallmark of primate survival and success – societal cooperation. ●



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