Kenya Past and Present

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FRONT COVER
The dress uniform of Col JH Patterson, whose life
story after the killing of the Tsavo maneaters is
recounted by Peter von Buol on pages 69-77.
Photo by courtesy of the Beit Hagdudim Museum, Israel.
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KENYA MUSEUM SOCIETY

The Kenya Museum Society (KMS) is a nonprofit members’ organisation formed in 1971 to support and promote the work of the National Museums of Kenya (NMK). You are invited to join the Society and receive Kenya Past and Present. Privileges to members include free entrance to all museums, regional museums, prehistoric sites and monuments under the jurisdiction of the National Museums.

The Society runs the Museum Shop at the Nairobi Museum and regularly organises events such as Know Kenya More!, member safaris, lectures and other activities to raise funds for the KMS Grants Programme. The programme helps fund the development of exhibitions at the National Museums.

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Institute of Primate Research Box 24481, Nairobi 00502
Kabarnet Museum Box 419, Kabarnet 30400
Kapenguria Museum Box 283, Kapenguria 30600
Karen Blixen Museum Box 40658, Nairobi 00100
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KMS highlights 2010 – 2011

A round up of events at the Kenya Museum Society over the past year.

Last year the Kenya Museum Society held a very successful Lecture Series and Know Kenya Course, thanks to the sponsorship of Toyota East Africa. The diversity and popularity of the speakers and topics appealed to a broader cross-section of people reaching outside of our traditional membership base.

The reinstated evening lecture programme was part of the KMS 40th anniversary celebrations. Our inaugural lecture with Richard Leakey was so popular that 400 people crammed into the auditorium, which only has 305 seats. The subsequent lectures were also very well received. We have Toyota East Africa to thank for the generous sponsorship,
which allowed us to promote the lectures. These lectures have become very popular and will continue to contribute to our fundraising as well as enhance the profile of our society.

Due to the financial success of the Lecture Series and the Know Kenya Course, we were able to finance the replacing of all the shelves in the Museum’s Casting Department, a project which is underway. Phase one and two of the new shelving is complete. Phase three, the second room, is on hold waiting for the Museum to complete construction works.

The ongoing road construction and resultant traffic congestion outside the Museum has had a negative impact on attendance at all KMS events. And with the destruction of the main gate, there is also the continuing perception that the Museum is closed. These will continue to affect our events and programmes until next year when we hope the construction is complete.

Over the past year, KMS decided to expand into social networking media and is now on Facebook and Twitter. Both Dorothy Mkala, our new Membership Secretary, and Lucy Njeri, our Office Manager, are involved in keeping us up to date and available to the younger generation who stays connected.

Our website has also been upgraded and expanded and is being updated regularly, many thanks to Christian

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Well-known lawyer and human rights activist Pheroze Nowrojee was one of the many illustrious speakers at the 2010 KKC.

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Lamu World Heritage

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Knochenhauer, our webmaster. Dorothy Mkala is completing a web design course to be able to assist in keeping our site current.

We are also using the online magazine, Kenya Buzz, to advertise our public events, such as lectures and movies. Again this reaches an audience outside our traditional membership. This and the social networking have resulted in a broader membership base.

In the bookshop, the Shop Committee under Egle Onofre has improved the profitability and the range of goods offered. The lower number of visitors to the Museum has resulted in much lower than expected sales figures. We have just hired a new manager, John Mmbono, who has a great deal of retail experience, from Ramoma and Banana Box; we hope he can help us turn this around.

Our truly outstanding performer this past year has been Narinder Heyer organising our weekend outings. Narinder has again this year put together some fabulous itineraries of tried and true favourites, as well as some fascinating new destinations. These appeal to all facets of our membership.

All members and the public who have dealt with the office have seen the benefit of our very welcoming and smooth-running office. Many thanks to Lucy Njeri and Dorothy Mkala.

The Kenya Museum Society is led by a group of people called the Council of 13 volunteers, who donate their time and expertise. I would like to thank them for all the help and support they have given both me and the Society over this past year.

PHOTOGRAPHS BY EBR AhM MWANGI, NMK AV DEPT, AND KMS MEMBERS
Fort Jesus and Rift Valley Lake System join World Heritage List

Kenya’s Fort Jesus and the Lake System in the Great Rift Valley were inscribed into the World Heritage List by the World Heritage Committee during their 35th session in Paris in July 2011. Fort Jesus and the Lake System join other Kenyan sites — including Mijikenda Sacred Kaya Forests, Lamu Old Town, Lake Turkana National Park and Mt Kenya National Park — recognised for their “outstanding universal value”.

World Heritage is universal; it belongs to the peoples of the world irrespective of their location. The UN body cited Fort Jesus as one of the most outstanding and well preserved examples of 16th
century Portuguese military fortification and a landmark in the history of this type of construction. Fort Jesus was declared a historical monument in 1958 and houses the Fort Jesus Museum.

The listing of the three inter-linked Rift Valley lakes (Lake Bogoria, Lake Nakuru and Lake Elementaita) brings into sharp focus, both at the national and international levels, their conservation status. The area is home to 13 globally-threatened bird species and some of the highest bird diversities in the world. The Kenyan delegation stated that the inscription will allow for ownership and greater participation of the local communities living around the lakes.

The granting of the World Heritage status raises the profile of the sites on the international stage and encourages visits, studies and appreciation of the sites. The status also facilitates fundraising for conservation and development activities. There are fewer than 1000 sites on the World Heritage List globally; hence they form an elite group of centres of excellence.

This is a great achievement for the National Museums of Kenya (NMK) as it fulfils its mandate of protecting, preserving and promoting Kenya’s rich natural and cultural heritage.

The Kenyan delegation led by the Permanent Secretary in the Ministry for National Heritage and Culture, Dr Jacob ole Miaron, strongly supported the inscription of both the Lake System and the Fort. Our natural and cultural heritage are irreplaceable sources of life and inspiration and thus need to be conserved, especially in conflict and post conflict regions.

Dr Miaron was accompanied by Ambassador Mary Khimulu, Kenya’s Permanent Delegate to UNESCO; Dr Idle Farah, Director General of NMK; Dr George Abungu, Heritage Consultant; Mr Edwin Wanyonyi, Kenya Wildlife Service; and Mr Hoseah Wanderi, NMK Researcher.

For more on the World Heritage Sites, see http://whc.unesco.org/en/newproperties/

NMK launches its strategic plan and centennial celebrations

The NMK strategic plan (2009-2014) and centennial celebrations were launched at a colourful ceremony held at the Louis Leakey Auditorium in April 2010.

The strategic plan supports NMK in facilitating heritage management and socio-economic development, contributing to the delivery of the 10% annual economic growth rate for Kenya envisaged under the economic pillar of Vision 2030.

The launch of the NMK strategic plan also marked the official launch of the centennial celebrations. From humble beginnings in 1909 when a group of scientists sat down with the simple idea of finding a place to preserve their collections, to a world renowned, multidisciplinary institution, the National Museums of Kenya has continued to stay true to its mandate of safeguarding Kenya’s heritage.

NMK’s five year strategic plan (2009-2014) incorporates the new policy shift and thinking in line with Vision 2030 and its medium term plan. The strategic plan is expected to enable NMK to contribute significantly to the attainment of the strategic objective of the research, innovation and
technology sector. In addition to this, the strategic plan will also enable NMK to contribute significantly to other sectors such as health, agriculture, tourism and the environment.

The NMK strategic plan and centennial celebrations were officially launched by the Minister of State for National Heritage and Culture Hon. William Ole Ntimama.

In a speech read on his behalf by the Permanent Secretary, Dr Jacob Ole Miaron, the Minister also vowed to reclaim the Lamu sand dunes which are threatened by illegal encroachment and development. He vowed to reverse the destruction with the same vigour that the government is reclaiming the Mau Forest.

“My Ministry is watching this and Lamu/Shela is as important as the conservation of the Mau Forest and those who were illegally allocated land need to be aware that we will not allow any destruction of the sand dunes and/or the water catchment area”, Hon. William Ole Ntimama said.

**Casting lab finally reopens**

The casting laboratory at the National Museums of Kenya reopened its doors in May 2010 after a major facelift funded by the German Embassy to a tune of KSh 2.7 million. The lab was officially opened by HE Margit Hellwig-Boette, the German Ambassador to Kenya, assisted by Hon. William Ole Ntimama, Minister of State for National Heritage and Culture.

The renovation of the casting laboratory is a major boost to NMK’s commercial activities and a key factor in NMK’s revenue generation. The Casting Department has attracted international customers, including other museums, university researchers and institutions that benefit from using its replicas.

“The department has over the years produced these replicas, mainly of prehistoric collections, which have placed Kenya on the world map as the cradle of mankind”, Hon. Ntimama said.

He said that the department has contributed to the advancement of palaeontological and archaeological research, adding that the replicas produced have been helpful for scientific research, teaching and exhibitions.

**IPR launches five year strategic plan and golden jubilee celebrations**

The Institute of Primate Research (IPR) marked its 50th year since it was founded by the late renowned palaeontologist Dr Louis Leakey in 1960. The Institute of Primate Research is a directorate under NMK. For 50 years it has faithfully carried out its mandate, which is to conduct biomedical research for health and conservation of non-human primates.

IPR’s five year strategic plan (2009-2014) incorporates the new policy shift and thinking in line with the government’s Vision 2030 and its medium term plan. The strategic plan is expected to enable IPR to contribute significantly to the attainment of its objective of research excellence in health and primate conservation. The plan will also enable IPR to contribute significantly to community projects related to health, conservation and sustainable utilisation of biodiversity.
The German Ambassador stated that it is the responsibility of government and society to protect the national heritage, as it is vital for educational purposes.

“There is need for the Kenyan and German governments to increase collaboration through organising events in different museums other than just developing infrastructure”, she said.

She emphasised the need for organising cultural weeks that bring people together, as a means of understanding different cultures.

To complete the renovation of the casting lab, the Kenya Museum Society donated a modern shelving system worth KSh 1.3 million, funds raised through their series of 40th anniversary lectures.

**NMK libraries scoop the Maktaba Award**

The National Museums of Kenya was fortunate to scoop three awards during the second annual Maktaba Award ceremony presided over by PLO Lumumba in September 2011.

In the Public Libraries category, the first runners-up award went to Nairobi National Museum Library and second runners-up to Lamu Fort Webb Memorial Library. Malindi Museum Webb Memorial Library took the second runners-up position under the category of Community Libraries.

The award is aimed at celebrating the home of literature, the library. It is driven by the realisation of the key role that information plays in the modern world and the fact that Kenya is part of the global information society. It is an initiative of the Kenya Library Association with support from the Jomo Kenyatta Foundation, the Goethe Institute and Radio Africa Group.

The awards, shaped along the lines of the German Library Awards, come with a trophy and a cash prize. The coveted award was clinched by the Kenya National Archives, beating over 70 other institutions.

The NMK Resource Centre Manager, Ms Ashah Owano, accompanied by her staff, received the award in the presence of Dr Idle Farah, Director General of NMK. The colourful ceremony was also attended by the German Ambassador, HE Margit Hellwig-Boette, among other dignitaries.

**PHOTOGRAPHS BY EBR AHIM MWANGI,**
**NMK AV DEPT**
On a Blixen binge a few years ago, I was intrigued by references to and photos of Karen and Bror’s first farmhouse, Mbagathi, named after the nearby river. Could this house still exist, I wondered, and where was it?

Mbagathi was known as “Prosper’s Farm” when Bror bought the small, unimproved house in 1914 and probably it was constructed about 1910. Bror and Karen Blixen lived in it until they moved to Mbogani (or Bogani), the present Karen Blixen Museum house, in 1917, when their Swedo-African Coffee Company bought out the remainder of Ake Sjogren’s land and reincorporated as the Karen Coffee Company.

Searching for documentation on Mbagathi, I found its location on the northeast corner of the blueprinted plot map of the farm as it was in the 1920s. A researcher at the National Archives dug through the archives and found the blueprint and plot maps of the farm, showing where Mbagathi was located.

Thomas Hart

Most of us have visited the Karen Blixen house, now a National Museums of Kenya property open to the public. But do you know about her first house in Nairobi?

Photo above: Bror Blixen (in dark suit) in front of the house Mbagathi in its original “Prosper’s Farm” condition as the Blixens found it in 1914.
Karen Blixen's first house

up an intriguing reference in the January 12, 1951 East African Observer stating that Mbagathi formed the nucleus of the now-defunct Westwood Park Hotel.

Comparing the old blueprint to a modern street map, I and fellow Blixen enthusiast Tove Hussein (whose book *Africa's Song of Karen Blixen* is now being reprinted) drove up and down Ngong Road looking for likely sites when, eureka! — we happened upon Westwood Park Road. Thinking this must have been the hotel's location, we were disappointed not to find anything along this short road that looked like either Mbagathi or a hotel. We stopped an old gent wandering along the verge and asked about the Westwood Park Hotel. He pointed mutely to a large gated arch over the end of the street bearing the words “National Defence Staff College”.

Presenting ourselves to the armed guard, we talked our way into a meeting with the College's commandant. To my amazement, he confirmed that the College had been the hotel until 1983, and vividly recalled from his disco nights there as a young officer in the 1970s the 'legend' that the hotel had been Karen Blixen's house. So yes, you Karen residents of a certain age, I can hear you harrumphing over this article that our supposed 'discovery' was common knowledge...

The commandant took a keen interest in our old photographs, and exclaimed “that’s still there” at the view of Karen’s garden fountain. We spent a pleasant half-hour wandering the grounds, taking pictures, and confirming that, in a serendipity that would have pleased the bibulous Bror, Mbagathi is now the officer’s bar of the National Defence Staff College.

Comparison to old photos of the unusual pillars with mid-mounted capitals, the position of windows, the identical fireplace, and the circular garden fountain leave no doubt that Mbagathi is now the western corner of the main building of the Defence Staff College. The interior walls have been removed, but the overhead beams still match up to the sketched room layout in Karen’s letters. The original house is now part of a much larger building that had been the main dining and reception area of the Westwood Park Hotel. The roofline has changed, although peak and chimney are recognisable.

Comparison of historic photos to some present views tells an interesting story:

Karen Blixen at target practice on the south lawn of Mbagathi, before she started renovating the building.

Far left:
The young Karen Blixen during her Kenya years, ca. 1915.

Left:
Karen Blixen's second house, Mbagani, the one we know today as the Karen Blixen Museum.
In the best known and earliest view of Mbagathi (fig. 1 left, Bror with hands in pockets) we see Mbagathi in its original “Prosper’s Farm” condition as the Blixens found it in 1914.

But as Karen complained in a 1914 letter, “This house is so badly built, because the veranda faces west…in this country you cannot have west-facing windows without a veranda outside and it is essential to have one room with a veranda right round it. Now I intend to build a veranda on two sides…”

Another small confirmatory detail is the unusual chimney, pictured from similar rear (north) views in the old and new figures 4 and 5 above. While the height of the original chimney has been concealed or changed by later additions to the roofline and building, the distinctive round top and (just barely) the projecting surround are still visible.
Inside the building (fig. 8), the entire space of the small Mbagathi house is now one large room, the officer’s bar. The interior walls have been removed, and the exterior walls have been wood-panelled. The floor is new. The beams appear to be original; in the views above, the position of the central corridor depicted in Karen’s hand-drawn 1914 floor plan (fig. 9) corresponds to the two parallel pillar-supported beams in the modern photo, running from the front door (out of view to right of photo) to the central rear exit to the kitchen. Karen’s bedroom would have occupied the exact spot of the modern bar-counter (left rear of photo).

What caught the College commandant’s eye, as figures 6 and 7 illustrate, is the amazing survival of Karen’s ornamental garden plan nearly a century after she laid it out. Mbagathi’s south steps, path, and circular pond or fountain remain today. Despite the altered roofline these views show how Karen’s ‘new’ terrace extended into an open colonnaded loggia, the pillars of which were later worked into the main south façade of the much larger expanded hotel/college building — all still with the strange mid-column capitals that owe their ancestry to the little porch in figure 1.
Fortunately for chroniclers of Karen’s furniture and possessions, she was evidently vain of her interior decoration skills (or eager to show folks back in Scandinavia that she wasn’t roughing it) and had professional photographs taken of rooms at both Mbagathi and Mbogani. This view of her sitting room at Mbagathi (fig. 10) unquestionably shows the same fireplace with its distinctive cornice and pillars as that in the present officer’s bar (fig. 11). As well as showing how sadly the art of photography has declined since then, I am embarrassed to say.

So next time a visitor asks you to take them to Karen Blixen’s house, nod sagely like an old Nairobi hand and ask: “Which one?”

PHOTOS PROVIDED BY THOMAS HART AND TOVE HUSSEIN

Notes
The National Defence Staff College premises are closed to the public.

Historic photographs from Isak Dinesen, Her Life In Pictures, by Frans Lasson and Clara Selborn, Karen Blixen Museum, Denmark, and the Karen Blixen Archives.

Tove Hussein’s book, Africa’s Song of Karen Blixen, is now being updated and reprinted with new letters and more information on the famous writer’s years in Kenya.
On 20 October 2001 Petro Okumbe Ouko told me the story of his life at his home in Wagusu, Bondo District in Nyanza Province. We had met for the first time in August 1995 and since then been friends. Every time research took me to Wagusu, I visited Okumbe. We sat in his living room on more than 30 occasions discussing daily events and philosophical issues, people in the community, and global politics. Over the years numerous anthropology students have visited Okumbe and received valuable advice at the start of their field work.

Okumbe is a short and strongly built man with a fringe of white hair around his otherwise bald head. His six lower middle teeth are missing according to old Luo custom. He walks with a stick that is painted black and decorated with a few shiny nails — partly to facilitate his gait, but also as a means of orientation because he has lost his eyesight completely.

Inside his house, I take a seat with my interpreter (and there have been many different ones over the years). As Okumbe doesn’t speak English and my Dholuo is weak, our talks (including this narrative) always take place via interpreters. In the big living room, the walls are decorated with pictures of his children, alongside calendars and posters. There is also an electric clock on the wall which sometimes interrupts our conversation with different sounds depending on what time it is. A cat is often moving around, elegantly jumping back and forth from the ceiling beams to the furniture. This is the room in which Okumbe told me the story of his life in 2001. I have always felt that it deserved a broader audience. So I asked him recently whether he would agree to have it published. He gladly accepted and this article is the result.

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Okumbe’s life story

I am called Petro Okumbe, son of Ouko; Ouko, son of Janeno; Janeno, son of Afwamba; Afwamba, son of Nyandiri; Nyandiri, son of Oyier; Oyier, son of Imboo; Imboo, son of Odongo; Odongo, son of Nyendhe; Nyendhe, son of Sagari; Sagari, son of Matar; Matar, son of Wango — that one unites us, all the Sakwa people who are here. I was born in the year 1917.

