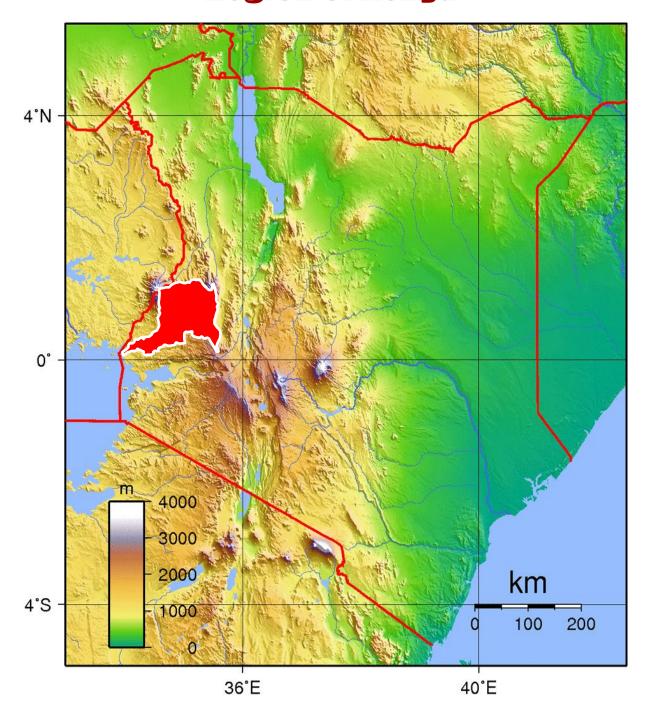
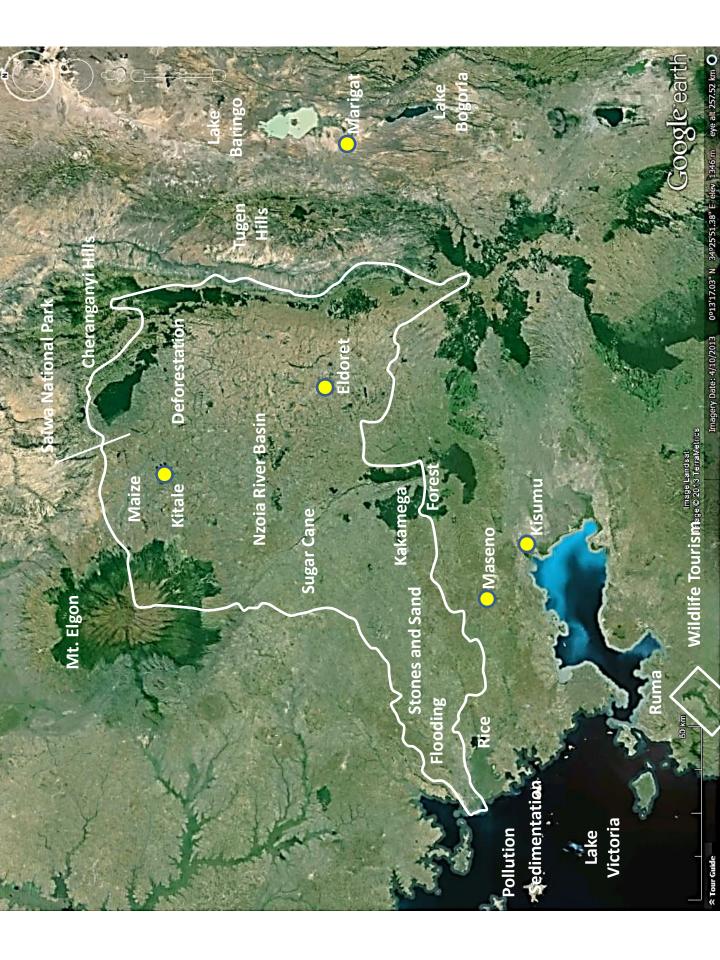
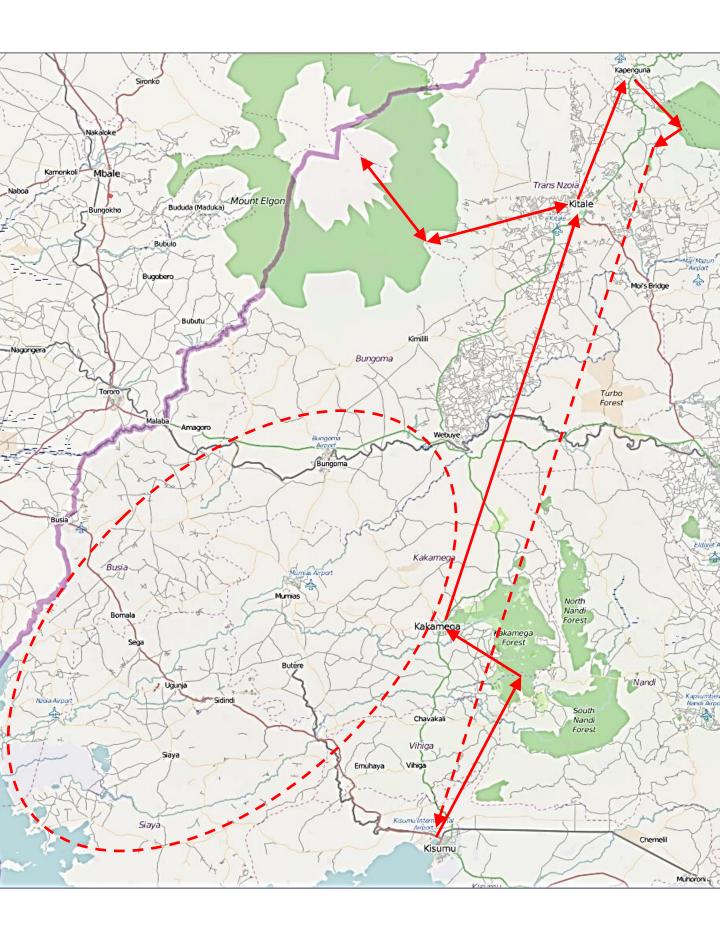
Integrated Ecosystem and Water Management in the Lake Victoria Basin Region of Kenya

