

of Karura Forest

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Nairobi residents today know Karura Forest as a popular leisure spot. However people have been living in and using the forest for thousands of years, as NMK archaeologist Angela Kabiru explains. Archaeologists have long wondered about the once-extensive forest north of Nairobi. In 1941 Dr Louis Leakey was the first to record prehistoric occupation of the caves in Karura Forest. The archaeological material he collected included stone tools such as points, blades, burins, scrapers, crescents and cores. There were also potsherds, an ostrich egg shell fragment and some pigs' teeth. The record does not specify which cave the artefacts came from and no further research was carried out at the time.

Looking from inside the entrance of the Mau Mau caves in Karura Forest, where archaeologists from the National Museums of Kenya carried out their excavations. Photo by H.Croze.

In 1970 and 1971 Richard Gramly collected archaeological artefacts from sites within or near Karura Forest. One of the interesting collections from "rapids along Karura River where the river enters Karura National



Pieces of bottle glass flaked and used like stone tools, found by Richard Gramly in 1970. Photo by A. Kabiru.

Forest" consists of 39 pieces of bottle glass, eight of which show evidence of having been used as tools¹. The tools were made from broken pieces of coloured glass bottles and flaked in the same way that stone tools were flaked.

Other materials collected from this site include pottery, 1726 stone tools made of obsidian and quartz, 22 glass beads of the type used by the Kikuyu (19th and 20th century types), and one copper ring. Gramly dates these tools to the end of the 19th century and suggested that the makers could have been either the Kikuyu or Ogiek who were living there at the time. The 258 potsherds in this collection include pieces with decorations of roulette, simple incisions or finger channelling, an indication that different groups of people had lived here. Channelled pottery was made and used by the Kikuyu, while that with incisions is of the type believed to be used by the Ogiek.

The collection was made from an open site "on the flank of a small hill, approximately 10 metres above the river and about 20 metres from the bank". Gramly recorded that the site was under cultivation when he found it, and it is unlikely that it has

been conserved, and therefore may not be available for further investigation.

Gramly also carried out an excavation in one of the caves in Karura Forest in early 1971 and recovered stone tools, pottery, animal bones and teeth, wooden awls and sugarcane graters. Findings of the analysis of the artefacts were never published. He left a note saying that the article would be published in *Azania*, the journal of the British Institute in Eastern Africa, but it never was.

Karura Forest is however not generally known for its caves or archaeological artefacts. Gazetted as a forest reserve in 1932 when the colonial government set it aside as a source of fuel wood for the new Ugandan Railway, parts of it were degazetted in the 1980s and allocated to private companies for housing projects. These housing plans were opposed by the public and many demonstrations were held in support of conserving the forest. Prof. Wangari Maathai, the Nobel Laureate who started the Green Belt Movement, led women in planting trees to replace the fastdisappearing tree cover. There were many violent confrontations. The then President, Daniel arap Moi, criticised the protesters, and the University of Nairobi was closed down after sustained student protests. The land allocations were eventually revoked, and now the forest has been rehabilitated by the Friends of Karura Forest in conjunction with the Kenya Forest Service. Karura Forest is now transformed from what was once a hiding place for thieves and murderers to a secure recreational space with nature trails, picnic areas, bike tracks, and wildlife.

Some of the attractions of Karura Forest are the caves hidden deep within the forest, said to have been used for religious purposes until recent times. More than 50 years ago these caves were among the many hiding places of the Mau Mau freedom fighters

¹ Gramly, R. (1970).

during Kenya's struggle for independence. Not much else is known about the caves before this period and this is why members of staff of the Archaeology Section of the National Museums of Kenya, at the request of Friends of Karura Forest, carried out some excavations inside the caves with the aim of establishing whether there is evidence of prehistoric habitation that could help in writing a comprehensive history of the forest for educational and conservation purposes.

Caves and rock shelters have been used since prehistoric times for a variety of functions and activities — as places of refuge, temporary living quarters, storehouses and shrines. They are perfect shelters from the wind and cold, and they were used for habitation long before people learned to build houses. In combination with fire, it became possible to keep out predators and some caves have evidence of human occupation spanning hundreds, if not thousands, of years. One major advantage of caves and rock shelters is that they preserve remains very well, and some of the best preserved archaeological artefacts have been found in caves. Rock art is also found in many of these prehistoric habitation sites. Caves and rock shelters have in the past and continue to be used as meat feasting sites by pastoralists such as the Maasai and the Samburu.²

Rock shelters and caves are also very suitable as burial places. There is little chance of the remains getting disturbed so their preservation is very good. Njoro River cave in the central Rift Valley of Kenya is a classic example of cave-as-burial. When the cave was excavated in 1938 by the Leakeys,³ it was found to contain about 80 skeletons that were partially burned, and it was therefore thought to be a cremation site. Not much is known about the 80 individuals found here, but they made or wore beautiful beads made of semi-precious stones. Human

2 Gramly (1975).

remains have also been found in Rigo cave,⁴ Naivasha Railway rock shelter, Gamble's cave and Bromhead's site,⁵ all in the central Rift Valley, and Lukenya Hill⁶ in Machakos.