According to Crazzolara, the Luo had their origin together with the Nuer, the Dinka and many other Nilotic groups in the ‘cradle land’ west of Bahr-el-Jebel in what is now southern Sudan. The historian, Ogot, is the main authority on Luo migration in Kenya. He describes how since approximately 1500 AD, independent groups of Luos came from the north and gradually settled in various
parts of Nyanza. The land was already inhabited and the newcomers usually took the land by force, whereby the peoples already in place were either assimilated or sent on new migrations of their own. Some of the migrating groups eventually crossed the Kavirondo (Winam) Gulf to South Nyanza (and in some cases back to the northern part of Nyanza again). Many of the original Nilo-Hamitic and Bantu peoples were assimilated by the Luo.5

Ogot recognises a person called Wanga and his descendent Matar as historical persons who came to Nyanza about eight generations ago as part of the fourth and last influx of Luo in Nyanza, and they populated what is today known as Sakwa (including the administrative location, Central Sakwa, where Okumbe lives). Ogot operates with a generation time span of 27 years.6 Okumbe traces his lineage back to Wango7 counting 11 generations. As Okumbe was born in 1917, that means that Wango according to him was born in 1621, whereas Ogot places it 85 years later (1706). However, according to Ogot, his estimates are subject to about +/- 40 years uncertainty, so the discrepancy is not that large.8 The hostile entry of the Sakwa clan forced other Luo groups (Jok’Owila and Jo-Kale) to migrate to South Nyanza. However, they later returned and drove the Jo-Sakwa back to their present homeland.9 The name, Nyandiri, is still alive in the term for the place called Kanyandiri (the place of Nyandiri), where Okumbe now lives in Wagusu.

The man and his family

When it reached 1932 I went to work, at a place called Songhor. It is President Moi’s place.10 I earned two shillings when I started working. Then I was employed for three shillings per month. Again it was increased to four. I was there up to 1935. Then I came back to join fishing. I joined the work of fishing in the lake. I fished for one year. I bought a plough for farming.11 So I farmed and when it reached 1939 I went to war.

During British colonial rule, a number of laws were introduced which were to change traditional Luo life. CW Hobley, who was later to publish scientific work on the geography and culture of the area,12 was the first sub-commissioner of the province from 1895 to 1903.13 At the start of the 20th century, hut tax and poll tax were introduced and had to be paid in cash. This forced a monetary economy onto a society that had until then been based on subsistence. During the colonial days, Nyanza was predominantly looked upon as a labour reserve.14

I married in 1938. When the war began, I went to war and I left her. We left each other before I went to war, because I went to war in 1939.15 I left her with a child. When I came back I married another woman from Kamyawa. Yes, it is in Sakwa here. I married her when I came back from war.16 I came home on leave and I went back. I returned from war in 1946. Again I married another one from Uyoma. Nyayoma left me in 1950. Now the cows that I got from that woman’s home are the ones I used to get married to this one [Agneta]. The one I have here I married in 1953.17 That is how my marriage life is. We got children together. The girl we buried with him in Nango is the first born.18 The doctor is the one who is following her — the one who is now called the Professor. The one following him is a girl, the one you saw who was sick and was married in Kano. The boy who followed that girl was called Okoth, the one who died. The boy called Ochieng’ got lost in Mombasa after he married. This is his son, the one you are seeing here. After Ochieng’ a girl called Ogola was born. That boy who is learning in India follows Ogola and he is called Adera. Ouko follows Adera. The girl who died follows him. The girl who recently died here, who is called Anyango, the one he saw here, follows him. Again I followed her with a boy. Again he died. That is how I am.
Jens: All the children you have just mentioned, they are all your children with Agneta?

Yes, they are my children with Agneta. The woman who left, had one girl who is in Alego. She often visits me. Even yesterday she was here. She came when she was sick. Then I treated her and she went back. She is the one I first married and we got a daughter in the year 1940.

Jens: What about your second and third wives? Did they have children?

The second one gave birth to three children, but they all died. She left me, then she died too. The third one got married again on Rusinga Island.

Okumbe lives with his wife Agneta and many family members in a large compound (dala) of about 5000 sq.m. In traditional Luo fashion, small houses are scattered in an uneven circle and there is shade because of the many trees. The compound is fenced to prevent the animals (a few cows and donkeys) from trespassing. When we visit during the day, Okumbe is usually seated in his easy chair either outside or inside the main house (made of bricks with an iron-sheeted roof), depending on the heat.

Okumbe has six sons and five daughters with his present wife Agneta, out of whom six have passed away. In addition, one of the sons disappeared mysteriously in Mombasa and is thought to have died. In the relationship with the first wife, Nyalego, one daughter was born who passed away in 2002 after the interview. Among the Luo, there is a tradition to name a married woman according to her birth place. For instance Nyalego means ‘the daughter of Alego’ — Alego being a town north of Sakwa.

The person who first married our mother was our father’s brother. He was called Ndonga, son of Janeno. He was the one followed by Ouko. When he died, Ouko married our mother. When I had been born by Ouko he then left while I was breastfeeding. I did not see our mother. I was just told that she was brown.

Jens: But your father stayed alive as your mother passed away?

The first who married our mother died, but Ouko died more recently — the year Mboya died.19

It is Luo tradition to practice levirate (wife inheritance) i.e. a widow should be remarried to one of the deceased husband’s kinsmen — ideally one of the brothers.20 The first husband of Okumbe’s mother, Ndonga, died before Okumbe was born, though Okumbe says that he was already conceived. Soon after, the mother was inherited by Ndonga’s younger brother, Ouko. According to Okumbe, when he was nine months old, his mother died after being seriously beaten by Ouko (who allegedly did not like her, because she gave birth to a baby boy, namely Okumbe). Subsequently Okumbe was brought up by one of Ouko’s other wives. According to Okumbe, Ouko — who was known to be an ajuoga (magician) with the ability to cure illnesses — did not wish him well because he was from an inherited woman, and he thought this was the reason that his first marriages went wrong.21 Subsequently, Okumbe decided to move to the home of his paternal cousin, Ogonda, from where he established his own home.
The inter-war period

I was born when the war between the Germans and the English was being fought. It started in 1914 and ended in 1918. When people came from war, they found that I had been born. The difference they brought is that they eradicated sleeping sickness. Because there was a kind of tsetse fly along the lake shore and in the islands. When it bites somebody, it transmits a disease. They also got rid of another disease called nundu, which could make sores on the face and body. Before the white man came, if you got a disease you died, because there was no medicine to treat it. Disease used to kill many of us who lived close to the lake. That is why we remained few. The most common diseases here were sleeping sickness and nundu. Also nyaldiema or ndira, which is nowadays called cholera. The disease of blek caused swellings on people’s bodies and they couldn’t talk. Diarrhoea was also difficult to treat, which was also called ndira. So they stopped for us some diseases. These diseases were attacking people who lived around the lake shore.

It is difficult to provide precise translations of the local terms into biomedical disease entities. According to Ocholla-Ayayo, nundu is equivalent to smallpox, which in the past was believed to be caused by ghosts. The British were actively trying to control sleeping sickness, which is transmitted by the tsetse fly mainly in the areas close to the lake shore. Wellde et al. give a historical overview of these control programmes between 1901 and 1981. Hoppe provides an anthropological analysis of the often drastic control measures on the Ugandan shores of Lake Victoria between 1906 and 1961. Cholera, referred to by Okumbe as ndira, is still a health problem in the area. Blek is equivalent to plague. There was for instance a major outbreak of plague in 1919 during which the British Archdeacon of Nyanza, Walter Edwin Owen, made a huge effort for the Luo population. The British were somewhat successful in their campaigns to control disease, which is acknowledged by Okumbe.

When they came, I heard that those who were given clothes went mad. Because they were used to walking naked with just a goatskin tied on. When a boy became mature was when he would start to tie a small skin behind his buttocks. So what I saw with Africans is that we were very naked. We started tying white skins, but there was no soap to wash them. Our fathers were the first people to put on clothes when the white people came. They used to wear earrings that people in the past called ngaga. If a man was given the responsibility of looking after the sub-location, then the ngaga was removed, because now he was working with the government. Now they started putting on clothes. They were given the clothes. When the clothes got worn out, they would buy them. Now the Asians had come. They were given clothes that were labelled British Navy. They had red caps that pointed upwards. The chiefs were given big caps.

They [the white people] brought education, but some people did not want to go to school. Some people thought that if their children went to school, they would get lost and not assist them. Although our fathers were working with the government, we were not taken to school. I learned writing when I went to the army. They thought about education late. Even now some people do not want their
I am called Petro Okumbe, son of Ouko. I am called Petro Okumbe, son of Ouko. I am called Petro Okumbe, son of Ouko.

Children to go to school even though they have cattle. They [the white people] brought good job opportunities. They brought us doctors. Again we can settle land issues. Now we can treat cows or even a goat. Therefore even if we are still illiterate, we know that they brought us some knowledge.

The first school to start here was Ramba. People from here were going to carry stones from River Yala [for building]. They were carried by people from Sakwa, Imbo, Asembo and Uyoma. Those are the people who began Ramba. They were carrying stones that were not shaped. Now afterwards Maranda followed. Maseno was the first one [to be built] among the Luo. And Yala [was also built] among the Luo. Those are the schools which came first. Now Sakwa got its own school and Yimbo which is Usenge. Uyoma also with Chianda. Ramba combined both of Asembo and us. Those are the things I saw here in Sakwa first. Ramba is very old.

British influence became manifest in western Kenya around 1900 partly because of the completion of the railway to Kisumu in 1901. Along with it came a number of mission congregations such as the Church Missionary Society (CMS), Mill Hill Mission (MHM), Friends Africa Mission (FAM) and the Church of God, setting up their centres in Maseno, Yala, Kaimosi and Mwihila respectively. They introduced European formal education based on a curriculum dominated by Christianity, and they used the schools as an instrument of evangelism. For many years the mission schools played a dominant role although rebellion developed among the indigenous population, for example, in Nyanza where “John Owalo severed relations with Maseno in 1907 to found the religious splinter sect, the Nomia Luo Mission, and schools to cater for children of his followers”.

The second world war

I never stepped in school. I only went to school when I joined the army. The first place we went to was Maseno. From Maseno we were taken to Jinja. There we studied for six months. Then I was taken by the forces to the KAR [King's African Rifles] people. Now at the KAR is where we were taught engineering. Then we learnt engineering in Kabete. Also in Mombasa. We learnt how to cross water using a canoe. We went up to Ethiopia, and up to Djibouti. From there we went to Madagascar. After we came back on leave we went to Colombo, Ceylon—the Singhalese country; they are Asians. From there we went to Calcutta, then to a place called Kamila. Then Kalewa. We were fighting the Japanese. Then we entered Burma. We finished fighting the Japanese on 15 August 1945.

The Italians fought us up to Sielo. Then we fought back, pushing them backwards. We went to Djibouti. But we did not fight them, because we gave them a notice that we will go there, but they rejected it. They refused us to go to their place. It took a whole year. As you know, the British and Americans have tough rules we had to follow. So they just raised flags in all those places and they allowed us to get there in peace and we went up to the seashore. So the plane was flying out and we were also running out.

Even in Madagascar they did not want us to go, but we went by force. The Italian people would surrender after they had been surrounded. They did not come with people to assist them. They were just alone, unlike the English who had many people in Africa, like Indians and other races, who were going to help them.

I almost died in Ethiopia. It was raining and they were shooting at us. That place was called Wadara, and it was in Ethiopia. We fought there for six months. It was very bushy, but they cleared almost all the vegetation.

The war campaigns in East Africa during World War Two were of relatively short duration. On 10 June 1940 Italy entered the war against the allies. From their bases
in Italian Somaliland, Eritrea and Ethiopia (which they had conquered just a few years earlier) the Italians were facing the British in Sudan, British Somaliland and Kenya. After initial Italian offensives, British armed forces convened from four directions and defeated the Italians within a short time. The British forces were supplemented by irregular Ethiopian forces who had turned against the Italians. Lieutenant-General Alan Cunningham commanded the force advancing from Kenya into Ethiopia and Italian Somaliland in January 1941, and captured Addis Ababa in early April 1941. Emperor Haile Selassie crossed the border to Ethiopia on 18 January 1941 and made his formal entry into the capital on 5 May. In 53 days Cunningham's force had advanced 2,776 km. The Italian General Gugkielmo Nasi was the last to surrender in Gondar on 27 November 1941 after being besieged for seven months. French Somaliland (now Djibouti), which was controlled by the French pro-Nazi Vichy regime, surrendered at the end of December 1942.

This was the force with which Okumbe marched. He remembers fighting at Mega and Moyale near the Kenyan-Ethiopian border, and the two small towns were captured by the British on 15 and 18 February 1941 respectively. Okumbe was not very impressed by the Italian fighting capability. This is supported by historical facts. The British side was estimated to have fewer troops than the Italian side. Nevertheless, the Italian casualties were enormous and many surrendered. However, in some places the Italians fought valiantly like in Keren in northern Eritrea, although this was not on the front where Okumbe fought. After the campaign in the Horn of Africa, Okumbe participated during May-November 1942 in the invasion of Madagascar, which was also controlled by Vichy loyalists.

**Jens:** And then how did you join the war in Burma against the Japanese?

The Japanese were very fierce; one man could kill many people. Even those who were captured could kill the people who were guarding them. They would not accept to be arrested. They did not want prisoners. They were very dangerous. They killed so many people. They could strangle so many people. So many people joined against them and many of them were killed and were put somewhere. A tractor came and collected the dead bodies to be buried in a mass grave. Many Japanese died, compared to the Italians. When the Italians saw that they were surrounded, they always surrendered.

After Japan entered the war against the Allies, they captured Burma and stood at India’s northeastern border around May 1942. Okumbe’s unit joined the battle at the central front near Palel in Manipur State of India as part of the 11th East African Infantry Division in July 1944. At this time the Allies had gained the offensive, and his company participated in tough pursuit of Japanese troops in the jungle during the monsoon season.36

**Jens:** So you were then amongst the engineers in this war. Is there anything that you remember either in Burma or in Ethiopia that was particular for your role in the war?

They used to have certain equipment looking like a small rounded container that could be put underground, and then there was some sharp object pointing out. Two hands held it. It was a remote sensor. So they could put it on the ears and if you reached a place where the enemies were it would produce a certain sound. There is another one that was not buried underground, but it could be put on the road. If you see the vehicle coming, it could be stretched so that the vehicle would go over it. There was another one that was put with a certain thread on the walking paths. So somebody walking on the paths would step on it and when you step on it, it would explode. Another one could be put on a bridge. So that it could destroy...
the bridge for the enemies not to advance. There was another one called a grenade. It was an object where you could pull a string like this and then you throw it at the enemy. An enemy could also get hold of it before it explodes and throw it back, so it explodes on you. It was a hand grenade.

Jens: Were you involved in all these things?

As an engineer you have to be taught all those things and you have to do some practice. And if your hands throw fast, then you are taken for that job. You have to know everything, so that if one person is using this one you can also use the other one. If the enemies could make it, then we knew how to go and destroy it. We could take a big pipe and seal one end of the pipe and make a certain explosive and push it through the barbed wire. Then it would open the barbed wire and the vehicles could pass. That was for the enemies. So we were destroying them. Those things were done at night. The people who were in the front line were people who were sharpshooters, and that is why I was going from one country to the other. They were only selecting people who were sharpshooters, and I was a sharpshooter and that is why I went to so many places. You must know how to use almost all the equipment, even if you have not been to school.

The enemies were throwing missiles at us, and we were also throwing missiles at them. But you would not notice the gunshots unless some pass close to you and you hear the sound shwii. If it hits somebody then you will just be surprised to see someone falling down. That is when you realise that there was a gunshot. Some weapons are very dangerous, because they do not make noise. Bombs explode twice, when they are beginning and at the end.

Jens: What was the most dangerous experience during the war?

The most dangerous part of it was the war with the Japanese, but in most cases they were aiming at the white man. So the white man would take tiles and burn them, and with the ash he would paint himself, and look like an African. They were not comfortable with their colour.

Okumbe was attached to 61 Field Company East African Engineers during the war. Throughout the war, Okumbe remained a private soldier. But according to Okumbe, he was much appreciated by the officers because of his intelligence. Okumbe returned to Kenya in 1946 when he was in his late 20s, carrying his savings and entitled to a military pension.

After the war

When we were ending the war, we came back to Kamila in India. We came back to Ranch in Pakistan. Now it is there we found the Japanese. Now the ship was ferrying people and came back for others. We were taken to Bombay. From Bombay we entered Mombasa. From Mombasa we went to Nanyuki which was the headquarters for the engineers. Now from Nanyuki we went to Kabete where we left our old clothes. We were given new clothes and blankets. That is how we came back. When I came back I bought a boat to start fishing. I was fishing and I also got a plot of land.

Jens: Is that the one we are seeing?

Yes. It is the one that I still have. They suggested that those of us who were interested in working should go back and learn some...
skills, but I did not want to work. I did not want to work for anybody.

Jens: So this is not your father’s place. This is a different place that you have bought?

We did not buy them. When we came back the government wanted market places where people could meet and they could talk to people to give them land and then we could ask for pieces of land. The owners did not ask for money. We were given them free. There were 18 plots that were given for free. Later on people started buying from the owners. But we were given them free.

Jens: So the government gave this plot to you?

Yes, all those people who are there, surrounding the market place. But those on the outskirts had bought from the owners of the land.

Jens: So you came back after the war. I think you told me earlier that you carried a bit of money during that time?

When I left, I was given 1900 shillings, meaning that I had not used a lot of money. When we returned, there was a pension where we could get 50 shilllings per month, and we used to collect it in Bondo. We were given a savings account for free so if you had a lot of money you could keep it safe. But if you don’t have a lot of money, then you could just take your money at the end of the month. I would use the money to buy goats and I was selling hides, and I also made a boat. Some people ate all that they had, and the government brought them home without anything. They thought that they were being given for free, but it was being recorded somewhere against their names. That is how it was, and my money is what has built me up to what I am now.

Jens: And has it helped your sons also?

Yes, now it is helping my children.

Although Okumbe never went to school, he is a strong believer in formal education. He has supported three of his sons to get academic degrees as seen by the photos in his living room where his sons pose in graduation gowns. In addition countless children (e.g. grandchildren and relatives) have stayed with him while attending primary or secondary education.

Jens: Just to get an impression of how much 1900 shillings was worth at that time, what was the price of a boat at the time you bought it?

A boat was costing 400 to 500 shillings. Then you had to buy the sail and the equipment to operate it. We were employed for 20 shillings when we went to Madagascar. Later we were given another five shillings. When we went to Japan we were given another 15 shillings. We also used to have a pension and it depended on your rank, e.g. if you were a corporal or if you were a sergeant. This money was per month. We were not given money every month, but you could ask for it after some time if you wanted. Some people would, but for me I would only ask for two or three shillings, because I did not want my account to read nil. Some people would keep quiet and not mention any amount. These people were saving, because this money was saved. When you are fighting in the war you don’t require money, because they provide you with food, tea and everything, including cigarettes. Cigarettes you were given even if you are not a smoker. We were not like people who are now dancing for the President. We
were people who went to war, not people who are singing and dancing. We are people who have heard gunshots. We were in difficulties. We were not in celebrations.