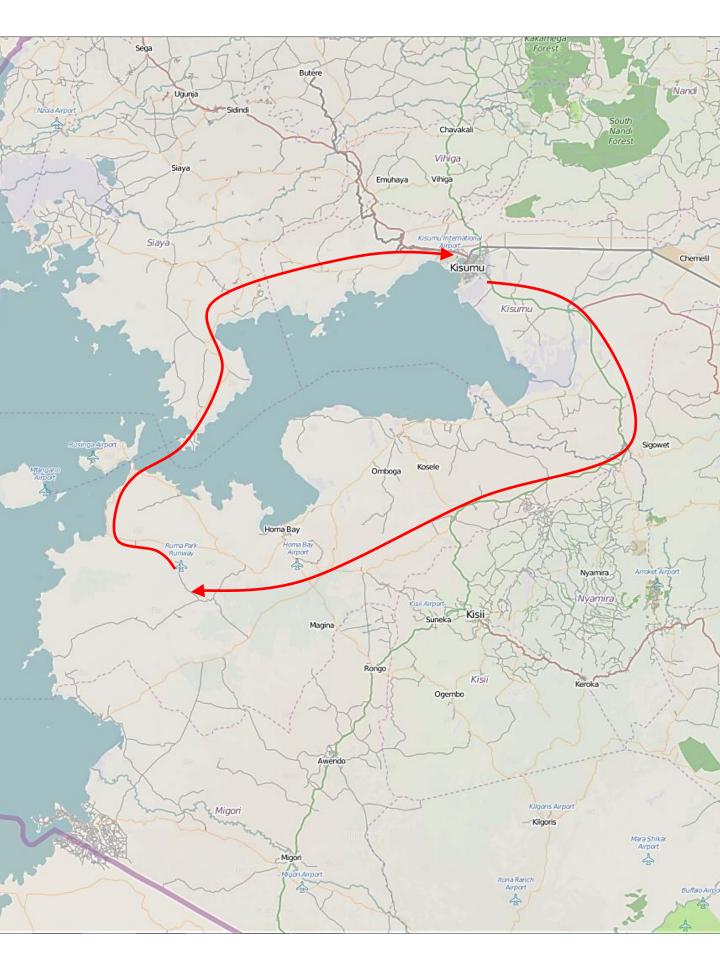


University of Bayreuth, January 30 — February 2, 2014 Pre-Meeting Excursion Information