Several kilometres from Karura Forest near Kiambu town is the Mbai cave on Paradise Lost farm. The cave was excavated in the 1990s and found to contain stone tools and bones. It was also thought to have been used as a Mau Mau hideout.

Many caves in central Kenya were used by the Mau Mau as hideouts during the struggle for independence, especially those located deep within the forest, which was more extensive than it is now. According to information on the website http:// kikuyu.com,7 Kiambu District south of River Chania was inhabited prior to the mid-19th century exclusively by hunter gatherers known as the Athi. They lived in the forested areas north and west of Nairobi, in Ruiru, Githunguri and the Karura Forest which stretched all the way from Pangani to Dagoretti. It is said that their last stronghold was where the National Museum now stands, and their territory was marked with beehives and animal traps.

The excavations

The objectives of the 2011 NMK excavation were to determine the archaeological potential of the caves and to understand their history of occupation. Excavations carried out yielded a large assemblage of lithic (stone) artefacts, bones and pottery. A preliminary analysis of these remains has helped to shed some light on the activities of the inhabitants in times past.

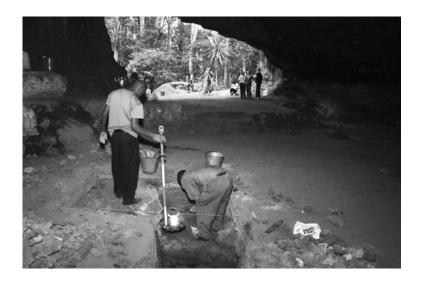
³ Leakey, L.S.B. (1950).

⁴ Wandibba, S. (1983).

⁵ Leakey, L.S.B (1931).

⁶ Gramly, R. M. and G. Philip Rightmire (1983).

⁷ http://kikuyu.com/eve/forums/a/tpc/ f/308108348/m/3557096433



An excavation trench being dug in one of the caves. Photo by H.Croze.

The excavations were carried out in two caves facing each other with Karura River flowing between them. These excavations were carried out over a period of three weeks; two trenches were dug in cave one and two test pits in cave two. Trenches or pits are usually dug in units of one-metre squares and can then go as deep as the depth of the soil deposits or as required. Digging usually stops when basement rock is reached or the soil layers become sterile, i.e. the deposits do not contain any cultural material. Test pits are usually dug to establish whether there are any cultural remains in the deposits, after which a full excavation may be carried out. All of the pits in both caves yielded cultural material — stone tools (lithics), bones (fauna), pottery, charcoal and pollen — some of which have been analysed. Charcoal retrieved from a core in the swamp was used for dating, while the pollen and plant phytoliths were used to reconstruct the vegetation history of the area.

Stone tools

The stone tools found in the Karura caves belong to the Later Stone Age, comprising a diverse toolkit with many different tool types that are much smaller than those from earlier times. The tools are mainly made from obsidian, with a few from chert/chalcedony and quartz. The notable thing about obsidian is that its nearest source is the area around Lake Naivasha. Volcanic

obsidian rock is extremely common within and adjacent to the highlands of the central Rift Valley.⁸ Most of the obsidian used in prehistory was collected from the areas around lakes Nakuru and Naivasha, Mt Eburu and Hell's Gate.⁹ The presence of obsidian in Karura indicates the existence of complex exchange or trade mechanisms and the movement of people and goods over long distances. Obsidian was favoured as a raw material for tools because it is composed of fine crystals and so produces very sharp edges that can be re-sharpened. Obsidian tool types recovered in Karura include blades, scrapers and crescents.

Pottery

Pottery is one of the most important sources of information in archaeological studies. Different cultural groups can be identified by their distinctive style of pottery. Worldwide, ceramic similarities are used to model cultural contacts and identities among prehistoric populations not only because of their ability to provide cultural and geographical classification over time but also because of the abundance of information on many other aspects of prehistoric life.¹⁰ The pottery found in the Karura caves is both prehistoric and contemporary and includes Narosura pottery, also reported from the central Rift Valley, which is attributed to southern Cushitic people who herded animals; cord rouletted ware attributed to Nilotic speakers who also kept animals; and channelled pottery that was used by the Kikuyu. The different pottery styles show the continuous occupation of the caves by different groups of people over a long period of time.