**Losing his eyesight**

I will narrate to him how my eye problem started. It started during the war, when we had finished fighting the Japanese. I was not being able to see at night for two weeks. When I was in the tent, I could see a bit. When I came back home I had headache. It was treated with traditional herbs. In the war we finished well, and when I was coming from Camilla that is when I started experiencing some problems with my eyes. When it gave me a lot of problems was in 1951. I went to Maseno and stayed there for three months. I could still see, but not at night. In the 1960s when I was trying to ride a bicycle, I could surprisingly see people passing. Then I stopped riding a bike and completely stopped seeing. Yes. That is how I am.

**Jens:** Did you say that it was the traditional herbs that destroyed your sight or it was the illness itself?

I think it was because of that traditional herb, because they were putting it very close to the eye. And it was very hot, so it was destroying the globe of the eye, because at that time the disease had already affected me. So in Maseno it was treated, but it was already messed up with the traditional medicine.

Health care in Wagusu is characterised by medical pluralism as in many other sub-Saharan communities. That means that there are a number of treatment options, based on either modern biomedical or traditional explanatory models or combinations thereof. Herbal medicine plays a big role among the Luo today as it probably did in the 1960s. It is not possible to ascertain what the biomedical diagnosis was. However, the symptom of night blindness is typical for vitamin A deficiency. Neither is it possible to identify which herb was used in the attempt to treat him, but generally some of the medical herbs have caustic effects.

**Jens:** But still you have been leading a very strong life and have been moving around quite a bit, even after you lost your eyesight?

Yes. God also gave me some little wisdom, so that if there is a problem in the home, I find a way of creating peace. So I thank you. We have discussed well. And God will bless us.

**Jens:** Erokamano jaduong (thank you).

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**Reflections**

This was the story of the life of Petro Okumbe Ouko, a strong man who in spite of his visual impairment managed to keep control of his life and his homestead to the benefit of the many children, grandchildren and other relatives who lived with him and received his support for their livelihood and their education. He was also a man feared and respected by many for his fierceness.

From an anthropological perspective this article is not explicitly linked to major theoretical discourses. It is simply an account of one person, binding together events of the turbulent history of almost a century. In that sense it is a modest addition to the life stories of the !Kung woman, Nisa, and the Moroccan man, Tuhami. The article aims at linking Okumbe’s personal narrative with various historical events and Luo cultural characteristics as they are described in the literature. Thus, it is an attempt to combine a micro and a macro perspective through time. In that sense it is related to the description of Siaya district in western Kenya — which happens to encompass the place where Okumbe lives as well.
The anthropological literature on narratives is extensive and will not be reviewed in detail here. According to Peacock & Holland’s review, such articles perceive life stories as “a window — though not a perfectly transparent one — on historical periods, cultural practices and psychic events ...(with)...a multifaceted significance in a variety of social and psychological processes”. 48 Thus the narrative is not a direct reflection of some truth, but is influenced by the interaction between the two interlocutors.

Seven years passed between the initial interview and the writing of the article, which is the reason that updates are sometimes given on the course of events. During the work a number of questions arose which needed clarification or elaboration. The interview comprised 23 transcribed pages. Some editing has been carried out. Thus, certain parts have been omitted which were not thought to contribute to the main story. The interview text follows the original sequence apart from a few cases where sentences have been moved.

Okumbe passed away peacefully in a hospital in Nairobi on 2 November 2008. Before his death he gave consent that the story be told using his own name — in fact he was very keen. The final draft was read aloud to Okumbe’s wife, Agneta, and shared with other family members for approval and corrections.

Postscript
But the conversation was not finished. Okumbe said: “I also have questions”. I said: “Yes please?” He said: “Why do you think Osama is fighting the Americans? What have the Americans done to him?” And then the talk continued for a long time — not about the past, but about the present and the future.
I am called Petro Okumbe, son of Ouko

6 The age of a father when his first surviving child was born (Ogot 1967: 27). The father’s (and not the mother’s) age is used, as this is a patrilineal society.

7 I assume that Okumbe’s Wango is identical to Ogot’s Wanga, as they both claim that the son is called Matar.


10 In the Rift Valley Province, east of Nyanza.

11 Allegedly this plough is still in the family’s possession.


15 Okumbe’s family tells me that he left Nyalego at home when he went to war. This is not in accordance with what Okumbe states. However, I have chosen not to edit the quotes and left Okumbe’s statements unchanged.

16 Okumbe married his second wife when he was home on leave in 1944.

17 Okumbe refers to his present wife Agneta. She is usually present during the conversations, though he does most of the talking. It is a Luo custom to pay bridewealth in livestock from the groom’s to the bride’s family.

18 Okumbe is alluding to the fact that the author attended the funeral.

19 Tom Mboya was a Kenyan politician, killed by unknown persons on 5 July 1969.


21 Ibid.: 162-164.

22 Ibid.: 177-178.


26 Ramba is in neighbouring Asembo, about 30 km east of Okumbe’s homestead.

27 Maranda is about 10 km north of Okumbe’s homestead. Today there is a secondary school there and a boarding school for mentally disabled children.

28 Usenge is a small township and fishing place on the shore of Lake Victoria about 15 km northwest of Okumbe’s homestead.


32 Maseno, situated in the green hilly area northwest of Kisumu, was one of the first colonial centres in western Kenya and a stronghold of the Church Missionary Society (CMS) (Bogonko 1992: 19).

33 Jinja is in Uganda about 100 km west of the Kenyan border, situated where the White Nile has its source at Lake Victoria.

34 Ceylon, now Sri Lanka.

35 Kalewa is in the northwestern part of Burma (now Myanmar) close to the Indian border (Manipur and Mizoram States).

37 Thanks to the assistance of the Royal Engineers Museum in Chatham, Kent, it has been possible to find bits of information on this unit. However, the information is very sparse.

38 Nanyuki is a town on the western slope of Mt Kenya in Central Kenya. It was used as a training site for the Kenyan Engineer units.

39 Kabete is on the outskirts of Nairobi, Kenya. The East African Army Service Corps School conducted training courses there.

40 This refers to Ngiga, a small shopping centre close to one of the fishing beaches on the lake shore.

41 Bondo is a small township about 13 km north of Okumbe’s homestead.

42 In daily talk the verb ‘to eat’ is used not only for consumption of food, but also for other resources, especially money.


44 Erokamano means “thank you”. Jadoung’ is the equivalent of the Kiswahili mzee, (big person). It is an honorific vocative form usually reserved for elderly males.


47 D W Cohen and E S Atieno Odhiambo, 1989. Siaya. The Historical Anthropology of an African Landscape. The former Siaya District has now been administratively split into two, and Okumbe’s homestead is in the southern Bondo District.

The fishes of Malindi

Marine life in the western Indian Ocean region was first investigated in the mid 1700s by Carl Linnaeus, the Swedish naturalist whose system for naming, ranking, and classifying organisms is still in use today. During the last two and a half decades, particularly, rich new collections have accumulated, fished especially from continental slopes in the tropics. For the enthusiast, there are a number of excellent and comprehensive books elaborating information regarding fish systematics, or ichthyology, including those by Smith & Heemstra (1995) and the more compact fish guides by Lieske and Myers (1994), Debelius (1993), and Van der Elst (1993), together with the identification guides for commercial fish and shellfish produced by the United Nations Food

The results of a recent survey on the fish species found in the Malindi Marine Park and Reserve, carried out by the Ichthyology Section of the Zoology Department, National Museums of Kenya. The study was sponsored by the Kenya Museum Society.

Edward Njagi, Tom Akelo, Joseph Gathua and Rashid Kaka

A blue banded snapper (Lutjanus kasmira) collected from Malindi Marine Park.
and Agriculture Organization (FAO) for Mozambique, Tanzania and Madagascar. In spite of their usefulness, these guides have various limitations, one particularly being that they do not give an adequate representation of the fish diversity on the Kenyan coast. Moreover, for most countries in the region, the exact number of species (complete species checklist) is not known.

**Malindi Marine Park**

Malindi Marine National Park and Reserve was the first marine protected area in Kenya, established in 1968 and designated as a biosphere reserve by UNESCO in 1979. The park is located south of Malindi town and is enclosed by a national reserve and a 30m strip of coastal land stretching from Vasco da Gama pillar to Watamu. No form of fishing activity is allowed in the park, but controlled fishing activity is allowed in the marine reserve using gear that is less destructive to the fish communities and the environment in general. The park is managed by the Kenya Wildlife Service (KWS) while management of the reserve and the surrounding areas is a joint initiative of KWS, the Ministry of Fisheries Development and the local community through the beach management units. The Malindi area is known for unique fish — the coelacanth\(^1\) (*Latimeria chalumnae*) and the two-headed shark (*Alopia supercilios*), both now preserved at the Zoology Department’s Ichthyology Section, were found in the waters off Malindi.

The recent survey carried out by the Ichthyology Section of the National Museums of Kenya and sponsored by the Kenya Museum Society confirms that the park and reserve have a very high diversity of fish, totalling over 100 species. The diversity is definitely more than this and higher numbers could be recorded if a more comprehensive survey were to be

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1. See *Kenya’s living fossil* by Dalmas Oyugi in Kenya Past and Present, issue 32.
done. The park has a coral garden that is also a major attraction for tourists visiting the coast of Kenya. The survey covered the Malindi Marine Park and Reserve as well as the surrounding areas of Watamu, Sabaki River mouth, Mijikenda and Ngomeni, to compare the diversity in the protected and unprotected areas.

**Study area and methods**

Samples were collected from areas between Watamu and Ngomeni. Points were chosen systematically along the beach and major emphasis was laid on Malindi Marine National Park and Reserve, because this is the area with no fishing activities (Malindi Marine Park) or with limited access by fishermen (Malindi Marine Reserve). Other areas where emphasis was laid included the Sabaki River mouth in a bid to capture catadromous species, such as eels, and anadromous species, such as smelt and shad, that interact between the sea and freshwater during different stages of their lifecycle.

The research team used motorised boats to access the ocean and collect fish specimens. Gill nets of various mesh sizes were used to collect specimens. Fish sampling was carried out during both the southeast monsoon season (*kusi*) and the northeast monsoon season (*kazkazi*). The samples were drawn from different types of habitats due to the importance of habitat variability and its strong correlation with species numbers and diversity. These included the upper and lower tide pools; rocky, gravel, sand, mud shores and bottoms; exposed and protected shores; regions of high and low salinity such as estuarine areas and brackish waters; coral reefs, fishing banks, surf zones; amongst eelgrass, mangroves, rockweed, kelp, and pilings; surface, mid-depths, and bottoms in shallow and deep waters up to three nautical miles from shore.

Fish specimen acquisition also involved purchases from fishermen, especially those
who fished overnight in deep waters, so as to capture nocturnal species for areas where the actual localities and other associated data was available. Images of fish were taken soon after capture in order to acquire the true colouration and natural sheen of fishes which are known to fade rapidly after death. The fish were placed on a polystyrene board covered with a wet piece of blue cloth (background) when photographing. All dissections or incisions of fish for genetic tissue collection were carried out on the right side of fish in order to leave the left side undamaged for systematic analyses and illustrations. A small slit on the right side of the belly allowed for the effective penetration of formalin, the fixative agent, into the tissues. Fish from the same locality were separated from other samples in perforated polythene bags, allowing penetration of the formalin, with a label included. The specimens were allowed to remain in 10% formalin for at least 10 days before being transferred to 70% alcohol for permanent storage in the ichthyology collection room.

Results

The survey showed that the park and reserve have a very high diversity of fish, totalling over 90 species (see table 1). The diversity is definitely more than this and higher numbers could be recorded if a more comprehensive survey were to be done. The highest diversity lies in the marine park, which represents almost 90% of all the fish found in the park, reserve and the surrounding areas.

The marine park is home to some of the most beautiful species of marine fishes. Among them are the wrasse, parrotfish, rabbitfish, barracuda, thornfish, goatfish, queenfish, snapper, pursemouth, surgeonfish, triggerfish, rock-cod, sweeper, shark remora, halfbeak, needlefish, pipefish, ponyfish, mullet and angelfish, to name a few. The list is not all inclusive as there are species that are still being analysed.
Fishing is a major economic activity for the people of Malindi, alongside tourism. However, the fisheries sector is faced by many challenges, including poor surveillance of trawling activities around Malindi-Ungwana Bay, a major source of conflict between semi-industrial trawlers and artisanal fishermen; the use of illegal fishing gear; and also fishing in restricted zones such as breeding areas. Some of the management efforts in place include the establishment of beach management units (BMUs) by the fisheries department and strict surveillance by Kenya Wildlife Service personnel within the marine protected area.

PHOTOGRAPHS PROVIDED BY THE AUTHORS

References
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Edward Njagi (lead author) is a research scientist and head of the Ichthyology Section of the National Museums of Kenya. Njagi has a masters degree in Biology from Addis Ababa University and has worked in the area of fish taxonomy and ecology (both freshwater and marine) for 10 years. Currently, Njagi is working on the taxonomy and ecology of the fishes of the western Indian Ocean, with particular interest in protected areas. Other research interests include marine and coastal management and biogeography.
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### Table 1: List of fish collections from Malindi and the environs

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<th>Local name</th>
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Global scientific communities are clear that climate change is real. Climate change can be defined as short, medium and long-term changes in weather patterns and temperatures that are predicted to happen, or are already happening, as a result of human-induced emissions of greenhouse gases such as carbon dioxide. These changes can be seen in the form of higher frequencies of extreme weather events such as drought and floods, as well as greater unpredictability and variability in the seasons and rainfall.

Throughout the climate change debate, it has been agreed that the people most likely to be affected by climate-change-induced pressures are the poor, marginalised and pastoral communities, especially those in developing countries such as Kenya. Ironically, these climate change victims contribute least to the factors causing climate change itself as their level of greenhouse gas emissions is low in virtually all cases.
In Kenya, most climate change debate and adaptation decisions have taken a top-down approach with little consideration of the impacts at the community level. Thus Government efforts and communities’ experiences occur at separate and different levels. This paper focuses on the impacts of climate change on pastoral production systems through participatory action and learning.

Location

The study covered the western region of Mandera District, specifically Takaba, Banissa, Malkamari, Dandu and Kilwehiri divisions. Mandera is a town in North-Eastern Province, located at 3° 55’ 34” N, 41° 50’ 46” E, close to Kenya’s borders with Ethiopia and Somalia. It has a population of 304,433 (1999 census) within 26,474 sq.km. The larger district is divided into 18 divisions and 86 locations. Politically, it consists of the three constituencies Mandera Central, Mandera East and Mandera West.

The study field work was conducted between December 2009 and April 2010, leading coincidentally to the collection of 12 examples of traditional material culture which are rarely collected. The pieces have been handed over to the NMK Cultural Heritage department for preservation. These collections are expected to be used for the future development of the museum’s public programmes including exhibitions intended to increase cultural heritage documentation, information, dissemination and preservation. In addition, a number of field photographs depicting different aspects of pastoral systems influenced by the impact of climate change were taken and preserved.

No insecurity was observed during the field work. The main sources of water in the area are earth pans (i.e. seasonal ponds), underground water tanks, boreholes and shallow wells, some of which are heavily polluted. Some of the areas observed are expected to experience an acute shortage of water during the dry spell e.g. Banissa, Lulis, Eymole, Birkan and Kiliwe.

The study area is populated by a Somali-speaking Gurreh ethnic group whose culture has co-evolved in tandem with the environment it inhabits. The problem is that the potential natural resources of Banissa area have not been adequately inventoried, nor is there a clear understanding of the environmental consequences and conflicts associated with the impacts of climate change.

The western region of Mandera district is considered grazing land since it supports a huge population of livestock that in turn supports numerous local communities. The region also has a unique assemblage of natural heritage sites including prominent hills such as Dandu Hill, Takaba Hill, Kiliwe Hills, etc. The area is known for its richness in both flora and fauna, many species of which are endemic to the area. Gum Arabica, several species of aloe and a number of potential medicinal plants are known to exist in the region.

Development question

The development and investment potential of the project area has remained largely untapped since colonial times and, as a result, it continues to lag behind other regions in social, economic and political
development. Lack of infrastructure, water scarcity, illiteracy and chronic food insecurity are the principal reasons for the backwardness of the Banissa area which has resulted in negative publicity and the perceived inability of the local people to contribute to the national development agenda. Historically, this assumption has led to a policy that there is no need to develop part of the former Northern Frontier District (NFD) that does not contribute a penny to national domestic development. As a result, local communities are left without political clout and lack basic human needs, continuing to depend on their livestock as they have since time immemorial.

**Pastoral communities and climate change**

The peoples of East Africa have traditionally relied on pastoralism as a way of life and their major source of income and security.

The Banissa pastoralists are no different, relying heavily on grazing lands and existing water resources. Thus, the local pastoralists of Banissa have been able to exploit land and climatic conditions that normally would not support rain-fed agriculture or extensive livestock keeping. What this means is that the dry lands of the area are not ‘wastelands’ because they are put to different uses that allow for the natural regeneration process to occur. In recent years, the Banissa region has had massive population movements due to extreme factors brought about by climate change. This has resulted in numerous conflicts over the sharing of pasture and water resources.

A significant proportion of the people in the area are pastoralists, the greatest number being in the border area with Ethiopia, which results in much cross-border trading. This involves the selling of livestock and manufactured goods from Kenya and the importation of kerosene, diesel, and petrol from Ethiopia.

The area normally experiences extremely high temperatures due to constant sunshine,
resulting in a high rate of evaporation of traditional water sources, leading to acute water shortages suffered by the local community. The competition for water between people, livestock and wild animals is high in the Banissa region. Shortage of water, pasture and browse have all significantly reduced food security and threatened pastoral sustainability with consequent detrimental effects on the health of people and livestock. These conditions have called into question the viability of existing adaptation strategies and response mechanisms bearing on the pastoralists’ food security and livelihood sustainability.

The Banissa pastoralist way of life is presently threatened by climate-change-induced pressure impacting social, economic, political and environmental conditions of the area. Major environmental stresses that are induced by climate change are floods, erosion and drought cycles. For pastoralists, flooding brings about subsequent decreased mobility, diseases, pollution of surface water and soil degradation due to topsoil erosion. The resulting degraded soil will not produce any worthwhile grass cover as regeneration capacity is disabled by water and wind erosion. The pressures of drought lead to famine and competition for resources, setting off a chain of social conflicts. Conflicts are highly expensive, life threatening and wasteful of scarce resources. Although the Banissa region is endowed with abundant land and natural resources, the majority of people are trapped in a vicious cycle of poverty, food insecurity and environmental degradation.

The changing climatic conditions are endangering the stability of the ecosystems with great impact on food security. Because of changed environmental conditions, the Banissa region’s natural honey production capacity has been drastically reduced compared to 20 or 30 years ago. To the pastoralists of Banissa, natural honey represents food, medicine and also cash.