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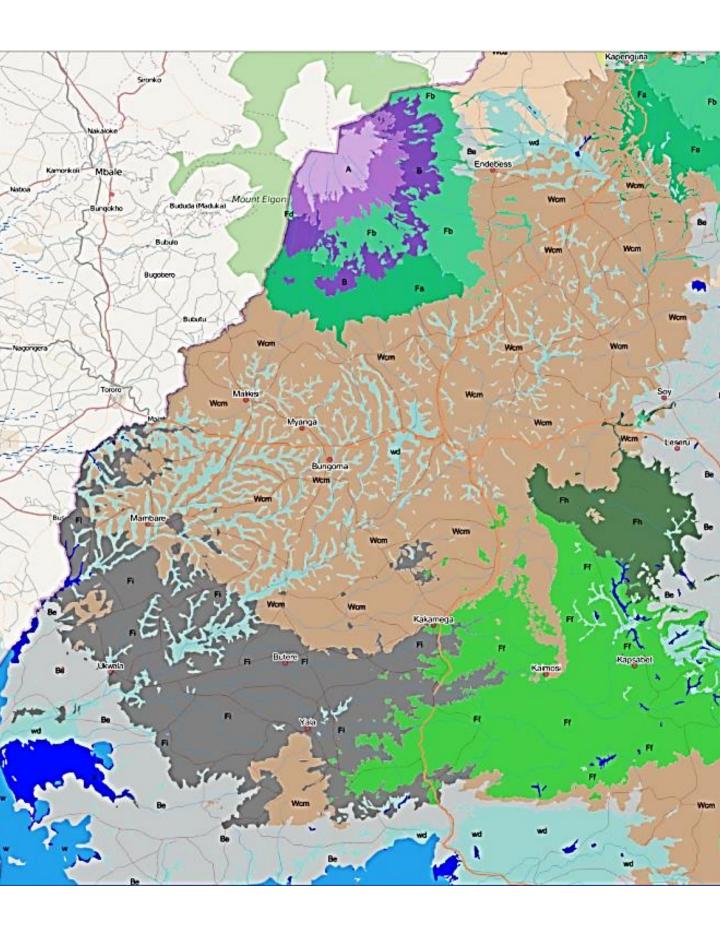
A map of the potential natural vegetation of eastern Africa