The conclusion that Karura was occupied by different groups of people is supported by the evidence previously collected by Leakey,

⁸ Merrick, H. V. and F. H. Brown (1984).

⁹ Ambrose, S. H. A. (2012).

¹⁰ Sadr, K. (1998).

which is clearly prehistoric and also includes pottery. Gramly's collection is recorded as Late Stone Age and protohistoric, since it is a mixture of both prehistoric and contemporary tools and objects, some of which are identified as Kikuyu and/or Ogiek. According to oral history, the Athi lived in this forest until they were pushed out or assimilated by the Kikuyu; cultural remains in or near the forest attest to Kikuyu occupation in the recent past.

The area has therefore been occupied by hunter gatherers (such as the Ogiek today), pastoralists who kept domestic animals (such as the Maasai), and then by the Kikuyu who are farmers and smelted iron. Hunter gatherers live in forests, set traps for wild animals and harvest beehives for honey. Pastoralists keep many animals as their main source of livelihood and usually move from place to place in search of grazing land; in the dry season they move higher and deeper into the forests and back to the plains in the wet season. Farmers on the other hand are sedentary; they grow crops, but also keep a few animals for milk and bride wealth. Bantu groups such as the Kikuyu and Wakamba are farmers. There is however a lot of trading and intermarriage between these groups of people, and sometimes it is difficult to ascribe a certain object to a specific group of people.

Bones

The faunal remains found consist of domestic and wild animals, both of which may have been used for food. Large animals such as buffalo, bushbuck and reedbuck lived in the forest at one point in time. The presence of large mammals indicates that the forest was much larger than it is today and also that there were microenvironments supporting aquatic animals such as reedbucks. Smaller bovids such as duikers and dikdik were also present, but no monkeys were found. One human tooth was recovered but this is not enough to say that the caves were used for burial.



Some of the obsidian used to make tools found in Karura may have come from sources around Lake Naivasha, suggesting well-established trading networks. Photo by A. Kabiru.



The different styles of pottery found indicate that the caves were inhabited by different groups of people over a long time period. Photo by A. Kabiru.



Bones from a variety of large mammals are proof that the forest was once much larger than it is today. Photo by H.Croze.



Sifting excavated earth in search of fragments of pottery or bone. Photo by H. Croze.

Vegetation

Analysis of pollen from sediments in the caves and from the swamp shows that 1600 years ago the area had considerably less tree cover with more open grasslands; this situation has gradually reversed and now there are more trees than grasses and shrubs. Open grasslands are ideal for grazing and it is therefore not surprising that the remains of domesticated animals have been recovered.

Data indicates that until about 300 years ago the main vegetation cover was grasses and herbaceous plants, and that aquatic plants were a big component of total vegetation cover. This gradual change in climate is also reflected in the different species of animals living at different times and, by extension, would also influence the kind of economic activities the human populations were engaged in. Expansion of the forest meant that it was possible to support a larger number of animals, which hunter gatherers would have hunted for food.

The coming of the Kikuyu into the highlands is thought to have contributed to the shrinking of the forests when they cleared the land for cultivation. The fact that Kikuyu artefacts have been found very close to the forest indicates that they have lived here for some time and that the land was favourable for farming. Caves in the forest would have

then been used for religious purposes and when the Mau Mau war broke out most of the known caves were used as hiding places. Most of the land around Karura Forest is still used for subsistence farming.

Further analysis of the artefacts and pollen is ongoing and will shed more light on the environmental dynamics of Karura Forest and its environs.

Karura Forest is an important resource for the city of Nairobi and the surrounding areas. It is home to several species of wildlife, including the recently re-introduced colobus monkey that is endangered elsewhere. It is hoped that the animal population will gradually increase now that hunting has been controlled. The forest is also home to many indigenous woody and herbaceous plant species that are important to local communities and also help to maintain the delicate balance necessary for a healthy forest.

Forests act as carbon sinks for urban environments and, with Nairobi expanding so fast, the role of the forest cannot be underestimated. It is clear that Karura Forest has a long history. It is important for us all to understand the importance of the forest, the history of the caves inside it, the role it has played in our history, and strive to conserve it for future generations.

Note: The findings of the analysis are presented here only in overview because some of the work is still ongoing. The detailed findings will be published in 2015.

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Current research interests include cultural tourism, prehistoric beads, cultural landscapes and GIS applications in archaeology. Her most recent article for KP&P, Of land, ritual and disposal of the dead, appeared in issue 40.

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