As a young boy visiting Banissa town in 1988 after completing my primary education, I had to cover myself with blankets during the day and used firewood to keep the living room warm. But when I visited the same Banissa in January 2010, the temperature was as high as 30°C and I moved about wearing only a T-shirt. This environmental change can be attributed to reduced land cover since there has been much destruction of trees, shrubs and grasses by local communities for use in construction, energy generation, making of household goods and trade.

In the rural areas of Banissa, where most of the people reside, over 90% derive their livelihoods from nomadic pastoralism and nearly the same number live below the poverty line, because of environmental degradation.

**Impact of climate variability through the year**

**Short dry season**

The Banissa region records a short dry spell (traditionally referred as Bonn Agaya) from January to March. During these months, a lot of people and livestock migration occurs. The people and livestock are forced to look for survival pasture, water and peaceful land as conflicts increase arising from the competition for scarce resources.

Pressure on earth pans, dams and pasture zones also increases. There is much
migration of livestock from Elwak and Takaba areas moving into grazing lands of the Banissa and Kiliwe areas. Land preparation for pastoral agriculture, and hand digging of the individual and community earth pans also occurs during this dry spell.

During the dry season, pasture dries up and because what remains is insufficient to support local livestock populations, migrations take place leaving behind the womenfolk and children who are unable to travel with the livestock, sometimes to far locations. The average distance for grazing areas and firewood harvesting has increased to between five and 10 km for most settlements and villages. The increased distance for firewood collection is a big challenge to women in terms of security, carrying capacity and health.

Among local communities, there is a great fear that climate change has led to increased incidence of livestock diseases such as Contagious caprine pleuro pneumonia (CCPP) and Peste des petits ruminants (PPR). Domestic animals are also under threat from climate change when fresh vegetation is scarce leading to a high mortality rate of calves, kids and lambs. As a result, some people migrate with their animals to the riverine areas of Ethiopia where green forage and water are available in abundance, despite the threat of attack from Ethiopian tribespeople. Livestock reared by the local communities of the area includes camels, cattle, goats and sheep. Camels and cattle are locally considered to be long-term dependable assets, while sheep and goats are seen as short-term assets. Naturally, the condition and numbers of livestock improve when there is abundant forage and water.

During the period of the study, the market prices of camels, cattle, goats and sheep were low. Market forces prevailing in Mandera, Moyale and Nairobi strongly influence the local livestock prices at Banissa.

Despite this condition, the price of camel meat at Banissa was KSh 150 a kilo. During the dry season low prices lead to the death of hundreds of animals and carcass disposal becomes a major environmental health problem. One consequence is that milk and related products become scarce. For example, a litre of camel milk fetched the unusually high price of KSh 75 and a cup was being sold for KSh 25. At these prices, only a few of the local population can afford to buy milk. In these circumstances, there is a tendency by the majority of people to switch to the consumption of black coffee and tea. Pastoralists usually take milky tea as many times as possible during the day because it is considered a prime source of food and is sometimes the only nourishment available.
Long rains

The long rains (traditionally referred as Gann) are recorded during the months of April to June. Pasture surveys, locally called Aburu occur during this phase because the opportunity to fatten livestock and carry out healthy mating arise then. Traditionally, livestock qualities and quantities are improved through good grazing practices, protection and mating between healthy animals. It is during the wet season when the livestock are healthy, strong and capable of mating that the production of milk and milk products becomes plentiful. Some pastoral families also plant crops during this period if the family division of labour allows.

Long dry season

The Gann period is then followed by the long dry spell called Adoles that begins around July and persists until September every year. The long dry spell usually arrives with a number of challenges for local pastoralists including water scarcity, livestock diseases, clan wars, labour demand and cold, dry weather conditions. This phase of the seasonal calendar is also associated with a number of livestock diseases. The diseases vary from one season to the next, depending on the local climatic conditions.

Short rains

The short rainy season is called Agay in the local Gurreh language and usually starts around October and continues to December. This period is characterised by extensive migration and social preparation for conflicts and their management. History shows that many of Mandera clan wars occur during the Agay phase. Calving and kidding periods usually occur between September and October. During such periods some pastoralists have to migrate with their livestock to Ethiopia to escape the long drought encountered on the Kenyan side of the border. Other pastoralists will form satellite settlements (makeshift villages) to attract strategic food relief and political attention. These villages depend on underground water tanks constructed through government CDF (community development fund) support, and private water tankers contracted by NGOs. According to local health reports, the nutritional status of children below five years of age is not encouraging, with nearly 20% of children at risk of malnutrition. The frequency of cases of diarrhoea reported also increase during this period. A summary of seasonal calendar and critical events discussed above can be seen in the chart on this page.
Pastoral farming, livestock production and dryland forestry are among the activities most affected by climatic changes in the local environment, and these activities are an important source of the major greenhouse gases. For instance, pastoral farming contributes significantly to carbon dioxide emissions, while livestock are a major source of methane. Both pastoral farming and livestock production have the highest potential for mitigation by means of reducing their own emissions. The conversion of dryland forest to pasture results in a major loss of carbon stocks, through burning and overgrazing. Demand on land for food directly or indirectly is ever growing due to increasing population and the impact of “villagization” brought about by relief agencies. Changing climate conditions are endangering the stability of ecosystems as tree harvesting and bush meat hunting have increased significantly. Traditional dryland practices to reduce emissions or increase carbon storing, such as shifting cultivation, grazing, reduced degradation and the use of forest products (biomass) for energy, to replace fossil fuel use, are nowadays not observed in many respects.

Although agro-pastoral systems are contributors to climate change, today a wide range of mitigation technologies and practices are already commercially available. For example, improved grazing land management helps to increase soil carbon storage; restoration of degraded vegetation as livestock and manure management assist to reduce methane emissions. The pastoral communities of Banissa use naturally dedicated biomass instead of fossil fuels. This activity has minimal impact on the ecological system. Environmental vulnerability risks associated with climate change may include heatwaves, floods, storms, fire, drought, deforestation, desertification, loss of biodiversity, environmental pollution, increased human and animal diseases, water scarcity, food scarcity, environmental degradation and refugees. All these conditions of the environmental risk were well observed during the field work.

**Improvements due to regeneration**

Following an extensive drought, the area received plentiful rainfall in the months prior to the study resulting in normalisation of environmental trends. Perversely, the heavy rainfall contributed to deaths of weak and unhealthy livestock through drowning caused by flash floods, although exact numbers were not documented. Difficult conditions were very evident in the months of March and April 2010 although new vegetation and pasture condition were expected to be sufficient to last two to three months into the coming dry spell. Livestock body weight conditions improved due to pasture and browse regeneration. As a result, local livestock markets took on new life led by increased demand for animals from external markets outside Mandera district (Nairobi, etc). The principal sources of income for most families then arose from the sale of livestock and from opportunities to do casual labour. Due to the extensive drought, agro-pastoral practices and crop production had fallen to minimal levels. This was expected to change soon.
Pastoral production systems affected by the climate-change-induced pressure may be captured in the following aspects:

a. Poor quality of ecosystems that cannot support people, livestock and nature. Reduced usefulness of the ecosystems e.g. fruit, seeds, medicines, honey collection, building, and other activities.

b. Low livestock productivity, leading to reduced production and lower quality of milk, meat, skin and hides.

c. Degraded natural resources to support pastoral basic needs (food, shelter, medicine, income) with potential to bring on migration and conflicts due to reduced vegetation cover, pasture and browse, leading to the tendency to exploit bush meat and the over extraction of local fauna and flora as well as the degeneration of microbial biodiversity resources.

d. Increased water stress due to competition between people, livestock, wild animals etc. This has also reduced cultivation of dryland crops e.g. millet and sorghum.

e. Weakened soil productivity with a potential risk of desertification, threatening livelihoods and leading to the loss of indigenous skills and technologies.

f. Changed pastoralist movement systems forsaking walking for vehicle dependence (buses, matatus) brought about by higher temperatures and UV radiation, posing health risks (skin cancers).

g. Inability to initiate viable pastoralist environmental management and conservation practices due to increased use of resources and conflicts between neighbours.

h. Collapse of cultural heritage systems of pastoralist leadership.

i. Social stability challenged as the suffering of women, children, elderly and other vulnerable groups in the community increase due to abandonment brought on by forced migration in the search for food and grazing.

Pastoralist communities of the Banissa region have adapted to the effect of climate change by the following approaches:

a. Increased rural-urban migration to look for opportunities, resulting in increased numbers of economic and environmental refugees.

b. Switching tasks with more emphasis on modern education for improved livelihood, as education is today considered the best form of securing the future.

c. Mushrooming of villages and settlements to attract relief food and political attention.

d. Increased efforts to harvest rainwater through underground tanks, community pans and selling water during the dry period.

e. Establishment of self-help groups to engage in more diversified and urban business practices.

f. Establishment of green belts to feed families and support livestock during severe drought.

To mitigate the impact of climate change on pastoralist production systems, the following strategies are suggested.

a. Promote deliberate government policy to reduce pastoralist relief dependency
Kenya’s pastoralists and climate change

syndromes and instead encourage wealth creation.

b. Strengthen and improve pastoralist education systems through supported urbanisation programmes of establishing eco-villages.

c. Improve the land ownership system so as to increase socio-economic and sustainable development activities of pastoralist communities.

d. Improve capacity building and training programmes for pastoralist communities once they have settled in villages, by the encouragement of skills diversification.

e. Increase climate change information sharing between different communities so as to reduce negative impacts and vulnerability risk through enhanced adaptation strategies.

f. Increase tree planting efforts to improve land cover and reduce environmental degradation. This will also complement the government’s deliberate effort of increasing land cover to the global minimum rate of 10%.

g. Increase environmental monitoring and evaluation practices.

All these measures in combination will assist in the generation of forms of improved pastoralist livelihood through increased productivity, availability, affordability, wealth distribution, and the creation of more dynamic pastoralist production systems, markets and opportunities within the study area. Innovative participatory methods are required to effectively engage in dialogue with the pastoralist communities on the emerging issues of climate change so that adaptation measures are effectively planned and implemented. There is also a need to promote environmental conservation initiatives, including tree planting and green belt regeneration.

In order to mitigate the impacts of climate change, the study recommends that community adaptations should be based on the communities’ expressed needs and perceptions so that such initiatives can effectively reduce poverty and assure livelihood benefits, as well as reducing vulnerability to climate change and related disasters. The introduction of a programme of intensive climate change education in the communities is essential to encourage adaptation and other interventions.

The provision of adequate drugs at rural dispensaries and health centres in anticipation of outbreaks of waterborne and climate-change-related diseases in poor households in the affected areas is also essential. While saving lives is important during periods of drought, there is a need to have strategies whereby the government should review its policy on relief food in favour of a policy of food for asset creation, in line with Vision 2030 and attaining the requirements of the millennium development goals. The problem of climate change requires interdisciplinary learning through the use of existing environmental scenarios so as to allow affected communities to acquire knowledge and skills in assessing climate change risks to local ecosystems and biodiversity resources, together with strategies for their conservation.

We also need to know how our forefathers responded to climate issues using our rich sources of indigenous knowledge so as to stimulate conservation efforts in the affected areas. Such traditional practices need to be accurately documented and there is a need to link climate change, livestock productivity and food security so as to combine equally mitigation strategies for easy adaptation. This will improve the capacity of local communities to manage and utilise ecosystems and help with diversification so as to raise the quality of community life. Such strategies should involve carrying out surveys to assess existing practices and environmental conditions so that appropriate ecological interventions, for example bee farming and tree farming, can be introduced to support wealth creation.
In addition, there is a great need for revitalisation and expansion of community water harvesting pans at the various settlements with the aim of increasing water resource sustainability, so that pastoralist educational facilities are prevented from collapse when droughts occur.

Conclusion
Climate change contributes to water stress, pasture/biomass/bioenergy reduction, increased human-wildlife conflicts, unstable livestock population, loss of indigenous knowledge and traditional systems, drought, poverty-pastoralist dependency syndrome, disturbed social fibre, degraded ecological systems, disrupted pastoral-agricultural systems, flooding and earth pans siltation, increased child mortality, gender burden, economic pressure, reduced regeneration, livelihood degeneration, low productivity and increased male and female stress.

Many of these impacts can be avoided, reduced or delayed by mitigation measures using existing technology. Increased adaptation can help reduce future vulnerability of both physical and biological systems.

PHOTOGRAPHS PROVIDED BY THE AUTHOR

ABOUT THE AUTHOR
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References
Much is still unknown about the life history and ecology of African herpetofauna (reptiles and amphibians). With this understanding we set out to know the distribution of these animals in some of the least studied areas in Kenya. The Kenya Museum Society facilitated the various logistics for the study.

Vincent Muchai and Patrick Malonza, Herpetology Department, National Museums of Kenya

The study targeted Kibwezi Forest, Ngulia and Chyulu Hills in southeastern Kenya. Little work has been done in these locations, with only a few sporadic collections and few reptiles and amphibians known from the area. We set out to establish which species occur in these areas and also whether prevailing weather had any influence on their abundance.

The three survey areas

The Ngulia Hills lie within the Tsavo West National Park and the Chyulu Hills are within Chyulu Hills National Park, both under the management of the Kenya Wildlife Service, while Kibwezi Forest is under the Kenya Forest Service. All the necessary permits for the study had to be obtained from these organisations. The Kenya Museum Society facilitated the various logistics for the study.
Study sites

Ngulia Hills are rocky hills on the Precambrian basement system located within Tsavo West National Park. On the lower slopes are bushes that give way to a small moist forest at higher altitudes (above 1400m) on the hill above Ngulia Bandas, a tourist lodge. There are several seasonal streams which are sources of fresh water for both animals and the lodge.

The Chyulu Hills are a range of hills of volcanic origin with patches of hilltop moist forest. The forests are mostly on the windward side with grassland on the leeward side and at the base of the hills.

Kibwezi Forest is mainly a groundwater serviced forest on volcanic lava rocks located next to Kibwezi town, stretching across Mombasa road to border Chyulu Hills National Park on the west. It has a huge spring, groundwater forest and swamp with several dams at Umani Springs, a source of water for Kibwezi, Makindu and Mtito Andei towns.

Kibwezi Forest and Chyulu Hills border human settlement and there is a lot of pressure from people in search of grazing land and water during the dry season. These have negative impacts on the area's biodiversity. Kibwezi Forest borders human settlement and there is a sustainable use programme between the locals and the Kenya Forest Service. Umani Springs Lodge was being constructed during the surveys.

Methods

Sampling of reptiles and amphibians was carried out using the time limited searches (TLS) method. This involved intensively searching under rocks and logs, on trees and stems, in holes, rocks and their crevices, and under debris, including digging in suitable micro-habits for burrowing species. The animals recorded in each half hour were recorded as one TLS. This sampling method was supplemented with opportunistic sampling where any reptile or amphibian observed was noted, caught and if collected carried using collecting bags. During night sampling, maglite torches were used to provide light and for sampling in wetlands nets were used to scoop.

Recording and preserving specimens

Only representative specimens were carried as museum specimens and all others were recorded and/or photographed.
and then released. Collected specimens were preserved in 10% formalin after humane killing using euthatal for reptiles and chlorobutanol for amphibians. They were later transferred to 70% alcohol for permanent storage.

**Reactions from the local population**

The two trips totalling 18 days attracted interesting reactions from the local communities and rangers, who found the study quite fascinating. It took a lot of explanation to calm their interest. In Kibwezi Forest construction workers at Umani Springs Lodge were really amused by our work. People were all around us when we were preserving our museum specimens.

Myths and misinformation about herpetofauna are a major cause of the awe and dread that people have. Many people fear reptiles and especially snakes, due to the general assumption that all snakes are venomous and should be killed on sight. This has a very significant bearing on rare species, as even those totally harmless may end up being killed. Snakes that are dangerous could be easily wiped out as there are normally not many within a particular ecosystem.

The studies took place in September 2009 (dry season) and January 2010 (wet season). The dry season was part of the prolonged dry spell which had ravaged the country all over, brought about by two years of inadequate rainfall. The wet season study was after very heavy rains and green vegetation had grown. This was not an extreme rainy season since there were no floods in the areas we surveyed.

During the dry season the land was bare and many animals had moved higher up the mountains, especially in Ngulia and Chyulu Hills, looking for water. Finding carcasses of animals such as buffaloes and antelopes that died after slipping off the rocks was a common feature. This was in contrast to the wet season when finding large animals was difficult as many had now settled on the lowlands.

More species were recorded in the wet season compared to the dry season (see table overleaf), despite the dense vegetation cover. This can be attributed to the improved food availability and lower temperatures as these animals are ectothermic (cold-blooded), becoming sluggish in cool weather and therefore easier to catch. Amphibians also breed in the wet season hence the reason for their numbers being high. Most of the species were first records as there was little prior work done in these areas.
Table 1 The different species, their common names, where and during which season they were found

<table>
<thead>
<tr>
<th>Species</th>
<th>Common name</th>
<th>Locality</th>
<th>First record</th>
<th>Dry</th>
<th>Wet</th>
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Other than the species found, there were reports of *Naja nigricollis* (black-necked spitting cobra) and *Dendroaspis angusticeps* (green mamba) in the Chyulu Hills and Kibwezi Forest. One notable species previously recorded in both locations but which we did not find during our survey was *Bradypodion* (*Kinyongia*) *tavetanum* (Mount Kilimanjaro two-horned chameleon). In many areas, rare chameleons are very elusive and sampling at the right time and season is necessary to be able to find them.

The species diversity in the area indicates a great biodiversity hotspot which, with more intense surveying, would yield more species.

The table opposite shows the different species, their common names, and where and during which season they were found.

**PHOTOGRAPHS PROVIDED BY THE AUTHORS**

### References


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<td>Scheffler’s puddle frog</td>
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<tr>
<td><strong>Psammophis biseriatus</strong></td>
<td>Link-marked sand snake</td>
<td>Ngulia</td>
<td>•</td>
</tr>
<tr>
<td><strong>Ptychadena anchietae</strong></td>
<td>Anchieta’s ridged frog</td>
<td>Ngulia, Kibwezi</td>
<td>•</td>
</tr>
<tr>
<td><strong>Ptychadena mascareniensis</strong></td>
<td>Mascarene ridged frog</td>
<td>Ngulia, Kibwezi</td>
<td>•</td>
</tr>
<tr>
<td><strong>Python natalensis</strong></td>
<td>South African rock python</td>
<td>Kibwezi</td>
<td>•</td>
</tr>
<tr>
<td><strong>Tomopterna cryptotis</strong></td>
<td>Cryptic sand frog</td>
<td>Ngulia</td>
<td>•</td>
</tr>
<tr>
<td><strong>Xenopus muelleri</strong></td>
<td>Muller’s clawed frog</td>
<td>Kibwezi</td>
<td>•</td>
</tr>
</tbody>
</table>

ABOUT THE AUTHORS

Vincent Muchai has a MSc degree in Biodiversity and Conservation Biology from the University of the Western Cape in South Africa. He is a research scientist in the Herpetology Section, National Museums of Kenya, and has been involved in herpetological research in Kenya and Uganda.