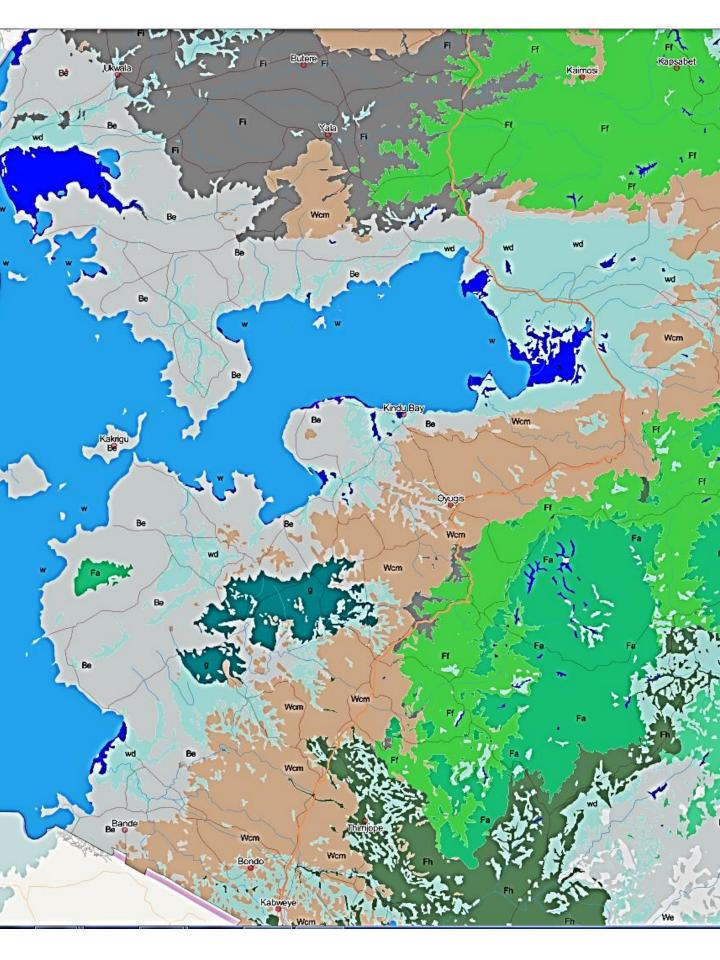
The map of potential natural vegetation of eastern Africa, version 1.1, gives the distribution of potential natural vegetation in Ethiopia, Kenya, Tanzania, Uganda, Rwanda, Malawi and Zambia. The map distinguishes 47 vegetation types, divided in four main vegetation groups: 15 forest types, 15 woodland and wooded grassland types, 5 bushland and thicket types and 12 other types. Furthermore, a number of compound vegetation types are mapped, which include vegetation mosaics, catena's and transitional zones. The map is available in various formats (as a work in progress).

Version 1.0 was published on the forest and landscape (FLD) website. The methods, data and assumptions made to create this map are detailed in: van Breugel, P., Kindt, R., Lillesø, J. B., Bingham, M., Demissew, S., Dudley, C., Friis, I., Gachathi, F., Kalema, J., Mbago, F., Minani, V., Moshi, H., Mulumba, J., Namaganda, M., Ndangalasi, H., Ruffo, C., Védaste, M., Jamnadass, R. & Graudal, L. O. V. 2011.

Potential Natural Vegetation of Eastern Africa (Ethiopia, Kenya, Malawi, Rwanda, Tanzania, Uganda and Zambia).

VOLUME 6: An Overview of The Methods and Material Used to Develop The Map. Forest & Landscape, University of Copenhagen. 139 p. (Forest & Landscape Working Papers; 68).





Key to the Map – found at http://maps.vegetationmap4africa.org/kenya pnv.html

- A Afroalpine vegetation
- B Afromontane bamboo
- Be Evergreen and semi-evergreen bushland and thicket
- E Montane Ericaceous belt
- Fa Afromontane rain forest
- Fb Afromontane undifferentiated forest
- Ff Lake Victoria transitional rain forest
- Fh Afromontane dry transitional forest
- Fi Lake Victoria drier peripheral semi-evergreen Guineo-Congolian rain forest
- g Edaphic grassland on drainage-impeded or seasonally flooded soils
- Wcd Dry combretum wooded grassland
- Wcm Moist Combretum wooded grassland
- Wd Edaphic wooded grassland on drainage-impeded or seasonally flooded soils
- WdK Acacia tortilis wooded grassland and woodland
- X Freshwater Swamp

For potential species lists and short vegetation descriptions –

- 1) Go to the map
- 2) Click on the vegetation type
- 3) Go to For more information, click HERE!
- 4) Open the Excel Workbook page, or any of the other links that are provided
- 5) Have fun!

In Addition to these Resources See:

http://vegetationmap4africa.org/vegetation-map/other-resources.aspx

Links to vegetation maps that are available as GIS data layers or, in some cases, as images. If layers are available in Google earth, you'll see an icon (globe) which you can click to open the layer in Google Earth or to go to the website where you can find the link. Because they open in Google earth, you can combine them with the PNV map for eastern Africa.