Dr Patrick K Malonza is a senior research scientist and also the head of NMK’s Herpetology Section. He holds a PhD in Natural Science from the University of Mainz, Germany. He has been doing research in herpetology since 1996 and his interest is mainly taxonomy, zoogeography, behavioural ecology, conservation and sustainable use for community development.
Kenya is home to many cultural resources. These are places or materials that have historic value, examples of which include archaeological sites, historical monuments and buildings, burial places, rock shelters, rock art sites and cultural landscapes. A country’s archaeological heritage, in particular archaeological sites, is finite and non-renewable. Its destruction is, therefore, loss of irreplaceable information about the past. Since archaeology is useful in corroborating other sources of history, tangible cultural heritage ought to be preserved and viewed in the wider social context as representing the past cultures of a people.

Because archaeological remains represent an important source of information about the distant past, their conservation in the form of sites and cultural landscapes should have a place on the national agenda. But there is need for specific efforts towards this endeavour, together with personnel and legislation appropriate to achieve this goal. This article examines efforts to conserve the archaeological heritage as a cultural resource found in a protected area — Tsavo National Park.
The concept of cultural resource management is relatively new in Kenya. Traditionally, most archaeological research has been skewed towards such themes as stone age and iron age technology, based on excavation as the main data acquisition technique, with supplementary ethnographic information and anthropological studies.

The signs of past human activity take both material and immaterial form. Because archaeological sites and cultural environments are irreplaceable sources of information about past human activities, proper management of these resources is critical, considering the threats stemming from development-oriented activities. Whether the activities are spatial such as the construction of hotels, lodges and dams, or linear such as road construction and upgrading, these projects as infrastructural development (both new and old) pose risks to resources in protected areas such as Tsavo National Park.

The significance and value of the cultural heritage can be assessed at different levels — local, regional, national and international. These values can be conflicting as a result of different cultural backgrounds, indigenous versus local interests, and others. Depending on whether the heritage was used for, say, cultural practices or religious observances, it may carry community and/or national historical significance.

**SWOT analysis**

Management of archaeological heritage in protected areas is a matter of many interrelated issues, all of which reinforce each other. In order to gain broader understanding of the problems bedevilling heritage management in protected areas, it is helpful to consider the Strengths, Weaknesses, Opportunities and Threats (SWOT) model. The SWOT framework was first advanced in the late 1960s and is useful in complex strategic situations. Borrowed from the discipline of business, especially marketing, a SWOT analysis considers both internal and external factors that affect the performance of an enterprise. The internal factors of a firm are summarised as strengths or weaknesses. In external analysis, opportunities or threats can arise when changes occur in the external situational or environmental factors.

After completing both internal and external analysis, a SWOT profile is generated and used as the basis for setting goals, formulating strategy and implementation. When acquiring the inputs before formulating a strategy using the SWOT profile, it is important to obtain information from many sources, especially stakeholders. This is meant to improve the quality and to avoid relying on information from a single viewpoint.

Using SWOT analysis, both strengths and weaknesses can be identified in relation to the management of archaeological heritage in parks as protected areas. One strength is that there exists a law which aims at the conservation of the archaeological heritage.

Several weaknesses can also be identified. One of these is the lack of site inventories indicating site location, site types and their archaeological potential in Tsavo. The other weakness is a lack of personnel with knowledge of archaeological heritage management (AHM) working at Kenya Wildlife Service (KWS) within the park.

In Tsavo, several issues emerge which can be seen as a threat to the conservation of cultural resources. One external factor is the failure by the National Museums of Kenya (NMK) to enforce existing legislation inside the park. Not a single archaeological site is maintained through fencing as is required by law. Even those that are found outside the park in the surrounding areas are not properly conserved and as such the public does not know about or appreciate the importance of these sites. NMK has equally not trained or seconded personnel to work in the park and spearhead AHM in protected areas.

The other external factor is the lack of an explicit law on conservation of cultural resources in protected areas. The law does
not clearly state whether it is NMK or KWS that should conserve sites within the designated park area. But since the park is governed by the KWS Act, conservation of wildlife takes precedence over protection of the archaeological heritage.

Preservation of cultural resources in protected areas requires adopting a multifaceted approach. The land which national parks occupy is held in trust on behalf of the people who are native to the area. The archaeological sites existing in such protected areas are the history of those who lived there in earlier periods. These sites, therefore, belong to the people and need to be considered in the social context. The custodians of the history of these sites are those presently living in the area, who also provide guardianship of the sites.

**Over 50 sites in Tsavo**

From the site inventory in the National Museums of Kenya, approximately 50 archaeological sites have been surveyed in Tsavo National Park. This number comprises sites whose culture/function type has been established (see tables 1 and 2 on the next page).

According to the inventory, these sites include iron working sites, cairn burials, rock shelter sites, and open-air sites. In addition other types of sites have been identified in the area around Tsavo. These include grinding hollow complexes and ancestral shrines of human skulls that have been called cranial display niches (CDNs) (Kusimba and Barut-Kusimba 2008:18).

There is generally a high density in the lower part of Tsavo East along the Athi River (Sabaki). A majority of the open-air sites are located in such places as near/around Buchuma water hole, Mudanda rock area and Aruba Dam. Rock shelters are located in Rukinga, Maroa, Maungu, Garawa, Mzinga and Kisio while cairns have been found in Lion Hill in Tsavo East.

In Mudanda area, many sites have lithic artefacts whose cultural affiliation is Middle Stone Age. In Aruba location, sites are located around Buchuma water hole. These sites have lithic artefacts of the Middle Stone Age period, fashioned from quartz material. Such sites are found at Ndatani, Charnoi, Buchuma and Kono Mojo. There are also Iron Age sites found in such areas as Sobo, Mwambaranga, Mghange, Mwototo and Paranga. These sites contain a variety of artefacts including pottery, bones, baked clay, slag, lithic artefacts, obsidian fragments and tuyere. This reveals that Tsavo has a lot of archaeological potential in terms of revealing information about the past history of the people who lived in the area. Given the diversity of the sites in terms of functional type, the Tsavo area has a wealth of historical and prehistoric significance.

**Conflicting legislation**

The archaeological heritage in protected areas is documented at NMK. The sites can be located and identified using archaeological survey maps from previous surveys. In order to manage a site or place you must know it exists, where it is and what sort of site it is. Although this information may look inadequate in terms of providing baseline data needed for conservation, it remains an essential early step in knowing our heritage. The begging question therefore is how does NMK implement the Antiquities and Monuments Act in protected areas that are governed by the KWS Act? Is the Act a mere toothless dog that cannot bite? How can the archaeological heritage in protected areas best be conserved? One important strength is that the Antiquities and Monuments Act protects all sites inside and outside protected areas.

The problems undermining the effective management of cultural resources in protected areas are several. They range from legislative conflicts between the NMK and KWS Acts, to practical issues of
### Table 1  Archaeological sites and threats in Tsavo National Park

<table>
<thead>
<tr>
<th>Site name</th>
<th>SASES</th>
<th>Function/ culture</th>
<th>Map no. and coordinators</th>
<th>Location</th>
<th>Surface materials</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ndatani 1</td>
<td>HdJs4</td>
<td>Early Stone Age</td>
<td>184/3-540724</td>
<td>Ndatani</td>
<td>Core and chopper</td>
<td>Expansion and grading of Lugard Falls – Mbololo road</td>
</tr>
<tr>
<td>Mudanda rock</td>
<td>HeJs2</td>
<td>Middle Stone Age</td>
<td>190/1-472492</td>
<td>Mudanda</td>
<td>Lithic artefacts</td>
<td>Tourist activities and large herds of wild game</td>
</tr>
<tr>
<td></td>
<td>HeJs4</td>
<td>Middle Stone Age</td>
<td>190/1-572672</td>
<td>Mudanda</td>
<td>Lithic artefacts</td>
<td>Expansion and grading of Mbololo – Sala road</td>
</tr>
<tr>
<td></td>
<td>HeJs6</td>
<td>Middle Stone Age</td>
<td>190/1-549683</td>
<td>Mudanda</td>
<td>Lithic artefacts</td>
<td>Expansion and grading of Mbololo – Sala road</td>
</tr>
<tr>
<td></td>
<td>HeJs12</td>
<td>Middle Stone Age</td>
<td>190/1-640610</td>
<td>Mudanda</td>
<td>Lithic artefacts</td>
<td>Expansion and grading of Lugard Falls – Voi road</td>
</tr>
<tr>
<td></td>
<td>HeJs1</td>
<td>Middle Stone Age</td>
<td></td>
<td>Mudanda</td>
<td>Lithic artefacts including stone tools, waste etc</td>
<td>Tourist activities and large herds of wild game</td>
</tr>
<tr>
<td></td>
<td>HeJs7</td>
<td>Middle Stone Age</td>
<td></td>
<td>Mudanda</td>
<td>Lithic artefacts</td>
<td>Tourist activities and large herds of wild game</td>
</tr>
<tr>
<td></td>
<td>HeJs9</td>
<td>Middle Stone Age</td>
<td></td>
<td>Mudanda</td>
<td>Lithic artefacts</td>
<td>Tourist activities and large herds of wild game</td>
</tr>
<tr>
<td></td>
<td>HeJs13</td>
<td>Middle Stone Age</td>
<td></td>
<td>Mudanda</td>
<td>Lithic artefacts</td>
<td>Tourist activities and large herds of wild game</td>
</tr>
<tr>
<td></td>
<td>HeJt1</td>
<td>Middle Stone Age</td>
<td>190/2-814491</td>
<td>Sobo</td>
<td>Flakes</td>
<td>Expansion and grading of Voi – Lugard Falls/ Sala road</td>
</tr>
<tr>
<td></td>
<td>HeJt4</td>
<td>Middle Stone Age</td>
<td>190/2-982642</td>
<td>Sobo</td>
<td>Lithic artefacts</td>
<td>Expansion and grading of Sala – Lugard Falls road</td>
</tr>
<tr>
<td></td>
<td>HeJt5</td>
<td>Middle Stone Age</td>
<td>190/2-998654</td>
<td>Sobo</td>
<td>Eroded core stones</td>
<td>Expansion and grading of Sala – Lugard Falls road</td>
</tr>
<tr>
<td></td>
<td>HeJt7</td>
<td>Middle Stone Age</td>
<td>190/2-914634</td>
<td>Sobo</td>
<td>Core stones</td>
<td>Expansion and grading of Sala – Lugard Falls road</td>
</tr>
<tr>
<td></td>
<td>HeJt8</td>
<td>Middle Stone Age</td>
<td>190/2-828615</td>
<td>Sobo</td>
<td>Lithic artefacts</td>
<td>Expansion and grading of Sala – Lugard Falls road</td>
</tr>
<tr>
<td>Voi 1</td>
<td>HfJs3</td>
<td>Middle Stone Age</td>
<td>190/3-567294</td>
<td>Voi</td>
<td>Lithic artefacts</td>
<td>Grading of airstrip runway</td>
</tr>
<tr>
<td>Voi II</td>
<td>HfJs4</td>
<td>Middle Stone Age</td>
<td>190/3-564294</td>
<td>Voi</td>
<td>Lithic artefacts</td>
<td>Grading of airstrip runway</td>
</tr>
<tr>
<td>Buchuma Water Hole (east side)</td>
<td>HfJt8</td>
<td>Late Stone Age</td>
<td></td>
<td>Arubi</td>
<td>Lithic artefacts</td>
<td>Tourist activities and wild game</td>
</tr>
<tr>
<td>Buchuma Water Hole (NW quarter)</td>
<td>HfJt9</td>
<td>Late Stone Age</td>
<td></td>
<td>Arubi</td>
<td>Lithic artefacts</td>
<td>Tourist activities and wild game</td>
</tr>
<tr>
<td>Buchuma Water Hole (west side)</td>
<td>HfJt10</td>
<td>Late Stone Age</td>
<td></td>
<td>Arubi</td>
<td>Lithic artefacts</td>
<td>Tourist activities and wild game</td>
</tr>
<tr>
<td>Buchuma Water Hole (west side)</td>
<td>HfJt11</td>
<td>Late Stone Age</td>
<td></td>
<td>Arubi</td>
<td>Lithic artefacts</td>
<td>Tourist activities and wild game</td>
</tr>
<tr>
<td>Buchuma Water Hole (NE quarter)</td>
<td>HfJt12</td>
<td>Late Stone Age</td>
<td></td>
<td>Arubi</td>
<td>Lithic artefacts</td>
<td>Tourist activities and wild game</td>
</tr>
</tbody>
</table>
### Table 2  Other sites in Tsavo and Taita Hills (Source: NMK inventory)

<table>
<thead>
<tr>
<th>Site name</th>
<th>SASES</th>
<th>Function/culture</th>
<th>Map no. and coordinators</th>
<th>Location</th>
<th>Surface materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chamoi</td>
<td>HeJt1</td>
<td>Middle Stone Age</td>
<td></td>
<td>Chami</td>
<td>Lithic artefacts</td>
</tr>
<tr>
<td></td>
<td>HeJt2</td>
<td>Middle Stone Age</td>
<td></td>
<td>Sobo</td>
<td>Lithic artefacts</td>
</tr>
<tr>
<td></td>
<td>HfJt6</td>
<td>Iron Age</td>
<td>189/4-221296</td>
<td>Taita Hills</td>
<td>Pottery</td>
</tr>
<tr>
<td></td>
<td>HfJt7</td>
<td>Iron Age</td>
<td>189/4-222295</td>
<td>Taita Hills</td>
<td>Pottery, tuyere</td>
</tr>
<tr>
<td></td>
<td>HfJt8</td>
<td>Iron Age</td>
<td>189/4-224296</td>
<td>Taita Hills</td>
<td>Obsidian fragments</td>
</tr>
<tr>
<td></td>
<td>HfJt11</td>
<td>Iron Age</td>
<td>189/4-227231</td>
<td>Taita Hills</td>
<td>Pottery, tuyere</td>
</tr>
<tr>
<td></td>
<td>HfJt12</td>
<td>Iron Age</td>
<td>189/4-219298</td>
<td>Taita Hills</td>
<td>Pottery, slag</td>
</tr>
<tr>
<td></td>
<td>HfJt14</td>
<td>Iron Age</td>
<td>189/4-218288</td>
<td>Taita Hills</td>
<td>Pottery, bones, quartz</td>
</tr>
<tr>
<td></td>
<td>HfJt16</td>
<td>Iron Age</td>
<td>189/4-216291</td>
<td>Taita Hills</td>
<td>Pottery, quartz materials</td>
</tr>
<tr>
<td></td>
<td>HfJt23</td>
<td>Iron Age</td>
<td>189/4-256279</td>
<td>Taita Hills</td>
<td>Pottery</td>
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<tr>
<td></td>
<td>HfJt24</td>
<td>Iron Age</td>
<td>189/4-249285</td>
<td>Taita Hills</td>
<td>Slag, pottery, tuyere</td>
</tr>
<tr>
<td></td>
<td>HfJt25</td>
<td>Iron Age</td>
<td>189/4-252289</td>
<td>Taita Hills</td>
<td>Slag, pottery, tuyere, fum</td>
</tr>
<tr>
<td></td>
<td>HfJt29</td>
<td>Iron Age</td>
<td>189/4-251274</td>
<td>Taita Hills</td>
<td>Pottery</td>
</tr>
<tr>
<td>Mwambaranga RS</td>
<td>HfJr32</td>
<td>Iron Age</td>
<td>189/4-294204</td>
<td>Taita Hills</td>
<td>Beads, slag, sherds, litechic</td>
</tr>
<tr>
<td>NdokomONYI Mines</td>
<td>HfJr34</td>
<td>189/4-174320</td>
<td>Taita Hills</td>
<td>86 lithic artefacts</td>
<td></td>
</tr>
<tr>
<td>Kishushi NE</td>
<td>HfJr35</td>
<td>189/4-177357</td>
<td>Taita Hills</td>
<td>11 lithic artefacts</td>
<td></td>
</tr>
<tr>
<td>Kishushi SW</td>
<td>HfJr36</td>
<td>189/4-171352</td>
<td>Taita Hills</td>
<td>Lithic artefacts</td>
<td></td>
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<tr>
<td></td>
<td>HfJr37</td>
<td>189/4-356225</td>
<td>Taita Hills</td>
<td>Lithic artefacts</td>
<td></td>
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<tr>
<td>Mgange</td>
<td>HfJr42</td>
<td>Iron age</td>
<td>189/4-228246</td>
<td>Taita Hills</td>
<td>Slag, 2 ceramic sherds</td>
</tr>
<tr>
<td>Paranga 1</td>
<td>HfJr50</td>
<td>189/4-333338</td>
<td>Taita Hills</td>
<td>2 quartz flakes, 8 potsherds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HfJr51</td>
<td>189/4-333335</td>
<td>Taita Hills</td>
<td>7 potsherds</td>
<td></td>
</tr>
<tr>
<td>Mwototo II</td>
<td>HfJr52A</td>
<td>Iron Age</td>
<td>189/4-318318</td>
<td>Taita Hills</td>
<td>Pottery, tuyere, slag, litechic</td>
</tr>
<tr>
<td>Paranga III</td>
<td>HfJr53</td>
<td>Iron Age</td>
<td>189/4-318318</td>
<td>Taita Hills</td>
<td>Lithic artefacts</td>
</tr>
<tr>
<td>Kono Moju Ridge</td>
<td>HfJr2</td>
<td>Late Stone Age</td>
<td></td>
<td>Aruba</td>
<td>Lithic artefacts</td>
</tr>
<tr>
<td>Aruba Dam I</td>
<td>HfJt3</td>
<td>Middle Stone Age</td>
<td>Aruba</td>
<td>Core – stones, retouched tools</td>
<td></td>
</tr>
<tr>
<td>Aruba Dam II</td>
<td>HfJt4</td>
<td>Middle Stone Age</td>
<td>Aruba</td>
<td>Lithic artefacts</td>
<td></td>
</tr>
<tr>
<td>Aruba Knoll I</td>
<td>HfJt5</td>
<td>Middle Stone Age</td>
<td>Aruba</td>
<td>Lithic artefacts</td>
<td></td>
</tr>
<tr>
<td>Aruba Dam spill way</td>
<td>HfJt6</td>
<td>Middle Stone Age</td>
<td>Aruba</td>
<td>1 pebble, 1 obsidian, 1 lava</td>
<td></td>
</tr>
<tr>
<td>Aruba Dam knoll II</td>
<td>HfJt7</td>
<td>Middle Stone Age</td>
<td>Aruba</td>
<td>Lithic artefacts</td>
<td></td>
</tr>
<tr>
<td>Aruba Dam lake shore</td>
<td>HfJt8</td>
<td>Middle Stone Age Pastoral Neolithic</td>
<td>Aruba</td>
<td>Lithic artefacts, glass fragments</td>
<td></td>
</tr>
</tbody>
</table>
conservation that include salvage excavation of archaeological sites under threat of destruction, storage and inventorisation of archaeological materials, and personnel training.

Methods of conservation

In cultural resource management, it is argued that archaeological excavation is in itself destructive and cannot, therefore, constitute a method of site conservation. Preservation of vital stratigraphic layers of the site in situ is recommended instead. This is acceptable in principle. However, some exceptional cases may warrant the use of excavation as an alternative means to conserve the sites. This represents another level of preservation since archaeological excavations will yield most of the data from sites that would otherwise be lost or damaged. For instance, many infrastructure developments and tourist-oriented activities threaten sites in national parks. The information obtained from excavation of sites would then be well documented and preserved.

The International Council on Monuments and Sites (ICOMOS) Charter advises on the excavation of sites and monuments threatened by development, land-use change, tourism or natural deterioration. Non-destructive techniques are preferred and total excavation should only be used in demanding cases and after thorough considerations have been made. The conservation and maintenance of archaeological heritage should be carried out on a selective basis. Priority for conservation in protected areas should be given to those sites located near or around spatial and linear development projects.

The maintenance and preservation of sites in national parks should be an ongoing process. This can yield best results if checklists about the entire archaeological heritage are used to ascertain the real status of the cultural resources after a specific period of time. Given the many threats posed to cultural heritage in parks, these checklists will go a long way to identify sites that are under real threat of destruction, including threats stemming from natural deterioration forces such as erosion.

Sites may also be accidentally discovered in the process of carrying out development projects. In such cases, efforts must be quickly put in place either to excavate the site or save it from total destruction. Excavation here will be used as a last resort after exhausting all other possible means to conserve it. Artefacts and other useful data will then be well documented and kept in site museums. When site museums are set within parks, they may well be an extra attraction for visitors and hence generate funds for conservation in the maxim of sustainable cultural tourism.

The history of these sites would be reconstructed to provide information for both tourists and other members of the public who “own” the heritage. Hopefully, this will help change the attitude of members of the public so that they start to appreciate the value of the heritage and archaeology as a subject. Helping the public understand the importance of archaeology in providing insights into our past history will narrow the gap between the public and the archaeological society. Publishing the field reports under a different maxim of “popularizing archaeology” would be an important step.

NMK would then select the means of presenting the history and cultural heritage from the site(s) to the public. However, care and caution must be taken with cultural materials that may appear fragile hence constituting a threat to the resource. In such instances, information about the location of such sites may be withheld or
if the use of the site to benefit the public poses a threat, such existing uses may either be discontinued or modified to remove the threat. It must also be noted that the use of heritage sites to raise funds for conservation should not dominate the overall goal of conservation, such that it compromises the continuity of the heritage itself.

KWS and NMK have entered into agreements about conservation several times. However, these memoranda appear to be only interested in conservation of wildlife and more so plant and animal life. For instance, one such memorandum under the Project Mbeju Expedition Report was signed between KWS and NMK in 2006. The project particularly targeted conservation of plant biodiversity in the coastal forests of eastern Africa, integrating *ex situ* and *in situ* conservation in the Shimba Hills, Kwale District, Kenya. Two other memoranda were signed in 2008, one on the Strategy for Conservation and Management of Commercial Aloe Species in Kenya and the other on Primatology, Wildlife Ecology and Conservation. The fact that NMK does not seem keen to enter into any agreements with KWS on conservation of the archaeological heritage in national parks is tragic. As things are now, the National Museums and Heritage Act, 2006, will remain ineffective at least as far as cultural resources found in parks as protected areas is concerned.

**Databases needed**

An up-to-date database of existing archaeological sites in protected areas is needed for scientific study and research. Such an inventory would include details such as names and/or location of sites, site types, surface collections, function type, survey maps among others. These data will form a source of valuable information about change in the cultural heritage over time, much of which cannot be easily detected from the evidence at a place. These inventories must not only be readily available but also easily accessible at NMK and KWS offices for other groups with interest in conservation.

According to the ICOMOS 1990 charter on archaeological heritage management, the protection of cultural heritage must be based upon the fullest possible knowledge of its extent and nature. A general survey of archaeological resources is, therefore, an essential working tool in developing strategies for the protection of the archaeological heritage as a basic requirement for its proper conservation and management.

To achieve the best results, the process of conservation calls for professional qualifications by all parties concerned. A multidisciplinary approach would be ideal if effective conservation of the heritage site is to be achieved. The objective of academic training in archaeology must consider training personnel on matters beyond just excavation techniques, to include issues ranging from conservation policies to *in situ* site conservation. In all institutions involved in the conservation of cultural property, adequate and trained staff is a prerequisite for a successful programme. Lack of technical knowledge and the use of outdated methods can frequently do more harm than good (Daifuku 1968). The conservation of cultural heritage in protected areas is not an easy task to accomplish. The problems of weak institutional capabilities, lack of appropriate resources and the isolation of many culturally essential sites are compounded by the general lack of awareness of the value of cultural heritage conservation (Marc 1994). In Kenya, the situation is worsened by the fact that there is no trained archaeologist working for KWS to oversee conservation of the finite heritage in parks.

Thus, as university curricula are being broadened to include aspects of conservation archaeology, perhaps this will redeem the situation, and the memorandum of understanding signed between KWS and NMK, it is hoped, will bring some positive results. Archaeology and cultural resource
management (CRM) are not separate as assumed by many people. If anything, CRM is another form of practising archaeology with emphasis on conservation and better use of the archaeological database (Folorunso 1996). However, many courses offered in CRM in African countries are inadequate because they cover conservation too broadly. In addition, many museums do not have an archaeological conservator on their staff.

For many years, courses in archaeology in Kenya at university level dwelt on themes other than CRM. This partially explains why there is a vacuum in proper management of the cultural heritage both at NMK and KWS. Most university staff trained in archaeology are busy teaching and entangled in administrative roles with little time to go out in the field and get involved in active conservation. The situation becomes critical due to lack of funds to enable the few trained staff to carry out fresh surveys and update the existing inventories.

Conservation of sites in protected areas goes beyond mere contextual site conservation and restrictions on carrying out excavation. It calls for broader perception of the problem beyond the current trend where most conservation efforts are directed towards ancient buildings, ruins and monuments. The training of KWS staff should include components of cultural resource management and especially the awareness of the importance of the archaeological heritage in national parks.

In order to achieve meaningful results, cultural heritage conservation must be integrated in the planning system and process in parks. To address the current impasse, NMK must take a leading role and take the first initiative towards heritage conservation. Both private and public initiatives play a significant role in developing effective policy on conservation of the cultural heritage. Through promotion of tourism, the material found in these sites will be an alternative way of culturally empowering local communities around protected areas in a more tangible way.

Interpretation and presentation of archaeological information regarding the cultural heritage will enable information about archaeology to reach the public since protected areas are in most cases inaccessible. Both formal and informal methods may be used. For instance site tours could be organised for local communities; displaying some of the artefacts in strategically located site museums; availing publications with histories of these sites to members of the surrounding community and printing posters and brochures containing information on the sites and archaeology in general and strategically displaying them to promote awareness. Under this new arrangement, the general public will interact with archaeology. Tripartite effective communication strategies must be developed among archaeologists as scientific researchers, NMK and KWS.

Cultural heritage conservation is a multifaceted concept that takes into account the landscape for the cultural property (both tangible and intangible) and the interest of all concerned groups. It also involves upholding all the values ascribed to the heritage by all interested groups and affected parties (Ndoro 2001). The prevailing conditions of the heritage will determine specific solutions for the site(s). A multi-sectoral approach will be preferred. The process of archaeological impact assessment before executing development projects would take several stages. First, a survey would identify the sites and assess their importance. This would be followed by “rescue” excavation to safeguard the site through excavation or surface collection of artefacts. A possible
third phase would involve changing the plans for the development to avoid impacting one or more archaeological sites (Deacon 1996).

Other areas of concern should involve maintaining international contacts and exchanging views on the latest developments in CRM. Logistical support should be provided for staff to attend international meetings organised by such bodies as the International Council of Museums (ICOM), the International Institute of Conservation (IIC) and ICOMOS. This will help improve the skills and technical know-how on conservation of cultural property and should be seen as a common goal for both NMK and KWS as stewards in conservation. True preservation means more than just conserving the individual monument or building. It includes the preservation of the landscape around the building, the preservation of the contextual archaeological site below that landscape, and the preservation of groups and clusters of buildings, monuments and sites (Folorunso 1996). Total in situ conservation is, therefore, the ideal way of securing the future of sites in protected areas.

**Code of ethics in conservation**

As a profession, CRM will set its own formal code of ethics so as to ensure high standards. This, in turn, will lead to the formation of a “conscience society” within the profession to keep a check on major activities of the profession, for example, how it utilises its resources, its effects in the society and bringing the attention of all members of the society to basic issues related to the profession (Mayer-Oakes 1989). The material cultures are in many instances kept, displayed and stored in NMK headquarters with the exception of a few prehistoric sites and regional museums outside Nairobi. This practice makes it difficult for the general public to directly appreciate archaeology. McGimsey (1972) stresses that unless the public is made to appreciate the importance of archaeological sites and the information they represent, only piecemeal achievements can be realised in terms of conservation and protection of the sites. More information that may broaden public understanding about the cultural heritage is embedded in traditional formal sources.

It is important to identify the nature and interest of the public regarding the cultural heritage. A change in legislation alone cannot give satisfactory answers to conservation-based issues in the country. The public must be able to show interest in preservation and protection of the heritage otherwise legislation will remain ineffective. In cases where the heritage is used as a cultural attraction, this will involve the use of means which are least destructive to the heritage to accomplish this objective. The ideal will be to promote in situ protection.

The Antiquities and Monuments Act, Cap 215 has been revised and is now referred to as the National Museums and Heritage Act, 2006. This new piece of legislation does not radically depart from the previous Act. As a matter of fact only piecemeal changes have been introduced and it does not seem to mitigate threats to cultural heritage in fundamental ways. As in the previous Act, all antiquities lying in or under the ground or on the surface of any land are covered by law as the property of the government. This is a major step in terms of revision of the previous legislation since the National Museums and Heritage Act, 2006, is supreme over the KWS Act which governs activities in parks as protected areas. Enforcement of the new act, therefore, will at least offer protection to the heritage and resolve conflicts that existed between the old piece of legislation and the KWS Act. Heritage wardens need to come out strongly to enforce the provision of this new Act.
Further still, the new legislation expressly mandates the National Museums to enter into an agreement with such authorities as KWS so as to provide guardianship to heritage sites such as those within parks. Enforcement of agreements for protection of monuments and other cultural resources is also vested with the National Museums. Although the new Act does not explicitly provide for mandatory archaeological impact assessments to be conducted for any development project, under Section 41(2) any owner or occupier of a monument who intends to build is prohibited from any act that could destroy the cultural heritage. This involves moving to the High Court to grant an injunction to restrain that development or other action that may negatively impact on the heritage.

Kenya is not the only country in Africa lacking a clear cultural resource management policy. Several countries including South Africa, Ethiopia, Malawi and Tanzania, among others, seem to share similar experiences with very little success. These countries have jurisdiction over some or all the archaeological resources but issues such as lack of statues to adequately protect cultural resources continue to pose a challenge.

Whereas the National Museums and Heritage Act, 2006, does not address all problems bedevilling the archaeological heritage in Kenya, it at least fills some gaps that had existed in the previous legislation about cultural heritage found in protected areas.

References


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Whence — and whither — the Gabra?

Cynthia Salvadori

The Gabra are the most truly nomadic pastoral people in Kenya, constantly on the move, their portable homes carried by their camels, to find browsing, grazing and water for their camels and flocks of sheep and goats. Living in one of the harshest areas of the country where few others dare tread, they have been able to follow their own path, adapting only those facets of other cultures that suit them.

Although numbering hardly 30,000, the Gabra are divided into five distinct clan groups or phratries, the Algaana, Galbo, Gara, Odoola and Sharbana, each one with its own mobile ‘capital’, the yaa where its ritual leaders live. I had gone to the Yaa Sharbana, one of those five ritual villages, then camped on the lava-stone plain west of the Hurri Hills, about 20 km due east along the new road from Balessa. Within the huge circle of 73 mat-covered dwellings was the naabo, the place of prayer with its small sacred fire that must never be

A man drinks from his gorfa during Almado, the Gabra New Year celebration. The white robes and turbans worn by Gabra d’abeela [ritual elders] show the influence of Islam.
allowed to go out, which travels with the yaa. Outside the circle, to the west, was a mosque. The mosque, like the naabo, was no more than an ephemeral space encircled by thorn branches.

What was interesting was that the mosque had initially been placed within the yaa. That was in 2001, when the yaa was camped near the Laga Balal, the river that flows, in spates, when it rains in the southern Ethiopian highlands. It would have been the first one ever to be situated in a Gabra yaa — at least for several hundred years, since the naabo itself was, perhaps, a mosque.

I had come to know the Gabra in 1997 when I was helping the late Father Paul Tablino translate and revise his descriptive monograph *The Gabra, Camel Nomads of Northern Kenya*. When he wrote the original Italian version he had little knowledge of Islam, but as we worked on the book, we began to pay more attention to the traces of ancient Islamic influence in Gabra culture, partly due to the work of the prominent German ethnologist Günther Schlee, partly due to our own observations.

Schlee’s meticulous research had led him to conclude that prior to the 16th century Oromo1 expansion, in the region between Lake Turkana and the Juba River, there lived a population of camel pastoralists who shared a common culture and a common language (or dialects of a common language), similar to the present Somaloid languages, Rendille and Somali. Schlee called that culture Proto-Rendille-Somali (PRS) “after the westernmost and the easternmost of its heirs”, with its in-between descendants being the present Garre, Ajuran, Sakuye and Gabra. The characteristic elements of this reconstructed PRS culture were: nomadic pastoralism based on camels; the Somaloid language; the use of both solar and lunar calendars, with associated ceremonies; and indisputable evidence of Arabic-Islamic influences, specifically in the names of the months and the days of the week, and in the dikira, religious songs.

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1 Oromo: the name given to the people who originally occupied lands in Somalia and whose members now live in parts of eastern Africa — especially in Ethiopia, where they are the second-largest population group behind the Amhara, and in Kenya.
The observances themselves differ in form and context. We may take this as support for our assumption that the proto-Rendille-Somalis, before they split into the present ethnic groups, had absorbed some features of Islamic culture but did not have Islam as a central part of their ritual or self-definition. (Schlee 1989, p.67.)

Islam did not arrive on the coast of East Africa much before 1000 AD, and it must have been appreciably later before Islamic elements became established in the interior. Because the presence of the PRS culture near the present Rendille area is indicated by archaeological excavations, because camels seem to have arrived in the area around 1200–1300 AD, and because of the clear evidence of Islamic influences in the PRS culture, Tablino dates the beginning of the PRS culture to around 1200 AD. The end of the PRS culture — or rather its Boranization — began with the great Oromo expansion out of Somalia, which erupted in the mid-16th century. Although fully Boranized now in terms of language, and partially Boranized in certain other features, one aspect of Gabra culture that distinguishes it most clearly from the Borana is the Islamic element derived from their PRS origins.

It is the vestiges of Islamic practices that particularly interest us here and for that we can quote almost verbatim from the section of Tablino’s book by that name.

“I suspect that the Gabra not only hung on to these [PRS] Islamic features, but emphasised them and perhaps added more. To determine to what extent, would require comparative studies with Rendille and Somali, which has been beyond the scope of my research. I will, however, try to summarise here the traces of Islamic influence that I have mentioned in other parts of this book.

“The very appearance of the Gabra d’abeela [ritual elders], with their white clothing, stiff white turbans and grave demeanour, is similar to Muslim dress and behaviour. The very word for their characteristic hymns, dikira, is Arabic in origin, coming from the word dhikr, and the content of many dikira is clearly Islamic, with references to Allah (La) and Nur (Light), short for Nur ul-Din, Light of the Faith, a common Islamic way of referring to the Prophet Mohammed, to Mecca and Medina. The naabo, the praying place of the Gabra yaa, is similar in function and form to the spaces outlined by stones or brushwood where groups of desert Muslims meet to pray; the Odoola even refer to the naabo as mashashid, mosque. It is also noteworthy that the use of alcohol is completely absent from Gabra traditional culture.

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MUSLIM
Muharram - 9th & 10th Ashura
Safar
Rabi-ul-awal - 12th Maulidi
Rabi-ul-akhir
Jumada-l-awla
Jumada-l-akhir
Rajab
Shaban
Ramadan - the fasting month
Shawwal
Dhu-l-qu’dah
Dhu-l-hijja - month of pilgrimage
  9th - pilgrims go to Mt Arafat
  10th - Idd ul-Adha

GABRA
Yaqa - 9th & 10th Sorio
Raggara I - 6th Iliyad
Raggara II
Faite
Jia Bor I
Jia Bor II
Soom D’eera I - 9th & 10th Sorio
Soom D’eera II - 9th & 10th Sorio
Sooma - Odoola d’abeela fast
Furama
Iddi Yaal
Arrafa - 8th Saddeeta

Names of the months in the Muslim and Gabra calendars (with the auspicious ones marked in bold) and some of the ceremonies.
"The names of the days of the week are obviously Arabic in origin (and consequently the weekday names given to children). The months have very different names, but both Gabra and Muslims have the concept of sacred or auspicious months and of the four for the Muslims, three for the Gabra, two coincide. Moreover, the timing of some of the festivals is similar. The chart on the previous page shows the names of the months in the two calendars (the auspicious ones marked in bold) and some of the ceremonies.

"The most obvious parallel is between Ramadan, the month when Muslims fast from dawn until dusk, and Sooma, when the d’abeela of the Odoola section observe a similar (though less taxing) fast. The very word used for the month, sooma, means to fast. But it applies only to the one phratry. Let us turn now to features common to all, or at least most, Gabra sections. In all cases the original clues were provided by various Gabra and local non-Gabra Muslims. We simply followed up the leads, checking the comparable dates and standard (Sunni) Islamic practices.

"One of the three sorio [sacrifice] months is Yaqa. There is no obvious rhyme or reason why Gabra should have two contiguous sorio days, and why they should have chosen the 9th and 10th — until one looks at the Muslim calendar. Yaqa corresponds to the Muslim month of Muharram and the 10th of Muharram is Ashura (which means simply ‘tenth’), a day of fasting. When the Prophet Mohammed went from Mecca to Medina he found there a group of Jews. They were celebrating the 10th of their equivalent month as the day when Moses escaped from the Pharaoh. Since Moses was equally a prophet for the newly-forming Muslim community, Mohammed felt that Muslims should commemorate the day, too. But because he wanted Muslim practices to be at least slightly different, he determined that the fast should be done on the 9th as well as the 10th!

"The moon of Arrafa corresponds to the Muslim month of Dhu-l-hijja, the month of pilgrimage to Mecca (hajj). The rituals of the Hajj start at the beginning of the lunar month and culminate on the 9th with prayers at Arafat, a hill near Mecca. On the 10th all Muslims, even those who have not made the pilgrimage that year, celebrate Idd ul-Adha, the ‘Feast of Completion’ marking the end of the Hajj. The curious prohibitions of the Gabra month of Saddeeta are almost identical to those enjoined on pilgrims performing the Hajj, when the trimming of hair and cutting of nails, even scratching oneself, the cutting of a tree or plucking of green vegetation, the killing or harming of any living thing is haram — forbidden. The similarity leads one to conclude that the Gabra name of the month almost certainly comes from Arafat.