Resources for Kenya

Kenya

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- Trapnell, C. G., Birch, W. R., & Brunt, M. A. 1966. Kenya 1:250,000 Vegetation Sheet 1. Results of a vegetation land use survey of south-western Kenya. British Government's Ministry of Overseas Development (Directorate of Overseas Surveys) under the Special Commonwealth African Assistance Plan.
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- Trapnell, C. G., Brunt, M. A., Birch, W. R., & Trump, E. C. 1969. Kenya 1:250,000 Vegetation Sheet 3. Results of a vegetation land use survey of south-western Kenya. British Government's Ministry of Overseas Development (Directorate of Overseas Surveys) under the Special Commonwealth African Assistance Plan.
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Potential natural vegetation of south-western Kenya for selection of indigenous tree species

Kindt, R., Lillesø, J. P. B., van Breugel, P., & Nyabenge, M. 2005. Potential natural vegetation of south-western Kenya for selection of indigenous tree species. Sheets 1-4. World Agroforestry Centre (ICRAF), Nairobi, Nairobi, Kenya. URL:
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- Shaabani, S., Welsh, M., Herlocker, D. J., & Walther, D. 1992a. Range Management Handbook of Kenya. Vol. II, 2: Samburu District. Republic of Kenya, Minstry of Livestock Development (MOLD), Range Management Division, Nairobi, Kenya.
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- Herlocker, D. J., Shaabani, S., & Wilkes, S. 1994c. Range Management Handbook of Kenya. Vol. II, 6: Baringo district. Republic of Kenya, Minstry of Livestock Development (MOLD), Range Management Division, Nairobi, Kenya.
- Herlocker, D. J., Shaabani, S., Stephens, A., & Mutuli, M. 1994. Range Management Handbook of Kenya. Vol. II, 7: Elgeyo Marakwet district. Republic of Kenya, Minstry of Livestock Development (MOLD), Range Management Division, Nairobi, Kenya.
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Kisumu



Clockwise: <u>Lake Victoria</u> Panorama, Kisumu Panorama, sunset at <u>Oginga Odinga</u> street, Downtown, <u>Kiboko Point</u>, Nighttime in Kisumu and Jomo Kenyatta Stadium.

Elevation 1,131 m (3,711 ft)

Population (2009)

• **Total** 409,928

Kisumu is a port city in <u>Kisumu County</u>, <u>Kenya</u> at 1,131 m (3,711 ft), with a population of 409,928 (2009 census). It is the third largest city in Kenya, the principal city of western Kenya, the immediate former capital of <u>Nyanza Province</u> and the headquarters of <u>Kisumu County</u>. It has a municipal charter but no <u>city charter</u>. It is the largest city in Nyanza region and second most important city after Kampala in the greater Lake Victoria basin.

The port was founded in 1901 as the main inland terminal of the <u>Uganda Railway</u> and named Port Florence. Although trade stagnated in the 1980s and 1990s, it is again growing around oil exports. Kisumu literally means a place of <u>barter trade</u> "sumo".

Etymology

When the Europeans first settled in the area in the late 19th century, Kisumu became a trading post - attracting the Luo people from as far as <u>Migori</u> and <u>Siaya County</u>. The Kisumu region was then occupied by the Luo community. A person going to Kisumu at that time would say, "Adhi Kisuma" to mean I'm going to trade. Derived from the word "Kisuma", the word for a trading post in Luo is "Kisumo". The current name *Kisumu* is an English corruption of the word "Kisumo".

An opposing theory states that Kisumu acquired its name from 'Kusuma.' The <u>Maragoli</u> word for 'trading.' Because, before the Luo arrived in the area, the Maragoli were already trading with other people in the area like the <u>Nandi</u> and <u>Maasai</u>. It should be noted that some Luo words were acquired from the Maragoli.

History



Local inhabitants near Kisumu, 1911

"Kisumu was located on a rocky schwarz covered with thorn bush, before it was cleared and roads were cut", so wrote <u>Charles Hobley</u> a colonial administrator in 1900. On 20 December 1901, Florence Preston the wife of the engineer drove the last nail in the last sleeper by the shores of Lake Victoria and Port Florence came into being. However it was only called Port Florence for a year, and then it reverted to its original Dholuo name - Kisumu, meaning a place to look for food. Winston Churchill visited Kisumu in 1907.

Kisumu was identified by the <u>British</u> explorers in early 1898 as an alternative railway terminus and port for the Uganda railway, then under construction. It was to replace <u>Port Victoria</u>, then an important centre on the caravan trade route, near the delta of <u>River Nzoia</u>. Kisumu was ideally located on the shores of <u>Lake Victoria</u> at the cusp of the <u>Winam Gulf</u>, at the end of the caravan trail from <u>Pemba</u>, <u>Mombasa</u>, <u>Malindi</u> and had the potential for connection to the whole of the Lake region by steamers. In July 1899, the first skeleton plan for Kisumu was prepared. This included landing places and wharves along the northern lake shore, near the present day Airport Road. Demarcations for Government buildings and retail shops were also included in the plan.

Another plan was later prepared in May, 1900, when plots were allocated to a few European firms as well as to Indian traders who had travelled to Kisumu on contracts to build the Uganda Railway and had decided to settle at the expanding terminus. The plan included a flying boat jetty (now used by the Fisheries Department). In October 1900, the 62-ton ship <u>SS</u> <u>William Mackinnon</u> was reassembled and registered in Kisumu, and made its maiden voyage to <u>Entebbe</u>, marking the beginning of the Lake Marine Services. The <u>SS Winifred (1901)</u> and the <u>SS Sybil (1901)</u> were later added to the fleet in 1902 and 1904, respectively. On Friday, 20 December 1901, the railway line reached the Kisumu pier, with the centre adopting a new name, Port Florence.

By February, the railway line had been opened for goods and passenger transportation. Kisumu was also privileged to host the first flight in East and Central Africa; the current police workshop was the first hangar in Kenya and entire East Africa. Before the jet airline

era, the city was a landing point on the British flying boat passenger and mail route from Southampton to Cape Town. Kisumu also linked Port Bell to Nairobi.



Boat riding in Kisumu

In the meantime, it was realised that the site originally chosen for the township north of the Nyanza Gulf was unsuitable for the town's expansion, due to its flat topography and poor soils. An alternative site was therefore identified and the town's location moved to the ridge on the southern shore of the Gulf, where the town sits today. Consequently, another plan was prepared in 1902, which provided the basic layout of the new town on the southern ridge. This was followed by the construction of a number of Government buildings, notably the former Provincial Commissioner's Office (now State Lodge) and the Old Prison (now earmarked for the construction of an <u>Anglican Cathedral</u>).

In 1903, the township boundaries were gazetted and some 12,000 acres, including water, set aside for its development. The new township reverted to its original name, Kisumu, in substitution of Port Florence. At this time, there was an 'Old Kisumu', that consisted of two rows of Stalls (Dukas) on Mumias Road, north of the Gulf. It was later demolished in the twenties when new plots became available on Odera and Ogada Streets in the present day Kisumu, hence the new area acquired the name 'New Bazaar'.

By the 1930s and 40s, the city had become a leading <u>East African</u> centre for Commerce, Administrative and Military installations. In the 1960s the population of Asians in relation to Locals was significantly higher. The town was elevated to the status of a Municipal Board in 1940 and later to a Municipal Council in 1960. In the early sixties, very little development took place in Kisumu, with an acute shortage realized in dwelling houses, shops and offices. The situation was later made worse by the influx of locals into the town following the declaration of independence in 1963.

The city's growth and prosperity slowed down temporarily in 1977, as a result of the collapse of the <u>East African Community</u>. However, the city spurred with the reformation of the community in 1996 and with its designation as a "city." The port has been stimulated by the transformation of international business and trade, as well as the shipments of goods destined for Uganda, Tanzania, Burundi, Rwanda and Democratic Republic of Congo.

Currently, Kisumu is one of the fastest growing cities in <u>Kenya</u>. It is thriving with rich sugar and rice irrigation industries, whose contribution to the National economy is immense due to its natural resources and as the epicentre for business in <u>East Africa</u>.