"It was a Gabra who first pointed out — insisted on — a connection between Iliyad and Maulidi, the Swahili pronunciation of Milad un-Nabi, the Birth of the Prophet. Initially we were dubious because Iliyad is held on the 6th of Raggara I while Milad un-Nabi is on the 12th of Rabi ul-awal, the next lunar month. But Maulidi was certainly already in the air, for on the day the Yaa Odoola was celebrating Iliyad, a group of itinerant Muslim preachers was in nearby Bubisa, making the rounds of the area ‘because it is Maulidi’. Central to the practices of Maulidi are recitations praising the Prophet and by extension Islam in general, and thus it is considered the most opportune time of year for preaching. As a result, Maulidi is celebrated not on one day but over a period of at least two months!

"The Almado cannot be linked to any particular Islamic ceremony for the simple reason that it is tied to a solar, not a lunar calendar. But, as we have seen, there are many Islamic elements in the festival, particularly in the dikira sung by the d’abeela [elders] for the occasion.

"Even in the complex Gabra marriage rituals there are traces of Islamic elements. The engagement gifts a man takes to his
prospective in-laws are called *marra*, which sounds comparable to the Islamic marriage settlement known as *mehr*. The bridegroom dresses in a curious way, knotting his new white cloth around his neck. A Gabra pointed out its similarity to the *ihram*, two pieces of unsewn white material, one looped over the left shoulder, that a Muslim wears while performing the Hajj.

“Recent converts aside, the Gabra firmly deny they are Muslims. Some readily admit there are traces of Islamic influence; as I said, it was Gabra who initially pointed out almost all the similarities noted above. Other Gabra deny even the most obvious connections and claim that such features are purely *aad Gabra*, Gabra custom. Both are right. Over the centuries, the Gabra have reworked Islamic elements — for instance, constructing their naabo around their sacred fire — so that the practices are now distinctively, unmistakably Gabra.” (Tablino 1998, passim.)

But there is something calendrical that goes back in time beyond even the earliest Islamic influences. The Gabra see the years in seven-year cycles, each year named for a day of the week; there is a Monday year, then a Tuesday year, and so on. Each such year has its own characteristics concerning weather in particular — a neat formulation of the seven-year cycle of weather patterns. Knowing that this was not part of Islam, both Tablino and I assumed it was something particularly Gabra. Only recently have I come to learn (I say ‘I’ because sadly Tablino passed away in 2009) that such linking of years with the days of the week is also found on the East African coast, among the Swahili and Bajuni. And it is of Persian origin. In that calendar, the Persian New Year is Navroz (or Naw Ruz), which celebrates the vernal equinox, 21 March. It is basically a festival of agricultural people — and the Arabs, amongst whom Islam came into being, were not farmers. On the coast, the New Year is known as *Siku ya Mwaka*, the Day of the Year. It used to be a major celebration, with everyone exchanging little packets of fresh millet grains, and making a certain kind of heavy bread from rice, and of course getting new clothes. Although now little known, it is still celebrated, at least by the old people, in certain parts of Lamu such as Mkunumbi; in Shela, the village just south of Lamu town; and on the islands such as Pate. On Siku ya Mwaka the children in the madrassas are, or used to be, given honey and *subiri*, a bitter
substance — to remind them that life has its ups and downs. And the old people still know that each year will have its inevitable character. This (2010) is a Monday year; there will be less than average rain but nevertheless there will be good crops.

Yet the Gabra New Year celebration may reflect an Arabic rather than a Persian influence. I’ve puzzled over the meaning of Almado. The Gabra, naturally, say the obvious, that it is the name of the festival. So I turned to an Arabic-speaking friend, to ask if al-mado could be an Arabic word. He wrote,

*Al mad could mean many things. The root “md” means to extend, to stretch, to expand, to support, to help, to supply, to prolong (also as in to prolong pronunciation in the recitation of the Qur’an) and similar and related concepts. So “al mad” could mean the extension, the expansion, the provision or coming of the help (also in a military sense), the support, even the extension of vowels in the recitation.*

This makes very good sense. The blessings and prayers of Almado are for help, for a prolongation and flourishing of life.

But how elements of a Persian agricultural calendar that were integrated into the culture of the Kenyan coast got adopted by the Gabra far inland, and how New Year got shifted from March to October, and given — perhaps — an Arabic name, is a historical mystery still to be solved. If there is time.

For now those distinctive practices, Gabra culture itself, are under threat — from the very religion from which they are derived. Christianity poses less of a direct threat because the colonial government banned missions from working in the north until the penultimate moment before they gave Kenya its independence and that fortuitously coincided with the Roman Catholics’ Vatican II Council which completely turned around the old ideas of conversion: no longer were pagan cultures to be obliterated, as had happened to the Kikuyu, but ‘inculturated’. It was for this reason that Fr Tablino (and many other priests) was encouraged to undertake — and publish — anthropological research. A few practices, such as the discarding of first-born twins, were firmly discouraged, but by and large the Catholics had no quarrel with Gabra culture *per se*. (Protestants are notoriously less open-minded, but they have minimal influence in the area since it was the Catholic Church which the colonial...
government, at the very last minute, ‘invited’ in to establish schools and health centres.)

Although Tablino and his confrere Venturino managed to convert, at least nominally, several influential men in the Yaa Galbo (the ritual village of another of the five Gabra sections), Christianity has had little direct impact on the nomadic Gabra, for it is essentially an urban religion. The biggest threat the missions pose is their intentional encouraging of nomadic children to go to school (their schools, which is their raison d’etre for having been allowed in the north) where they quickly pick up enough superficialities of western culture to discourage them from returning to their families and traditional life. Another threat comes from the distribution of ‘famine relief’, which has encouraged people to cluster around the missions in hopes of handouts and creates dreadful shantytowns. But, although missionaries such as Tablino had been unaware of it at the time, the great majority of such hangers-on and early converts were not Gabra at all but Waata, the dispersed endogamous hunter-gatherers who, being despised by the nomads proper, had nothing to lose and a great deal to gain by associating themselves with the missions. Christianity had little appeal to the real nomads.

Islam, on the other hand, is a religion of nomadic peoples. Its spread depends not on a massive, costly infrastructure of solid stone-built missions but on individual peripatetic missionaries. Now, with the upsurge of Islamic consciousness, Muslim missionaries are on the move. And they find it easy going. There is nothing in Gabra culture that goes against basic Islamic beliefs — their concept of Waaqa (God/the Heavens) is absolutely monotheistic and there certainly are no idols or graven images to be worshipped.

Nevertheless, Islam is having a divisive impact on Gabra culture, on Gabra villages, even in families. A key problem lies in the slaughtering of animals. A Muslim can only eat the meat of an animal killed in the correct Islamic way. The actual slaughtering presents no problem, for the Gabra kill as Muslim law decrees, by quickly cutting the animal’s throat. The problem lies in the fact that for the meat to be halal (lawful) for a Muslim, this must be done by a Muslim who offers a Muslim prayer as he does so.

The killing of livestock by the Gabra is not a matter of slaughter; virtually every animal killed is slain as a sacrifice (sorio), as part of a ritual, and is normally done by the father of the family, an elder, and the meat is then shared out in very specific ways. If the father is a traditional Gabra, but his son has become a Muslim, this means the son cannot partake of the meat.

Further to the current Islamic proselytizing is a moral obligation similar to that of (most) Protestant Christian sects, to obliterate all ‘pagan’ practices, even those that do not run contrary to Islamic ones. This has been successfully done with the Gabra Migo, a detached group of Gabra living mainly in southern Ethiopia. Within the last two generations they have become so completely Islamized that the last visual vestiges of the complex Gabra age-set system have vanished; the elders no longer wear their distinctive stiff turbans — they are no longer d’abeela.

But the Gabra of Kenya are astute at adapting what suits them. In 1990 one of the first Gabra catechists of the North Horr mission went to the Yaa Gara when it was camped at Gorai and set up his tent with them. He would join the elders for their prayers at the naabo, and he also preached without incurring any problem (or eliciting much interest). But preaching is not the same as building a church. Or a mosque!

The construction of the mosque within the Yaa Sharbana, the only yaa with a significant number of Muslims living in it, was matched with marked anti-Christian sentiment, mainly due to a couple of young men. But some yaa members, not themselves Christians, stood up for the
Church. And the placing of the mosque within the precincts of the yaa met with firm disapproval from the yaa officials and from the other yaa. They cracked down, saying ‘there cannot be two naabo’. The circle of thorn branches that formed the mosque was dismantled and re-erected outside the yaa.

The catechist was of an age — belonging to the luba Manguba — that he should become a d’abeela. He was intending to go through the long, complex ceremony of putting on the turban because, as he says, ‘I want to follow my culture’. He has three older brothers who are Muslim who live around Bubisa, herding their many camels. When he was young, one of these brothers had been appointed jallaba (traditional councillor), a life-long appointment. He became a Muslim and disappeared. His yaa, the Yaa Galbo, called him back. They forced him to ‘take a meedicha’, i.e. to take part in a ritual sacrifice performed by a non-Muslim.

Gabra culture, like any culture, is in a state of flux; tradition only seems static when viewed from the perspective of the present. The real change is not change itself but the rapidity with which it is now taking place. It will be interesting to see which way Gabra culture tilts, whether to Christianity or to newly revived Islam — or if it has enough strength and pride to retain its own unique identity.

PHOTOGRAPHS TAKEN BY CYNTHIA SALVADORI AND NOW STORED AT THE BRITISH INSTITUTE OF EAST AFRICA

References
Life after Tsavo:

The untold life story of John Henry Patterson

Peter von Buol

Nearly 110 years after construction was completed on the Uganda Railway, one of its construction engineers, Lt Col. John Henry Patterson, DSO, remains one of the most well-known figures of Kenya’s colonial era.

While Patterson is primarily remembered for his role in ending the reign of terror of a pair of lions that had killed 28 members of his construction crew at the Tsavo River bridge crossing, many today are unaware of the rest of the Irish-born colonel’s extraordinary life.

Not only did Patterson kill two of the most notorious man-eating lions in history, he was decorated as a war hero by the king, served as the first chief game warden of British East Africa, commanded the first Jewish military units in the modern era and was a successful author and lecturer. He also had some success as an inventor of military equipment. Later in life, he became a tireless advocate for the restoration of the State of Israel in what was then the British Mandate of Palestine, and streets in Tel Aviv and Jerusalem are named in his honour.

Patterson’s official assignment in 1898 included being responsible for the
construction of a permanent railway bridge that crossed over the Tsavo River in Kenya and he assumed the role of big-game hunter out of necessity. During a nine-month span, a pair of man-eating lions killed 28 railway workers, most of them contract labourers imported from what was then British India but is today Pakistan and India. During the height of their killings, construction actually stopped for about three weeks. Patterson’s determination to complete his initial assignment provided him with motivation for killing the man-eaters.

Prior to Tsavo, the construction engineer had served as a supervisor with the Military Works Department in British India. Patterson’s experience in India had included construction projects such as building military forts and railway bridges.

The Uganda Railway\(^1\) was built with the same narrow metre gauge as that used in most of British India. The railway’s chief engineer, George Whitehouse, and its chief of plate-laying, Ronald Preston, also had experience building railways in India.

Patterson did not attend college but was an avid reader and a lifelong learner.

During his tour of duty in India, he became proficient in Hindustani and studied military and civil engineering. Interestingly, Patterson’s wife, Frances Helena Grey, whom he married in 1895, was one of the first two women to earn a doctorate of law degree from the Royal University of Ireland.

After the Tsavo bridge was completed in March 1899, Patterson continued to work for the Uganda Railway until the end of the year, at which time his contract with the railway ended. Prior to leaving East Africa\(^2\), Patterson expressed interest in extending his contract with the railway, but he became ill with dysentery and returned to Britain.

Upon his return home, Patterson rejoined the military as the Boer War in South Africa had once again erupted, due to the Boer invasion of Natal in October 1899.

Patterson’s horsemanship, military experience and leadership ability were exactly the qualities sought by the British Military in its quest to defeat the rugged Boer commandos, many of whom were expert horsemen and marksmen due to their frontier lifestyle.

Patterson had extensive experience as a mounted soldier. Though only a sergeant while in the service of the Military Works Department prior to Tsavo, his military career had begun as a mounted soldier with the 3rd Dragoon Guards (where he had spent some time in Natal) and he had also served with the 16th Lancers in India.

Interestingly, Patterson was promoted to second lieutenant and he joined the 20th Battalion of the Imperial Yeomanry, also known as the British Rough Riders.

Many among the Imperial Yeomanry had been avid sportsmen before the war and they were recruited as a counterweight to the Boer guerillas. While Patterson was himself not an aristocrat, many of his fellow officers hailed from prominent families, including Lord Zouche and Viscount Maitland. A common misconception is that most of the rank-and-file members of the Imperial Yeomanry were from the upper classes.

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1. See Building the Lunatic Line by Bryan Harris in Kenya Past and Present, issue 35.
2. The name Kenya did not exist until 1920. Before that, the area was known as the East Africa Protectorate.
More than half actually came, like Patterson, from middle-class families.

The Boer War served as a crucible for Patterson's future. Friendships made among his fellow soldiers served him well throughout his lifetime as many Boer War veterans achieved prominent positions in the military and the government.

In 1909, Lord Zouche, who was a descendant of ancient Norman nobility, would defend Patterson in the House of Lords after false accusations were made against him.

**Mentioned in despatches**

Upon his return to Africa, Patterson excelled as a soldier. He was “mentioned in despatches” for bravery on numerous occasions by his commanding officers. For his services in the Boer War, he was awarded the Distinguished Service Order (DSO) by King Edward VII.

By January 1902, Patterson had been promoted to the rank of lieutenant colonel and given command of the 33rd Battalion of the Imperial Yeomanry. The battalion left Great Britain while the conflict was raging but did not see combat as the Peace Treaty of Vereeniging had been signed one week prior to its arrival in South Africa.

After the war, Patterson returned home and served with the Essex Yeomanry, a new regiment formed at the instigation of the Earl of Warwick. Colonel Beale Colvin, who had been Patterson's commanding officer in the Rough Riders, served as its first commander.

During this period, Patterson patented a rifle-carrying invention for mounted soldiers that eventually became popularly known as Patterson Equipment and was adopted by mounted military units around the world. Patterson also started his prolific writing career. Previous newspaper and magazine articles about his hunt for the Tsavo man-eaters had been well received and he believed the reading public would enjoy a full length account of his time with the Uganda Railway.

British author Patrick Streeter, in his biography of Patterson entitled *Mad for Zion*, said it was actually the colonel who approached his future publisher.

“The colonel had approached MacMillan in October 1906 to ask if they would be interested in ‘a story about his time with wild men and wild animals in East Africa’. They replied by return of post to say they were interested and the following day Patterson delivered to their offices in St. Martin’s Street... the manuscript and 356 photos. The book came out exactly one year later and was an immediate success, reprinting twice within three months, and in the course of its history was translated into many languages and remained in print for over 80 years,” writes Streeter.

With the 1907 publication of his autobiographical *The man-eaters of Tsavo*, Patterson became a worldwide celebrity. Patterson wrote the book in a straightforward and mostly unembellished manner that thrilled his readers. Careful comparison with his actual diary and his published autobiographical account does show there to be some differences that were added for “colour”.

“In his book [Patterson] states he took a baby railway carriage pulled by two natives, to the headquarters of the railway at Kilindini where, finding his superior away, he pitched his tent under a shady palm, purchased stores and explored [Mombasa] island. The diary gives a more prosaic account, recording that he travelled by train and stayed in a bungalow costing 4 rupees a day,” writes Streeter.

The book was popular among general readers, and sportsmen and naturalists especially enjoyed the book. Its foreword had been written by Frederick Courtney Selous [the namesake of Tanzania’s Selous National Park], who was one of the most
well-known sportsmen/naturalists of the late Victorian/Edwardian era.

Selous also recommended the book to his friends, one of whom was the then-president of the United States of America, Theodore Roosevelt. After reading the book, Roosevelt recommended the book to his own friends and family. In a letter to his son, Kermit, Theodore Roosevelt described Patterson's book as “a most satisfactorily lurid man-eating story.”

Later, before Roosevelt’s term of office ended in early 1909, he hosted Patterson as an official guest at the White House. At the dinner, the president and the colonel discussed big-game hunting in Africa (Roosevelt was planning his future safari to East Africa).

Interestingly, they also discussed the plight of Jewish people around the world and the settlers in Turkish-ruled Palestine. This conversation foreshadowed Patterson’s future role in the First World War and as a Zionist activist.

According to Streeter, their dinner conversation indicated Patterson had a more than passing interest in the plight of the Jewish people.

After the publication of his first book, many he would meet came away with the impression that Patterson was a British aristocrat. He never made such a claim but his rank, his demeanour and his DSO caused many to reach such a conclusion.

Return to East Africa

Patterson returned to East Africa in 1907 as the Chief Game Warden of the Protectorate.

According to Streeter, Patterson’s “principal task [as warden] was the preservation of the game and the authorisation of licences.”

While Patterson today is remembered as a big-game hunter, he was actually also a conservationist. In the early 1900s, he had already expressed concern for Africa’s unique fauna.

In a 1924 interview with Chicago newspaper reporter Horace Wade, Patterson warned against the extinction of one of Africa’s flagship species. “Elephants are quickly reaching a state of extinction,” said Patterson.

On his first safari as chief game warden, Patterson visited the Athi Plains to record the distribution and variety of game. Patterson described this successful safari in detail in his second book, *In the grip of the Nyika* that was published in 1909. Unfortunately, during another safari described in the same book, tragedy struck.

The safari to the Northern Game Preserve turned disastrous when one of its participants, Audley Blyth, committed suicide within his own tent. Blyth had also served in the Imperial Yeomanry during the Boer War but does not seem to have known Patterson during the war as he had belonged to a different unit. At the time of his death, Blyth had been very ill with malaria and suffered from delirium. While some would later spread rumours that Patterson may have murdered Blyth because he was interested in Mrs Blyth, testimony from the witnesses absolved the colonel.

“The unanimous evidence from all the native witnesses was that Patterson was well away from the tent at the time of the shot and could not have fired [the gun] but the witnesses [also] stated that Effie (Ethel) was either in the tent or leaving just as the fatal shot was fired. The evidence in Effie’s favour is that she shrieked on running out of the tent. This is consistent with Audley firing the shot,” writes Streeter.

Controversy ensued because Patterson decided to continue the safari with Mrs Blyth and some have suggested the colonel at the time was having an affair with her. Patterson defended his actions, saying it would have been improper for him as a responsible government servant to return home without finishing his assigned task.

According to Streeter, officials at the Colonial Office were alarmed by Patterson’s
actions and forced him and Mrs Blyth to return to Britain for questioning. The same officials questioned the personal conduct of the colonel.

“This is an ugly business and requires sifting to the bottom. I understand from Mr Monson, the secretary to the Administration, that the general impression in the Protectorate is that Mr Blyth shot himself on account of too intimate relations between his wife and Colonel Patterson,” recorded Sir Francis Hopwood, the then-permanent undersecretary at the Colonial Office.

In a letter to Hopwood, Patterson responded to the charges, “My enemies out there are trying to work up some lies... There is not a vestige of truth in them. The whole thing has been worked up by scoundrels who wish to destroy me at all costs.”

Patterson’s safari through a mostly uncharted part of British East Africa was resented by some who had wanted to survey the new area themselves. In addition, throughout his career, Patterson was known as someone who believed in the strict enforcement of rules and regulations. It is possible his enforcement of game licensing angered some of the big-game hunters.

Despite the controversy, Patterson did not hide from the incident and gave his own version of events within the pages of his second book. While In the grip of the Nyika did not duplicate the success of The man-eaters of Tsavo, the book was well-received and considered a success.

Fortunately, Patterson’s influential friends did not desert him and they were quick to rise to his defence. Boer War comrade Lord Zouche defended him in the House of Lords.

While Patterson was officially exonerated from any wrongdoing, he was relieved of his position as Chief Game Warden. Officials at the Colonial Office cited his poor health.

In March 1909 Patterson’s personal life took a more pleasant turn with the birth of his son, Bryan. Patterson lived in semi-retirement from the military during the years before the First World War but Africa continued to be a destination for his travels and he made inspection tours of the colonial troops of East Africa as well as the Cape Province, Egypt and West Africa.

Despite being nearly 47 years old at the outbreak of World War I, Patterson offered his services to the British War Office and was sent to Flanders. By early 1915, however, he had left the European theatre and was serving in Egypt as part of the Army Service Corps. Streeter speculates it is possible Patterson was sent to Egypt in anticipation of the formation of what would become known as the Zion Mule Corps.

Zionism

“Was this contact with the Jewish race and Zionism totally new to him, or did he have some foreknowledge of these matters? He records that he studied the martial history of the Jews in the Bible. He claimed that before 1914 he had never known a Jew. This may be an exaggeration,” writes Streeter.

In March 1915, Patterson assumed command of what became known as the Zion Mule Corps of the British Egyptian Expeditionary Force (EEF). Interestingly, Patterson has sometimes been compared to one of his EEF counterparts, T E Lawrence, today better known as Lawrence of Arabia.
It is not known if Patterson intentionally sought to command the mule corps. Some historians contend that at his age, he would have been eager to get any sort of command during the war but others have suggested he must have been sympathetic to the cause of Zionism and had asked to serve as the unit’s commander.

The formation of the Mule Corps

According to British military historian Martin Sugarman, the formation of the Zion Mule Corps had been approved by the British military establishment because it was thought “the British side would benefit the war effort to have a Jewish fighting unit, not only because the myth of Jewish financial wealth was deep-rooted in British upper-class circles, still tinged with anti-Semitism, but because of widespread support for Christian Zionists helping Jews reclaim their ancient homeland.”

At the onset of the war, the Zionist movement was officially neutral and being courted by both the Allied powers and the Central powers.

By 1914, Patterson himself may have already been a Christian Zionist. In the two books he wrote about his wartime experiences, it is clear he had a strong knowledge of the Bible.

“As a boy, I eagerly devoured the records of the glorious deeds of Jewish military captains such as Joshua, Joab, Gideon and Judas Maccabeus, I little dreamt of the day I myself would, in a small part, be a captain of the host of the Children of Israel,” wrote Patterson in his third book, With the Zionists in Gallipoli.

According to Patterson’s grandson, Alan Patterson, the colonel had been raised an Anglican and his grandfather’s family remained active in the church.

The impetus for a Jewish military unit had come from two leading Zionists in Alexandria, Joseph Trumpeldor and Vladimir Jabotinsky. Both would eventually become close friends of Patterson.

Trumpeldor had been among the estimated 11,000 Jews expelled from Palestine by the Ottoman Empire. He was a decorated war veteran and had served in the Russian military as a commissioned officer during the Russo-Japanese War of 1904-1905. At the time, Jabotinsky was the foreign correspondent for a Russian newspaper.

At the outbreak of war, Egypt was flooded with Jewish refugees. Most were subjects of Great Britain’s wartime ally, Tsarist Russia. Many had fled to Palestine from Russia due to religious persecution and were reluctant to return.

Following active lobbying by Jewish groups headed by Trumpeldor and Jabotinsky, the British commander in Egypt, Sir John Maxwell, approved the formation of the mule corps with the stipulation that it would not be a combat unit but rather serve as a support unit. The reason, said Maxwell in a March 1915 meeting with Jewish lobbyists, was that under British law it was illegal to enlist foreign nationals as soldiers in the British military. However, he added that the mule corps troops would be fully armed and also trained in combat, so that they would be able to fight if necessary.

According to Sugarman, while some Jews in Alexandria expressed disinterest in serving in a “donkey battalion”, an impassioned speech by the war-hero Trumpeldor convinced the majority of the community to support the venture.

“The delegation held an all-night meeting and [had] resolved to reject the proposal, since many were [already] being taught military drill by former Russian Jewish soldiers and felt it demeaning to enter the Allied armies as a ‘donkey battalion’. But Trumpeldor said ‘We’ve got to smash the Turk. On which front you begin is a question of tactics; any front leads to Zion,’” wrote Sugarman in The Zion muleteers of Gallipoli.

An old friend of Patterson’s from the Boer War, Major General Alexander Godley, seems to have been instrumental in lobbying...
At the end of March 1915, Patterson was appointed commander with Truempeldor as his second in command. Within the British Army, the unique corps was actually designated as a Colonial Corps of the EEF. Maxwell on Patterson's behalf. According to Sugarman, the unit caused a diplomatic row between two of the Allied nations. The Russian consul in Alexandria became incensed when he heard of the unit's formation and demanded the Russian Jews be sent back to Russia in order to enlist in the army of the Tsar. His protests, however, were ignored.

The Zion Mule Corps consisted of a maximum of 737 men. In addition to 750 pack mules, the unit was given 20 horses for its commissioned and non-commissioned officers. Its command structure consisted of five British officers and eight Jewish officers. Orders were given in both English and Hebrew, even though the Russians were more familiar with Yiddish. The Grand Rabbi of Alexandria was appointed its Honorary Chaplain, added Sugarman.

After three weeks of basic training, Patterson's unit was deemed battle ready and in April sent to serve in the Allied invasion of Gallipoli.

It was hoped that a successful landing at Gallipoli would lead to an eventual march on the Ottoman capital city of Constantinople, but instead it became a quagmire for the Allied troops. Due to the lack of a safe harbour on the peninsula, it was very difficult to supply ammunition and other supplies. Transport regiments such as the Zion Mule Corps were extremely valuable. Patterson's troops served with distinction throughout the campaign and despite consisting of men with little military experience, the corps demonstrated tremendous courage in an unforgiving theatre of war.

In November 1915, Patterson was sent to Alexandria to recuperate from numerous ailments, including jaundice and enteritis. It is also believed he had suffered shell-shock.

In early 1916, the Allies made the decision to evacuate the peninsula. At the time, Patterson was convalescing in Alexandria and Truempeldor was serving as the corps' acting commander. The corps was disbanded upon its return to Alexandria.

Shortly afterwards, Patterson was sent home to Britain to recover. During this period, he finally met Vladimir Jabotinsky, who had travelled to London in an attempt to convince the British government to form a Jewish fighting unit to replace the Zion Mule Corps.

**The 38th Battalion**

Jabotinsky became one of Patterson's closest friends and the two men would be associated with one another for the rest of their lives. After the war, Jabotinsky would become the founder of the Revisionist Party, the right wing of Zionism that was a predecessor of Israel's current Likud Party.

In part due to the lobbying efforts of Jabotinsky, on 23 August 1917 the British government announced the formation of the first Jewish battalion to serve in the British military, officially designated the 38th
Battalion of the Royal Fusiliers. Eventually five Jewish battalions together would form the Jewish Legion. Similar to the Zion Mule Corps, most inductees did not have a lot of military experience.

“All trades and professions were represented, but the majority of the new soldiers were from the tailoring and the allied trades [then dominated by Jews]...Many music hall artists and musicians were [also] found in the ranks,” writes Streeter.

One day before leaving Great Britain for the Middle East, on 5 February 1918, the men of the 38th Battalion proudly marched through London. As their commander, Col Patterson led the parade atop his favourite bay mare.

The record of the Jewish Legion in the Palestine campaign paralleled that of the Zion Mule Corps. Despite obstacles, the Legion performed very well.

The postwar years

After the First World War, Patterson became closely associated with Jabotinsky’s Revisionist party. He was considered one of its spokesmen and he often lobbied the leaders of western nations to support the establishment of a modern-day state of Israel.

In addition to his political activities, Patterson resumed his career as a lecturer. While visiting Chicago’s Field Museum of Natural History as part of a lecture tour in 1924, he sold the skins of the Tsavo man-eaters.

Until 1940, Patterson continued to travel around the world but on a trip to the United States to lobby the American government to provide more support to Great Britain in its fight against Germany, he became too ill to return home. His wife Francie soon joined him but they were never able to return to Britain.

During this time, Patterson became a close friend of the Revisionist leader, Ben-Zion Netanyahu. Netanyahu’s first-born son was named Jonathan to honour Patterson and like his namesake, he rose to the rank of lieutenant colonel.

“Such was the friendship between them that my parents decided to call their first-born son Jonathan, the ‘Jon’ in honor of Patterson and the ‘Nathan’ in honor of my grandfather. Now and then, on special occasions, my family brings out a silver cup with the inscription: ‘To my darling godson, Jonathan, from your godfather, John Henry Patterson,” wrote Israeli Prime Minister Benjamin Netanyahu in his book A Durable Peace.

Patterson and Francie survived the Second World War but both died in 1947. Patterson had dreamed he would see the establishment of the modern-day state of Israel but missed its rebirth by nine months. Patterson’s uniform, medals and sword can today be seen in the museum of the Jewish Legion in Israel.

Sadly, Patterson’s namesake is associated with an East African tragedy as Jonathan Netanyahu was killed in the 1976 Entebbe Airport rescue in Uganda, where Palestinian terrorists took a plane and its passengers hostage. Netanyahu was the commanding officer of the rescue team.

Patterson was not the only member of his family to achieve worldwide headlines.

As an adult, his son Bryan would achieve great success as a palaeontologist and garner worldwide headlines with his scientific discoveries. Interestingly, one of Bryan Patterson’s most significant discoveries was made while he was conducting field research in Kenya. In 1965, Patterson and his team found an elbow bone of a four-million-year-old hominid at Kanapoi. By 1967, this discovery would be described as...
‘the oldest known manlike fossil’. Patterson had been invited to Kenya by Louis Leakey to search for the fossils of the ancestors of the mammals that today inhabit the plains of eastern Africa.

In her recent book, *The first human*, author Ann Gibbons describes Leakey’s reaction to the discovery.

“After Patterson finished that season at Kanapoi, he returned to Nairobi and showed the fossil to Louis Leakey. Leakey’s half-joking response was: “But you were not supposed to find hominids!”

PHOTOGRAPHS COURTESY OF THE CHICAGO FIELD MUSEUM IN THE USA, AND THE MUSEUM OF THE BATTALIONS, MUSEUMS UNIT OF THE MINISTRY OF DEFENSE, BEIT HAGGUDIM MUSEUM, AVIHAYIL ISRAEL. PRIVATE FAMILY PHOTO COURTESY OF ALAN PATTERSON.

Reburial of Colonel Patterson in Israel
Prior to his death, Colonel Patterson had expressed a wish that he and his wife would eventually be buried in the Holy Land. By 2012, the Pattersons may receive their wish as arrangements are being made by Alan Patterson, the colonel’s grandson, and the Jewish American Society for Historic Preservation (JASHP), to re-inter them with full military honours in an Israeli military cemetery established by veterans of the Zion Mule Corps in the Moshav settlement of Avihayil.

Said Jerry Klinger, president of JASHP: “I met with the Moshav in May [2011] and they are very excited at the possibility that the Colonel and Mrs Patterson might be brought to rest there…they had already selected a very honoured and dignified place of rest for the colonel and his wife. He would be back, in essence leading his men.”

Patterson’s dress uniform, sword and medals are now on display in the Jewish Legion Museum in Israel. From left to right, the medals are:
1. The Distinguished Service Order (DSO), a white cross on a blue and red ribbon, awarded during the Boer War.
2. Second from the left, the Queen Victoria South Africa Medal with four clasps (including the South Africa 1901 clasp).
3. Centre is the Gallipoli Star, earned with the Zion Mule Corps 1914–1915 during WWI.
4. The second medal from the right is Patterson’s British War Medal in Silver, awarded for service in WWI.
5. On the extreme right is the Allied Victory medal of WWI.

ABOUT THE AUTHOR
Peter von Buol is an adjunct professor at Chicago’s Columbia College. For the past 19 years, he has also been associated with the Chicago Field Museum, where the skins of the man-eating lions shot by Col. Patterson are still on display, and has been researching the life of the colonel. In addition to teaching, he is a regular contributor to *BBC Focus on Africa* magazine and has written for *Swar*a and *BBC Wildlife* magazine as well as numerous publications around the world.
Kenya, the land that once daunted explorers, historians and colonialists, is arguably one of Africa’s countries (the others being Ethiopia and South Africa) that are referred to today as the “Cradle of Humankind”, the home of our own. Thousands of hominin fossils and cultural artefacts have been recovered, especially within its rift system. South Africa boasts evidence of earliest human genes but Kenya’s high genealogical diversity, especially among the Turkana people, shows that there has been long term trade and movements within its territory. Therefore, it might just be a matter of time before Kenya discovers an earlier human gene than that of the Khoisan people in South Africa. In his book *The journey of Man: a genetic odyssey*, Spencer Wells describes how humans left Africa to populate other parts of the world, beginning about 60,000 years ago. This confirms that the human species has lived in Africa longest and also strengthens the “Recent African Origin” (RAO) hypothesis which proposes that modern humans are the product of a speciation event in the late Pleistocene in Africa.

The hypothesis that Africa is the “cradle of humankind” continues to be fortified by finds that allude to the perception that the common ancestor of humans and other apes lived in Africa and that the divergence of the two lineages took place here. Molecular studies so far have put the divergence of humans and chimpanzees (our closest relatives) at 7–5 million years ago and that of gorillas at 9-8 million years ago.

The Kenyan contribution

Recent fossil finds from Kenya have provided evidence that is in line with the molecular studies. *Nakalipithecus nakayamai* is a prehistoric ape species that was excavated in 2005 by a team of Japanese and Kenyan researchers in the Nakali region of northern Kenya. This species, described from a jawbone and 11 isolated teeth, has been dated to 10 million years ago. The teeth, which are covered in thick enamel with low voluminous caps, have assisted us to deduce
its diet — basically composed of considerable hard objects such as nuts, seeds and fruits. In addition, analyses indicate that this species is very close to the last common ancestor of gorillas, humans and chimpanzees. It can therefore be considered a basal member of the Homininae clade. Nakalipithecus nakayamai is different from other known Miocene and extant hominoids through its special dental features which are similar in size to female gorillas and orangutans. This discovery offers the strongest evidence so far against the hypothesis that the last common ancestor of humans, gorillas and chimpanzees descended from a repatriated hominid that left Africa around 16.5 million years ago for Europe or Asia, but then returned about 9.5 million years ago. However, more finds are required in order to fill the existing lacuna in our understanding of the African Miocene Homininae evolution.

The other Kenyan fossil species is Orrorin tugenensis which was discovered at Kapthurin in Baringo District in 2000 by a team which included Martin Pickford and Brigitte Senut. The find comprises 13 fossils belonging to at least five individuals. They include a left femur, pieces of jaw with teeth, isolated upper and lower teeth, arm bones, and a finger bone. Preliminary analyses suggest that this hominid, the size of a chimpanzee, was an agile climber and that it walked on two legs when on the ground. The fossil has been dated to around six million years and from the basis of dental and postcranial form and structure (its morphology), it appears that Orrorin belongs to the hominid lineage. This gives more credence to the hypothesis that the divergence between apes and humans took place prior to six million years ago. Although we cannot learn much from this specimen in terms of its morphological features and probable existence on the landscape, we can at least construe the upright walking position through the morphology of its femur.

In addition, the Orrorin tugenensis fossil is closer in size to Ardipithecus ramidus (Ardi), which is a very important fossil as it gives us a view of what the common ancestor of humans and chimpanzee would have looked like. Ardipithecus ramidus was first reported in 1994 and announced in 2009 in Aramis, Middle Awash, Ethiopia just 74 km from where Lucy was found. Interesting is the fact that Ardipithecus ramidus, which is only about 4.4 million years old, had traits more like those of early apes, and thus the hypothesis that the common ancestor between humans and chimpanzees would have had morphological traits like those of chimps, humans or something in between, is false. Ardi instead shows an unexpected mix of advanced characteristics and of primitive traits seen in much older apes that were unlike chimpanzees or gorillas.

And then there is Kenyanthropus platyops — the “flat-faced man from Kenya” unearthed from the western side of Lake Turkana by a team led by Meave Leakey, almost immediately after the discovery of Orrorin tugenensis (Leakey et al, 2001). Kenyanthropus is believed to be about 3.5 million years old and has mixed features that are both advanced and primitive (for example the ear canal is more like that of a chimpanzee). Although known from only one specimen, this is another find that has given us clues into the timing as well as its morphology.
features related to the divergence of humans and chimpanzees.

In conclusion, Nakalipithecus nakayamai, Kenyanthropus platyops and Orrorin tugenensis have shed more light on the timing of the departure of humans from apes and chimpanzees, a major debate in the study of paleoanthropology. Moreover, these three confirm that Kenya still has a lot to contribute to our understanding of human evolution and that we have hardly scratched the surface. More fossils that can provide us with more information about our hominin ancestry are yet to be discovered and it is just a matter of time before other ground-breaking discoveries will be made. Moreover, with these and many other finds, Kenya’s contribution remains undisputed in the quest of finding our common roots.

PHOTOGRAPHS PROVIDED BY THE AUTHOR

Kenyanthropus platyops, the “flat-faced man from Kenya”, discovered by Meave Leakey and her team on the western side of Lake Turkana, has been dated to 3.5 million years.

References

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Dr Purity Kiura is a senior research scientist and the Head of the Archaeology Section in the Department of Earth Sciences, National Museums of Kenya. Originally trained as a geologist, she later completed a doctorate in anthropology at Rutgers University, New Jersey. Her research interests include human origins and the evolution of technology, human subsistence and settlement patterns. She is also interested in the study of modern peoples, landscapes and environments in East Africa as an analogue to those of people in the past. She has authored a book Ethnoarchaeology and stable isotopes in the study of people’s diets (2008) in her continuing study of the origin of humankind.
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