Kisumu panorama, viewed from Lake Victoria

Points of interest

Town Clock

On the main street of Kisumu city, Oginga Odinga Road. A tall Town Clock stands in the middle of the road. It was unveiled on 19 August 1938 by the then <u>Governor of Kenya Sir Robert Brooke-Popham</u>. The Town Clock was built in memory of Kassim Lakha who arrived in East Africa in 1871 and died in Kampala in 1910. It was erected by his sons Mohamed, Alibhai, Hassan and Rahimtulla Kassim, as the inscription on the Town Clock reads.

Kisumu Museum

Kisumu Museum, established in 1980, has a series of outdoor <u>pavilions</u> laid out in a formation similar to that of a Luo homestead. Some of the pavilions contain live animals. For example, one pavilion contains numerous <u>aquaria</u> with a wide variety of fish from <u>Lake Victoria</u>, along with explanatory posters. Another pavilion contains terrarium containing <u>mambas</u>, <u>spitting</u> <u>cobras</u>, <u>puff adders</u> and other venomous Kenyan snakes. Additionally, out of doors, the museum has a few additional exhibits, including a snake pit and a <u>crocodile</u> container.

Other pavilions show weaponry, jewellery, farm tools and other artifacts made by the various peoples of the Nyanza Province. Additionally, there are exhibits of stuffed animals, birds and fish. One pavilion houses the prehistoric TARA <u>rock art</u>, which was removed for its own protection to the museum after it was defaced by graffiti in its original location.

The museum's most important and largest exhibition is the <u>UNESCO</u>-sponsored Ber-gi-dala. This is a full-scale recreation of a traditional <u>Luo</u> homestead. Ber-gi-dala consists of the home, granaries and livestock corrals of an imaginary Luo man as well as the homes of each of his three wives, and his eldest son. Through signs and taped programs in both <u>Luo</u> and English, the exhibition also explains the origins of the Luo people, their migration to western Kenya, traditional healing plants, and the process of establishing a new home.

Dunga Beach and Wetlands

Dunga Beach and Wetland is known for its unique eco-cultural attractions due to its biodiversity and cultural rich and diverse papyrus wetland ecosystem and local community respectively. Ecofinder Kenya has established Dunga Wetland Pedagogical Centre at Dunga Beach is a grass-root led intervention whose overarching cardinal goal is empowerment of Dunga Wetland Community and improvement of livelihood security of its people. Therefore, som of the main focuses in the center are promoting Eco-Cultural Tourism and facilitate the conservation of the Dunga Papyrus Wetland Ecosystem. [6]

Kisumu Impala Sanctuary

Kisumu is the location of the <u>Kisumu Impala Sanctuary</u>. During the British rule, Impala Park now sanctuary was called Connaught Parade .Measuring just 0.4 square miles (1.0 km²), the sanctuary is one of Kenya's smallest wildlife preserves. As its name suggests, it is home to a herd of impala. Some hippos, as well as many reptiles and birds are also present. Additionally, several caged <u>baboons</u> and <u>leopards</u> who faced difficulties of one sort or the other in the wild are held in cages there. Over 115 different species of birds live there.

Hippo Point

Hippo Point is a 600 acres (240 ha) viewing area on Lake Victoria. Despite its name, it is better known as a viewing point for its unobstructed sunsets over the lake than for its occasional <a href="https://hippo.nih.gov/hippo

Transport



Kisumu Harbour. The green vegetation is water hyacinth

Before the <u>jet</u> airline era, Kisumu was a landing point on the British <u>flying boat</u> passenger and mail route from <u>Southampton</u> to <u>Cape Town</u>. Kisumu linked <u>Port Bell</u> and <u>Nairobi</u>. Kisumu is served by <u>Kisumu Airport</u> which has international status, with regular daily flights to <u>Nairobi</u> and elsewhere. Expansion of the airport cargo facility after completion of the passenger terminals is currently going on in anticipation of increased trade brought about by the recreated <u>East African Community</u> of Kenya, Tanzania and Uganda.

<u>Lake Victoria ferries</u> have operated from the port linking the railway to <u>Mwanza</u> and <u>Bukoba</u> in <u>Tanzania</u>, and to <u>Entebbe</u>, <u>Port Bell</u>, and <u>Jinja</u> in <u>Uganda</u>. The first steam ships built in Kisumu in 1905 were the SS Sybila and the SS Nyanza. As mentioned above under '<u>History</u>', the <u>Uganda Railway</u> from the port of <u>Mombasa</u> reached Kisumu in 1901. Currently (2013) no passenger trains are operated between Nairobi and Kisumu.

Notable natives and residents

The term used to refer to a resident of Kisumu is *jakisumo* (plural, *jokisumo*). Notable *jokisumo* include

- Jaramogi Oginga Odinga, politician, the first Vice-President of Kenya
- Raila Amolo Odinga, politician, son of Jaramogi Oginga Odinga, Kenya's prime minister
- Robert Ouko, politician and son of Kisumu Nyahera who was abducted from his Koru, Kenya home. His charred body was found later.

Trivia

• <u>U.S. President Barack Obama</u>'s <u>father</u> is from the village of <u>Nyang'oma Kogelo</u>, 37 miles or 60 km from Kisumu.

Kakamega Forest

Kakamega Forest is a tropical rainforest situated in the <u>Western Province</u>, of <u>Kenya</u>, North West of the capital <u>Nairobi</u>, and near to the border with <u>Uganda</u>. It is <u>Kenya</u>'s only tropical <u>rainforest</u> and is said to be Kenya's last remnant of the ancient Guineo-Congolian rainforest that once spanned the continent.



Geography

The forest including reserves encloses about 238 square kilometers, a little less than half of which currently remains as indigenous forest. The forest is elevated at predominantly between 1500 m and 1600 m above sea level. In the north of the Forest is the 4,468 hectares (45 km²; 17 sq mi) Kakamega National Reserve, given national forest reserve status in 1985. Just to the north is the Kisere Forest Reserve. Throughout the forest are a series of grassy glades, ranging in size from about 1 to 50 ha, with a few larger clearings. The origins of the glades are uncertain. Some are certainly recent clearings, but others predate recent records. These may have originated from past human activity such as cattle grazing or may be the result of herbivory and movements by large mammals such as buffalo and elephants (both now extirpated from the region). The glades vary a great deal in structure, some being open grass and others having a considerable number of trees or shrubs. A number of streams and small creeks run through the reserve. The larger creeks are usually bordered by a few to tens of meters of forest on either side which divide the glades, while the smallest creeks flow through open grasslands, often forming small marshy patches.

Climate

The Kakamega Forest is very wet, with an average of 1200 mm - 1700 mm of rain per year. Rainfall is heaviest in April and May ("long rains"), with a slightly drier June and a second peak roughly in August to September ("short rains"). January and February are the driest months. Temperature is fairly constant throughout the year, ranging between 20C - 30C.

Biodiversity

Flora found in the park include some of Africa's greatest hard and soft woods: Elgon teak, red and white stinkwood and several varieties of Croton and Aniageria Altisima. There are 380 recorded species of plants. This includes 60 species of ferns, 150 species of trees and shrubs, and 170 species of flowering plants including 60 species of orchids with 9 species found only in this forest.

The Forest is famous for its birds, $367^{[3][4]}$ bird species have been recorded in the forest such as the west African <u>Great Blue Turaco</u> and <u>Black-and-white-casqued Hornbill</u>. At least 9 birds are not found anywhere else. [5]

Wildlife that occur in the park include <u>Bush Pig</u>, <u>Duikers</u>, <u>Bushbuck</u>, <u>African Clawless Otter</u>, <u>Mongoose</u>, <u>Giant African Water Shrew</u>, <u>Squirrels</u>, <u>Tree Pangolin</u>, <u>Porcupine</u>, <u>Bats</u> and a variety of primates including the <u>blue monkey</u>, <u>redtail monkey</u>, <u>De Brazza's monkey</u>, <u>baboon</u>, <u>potto</u> and the occasional <u>vervet monkey</u>. <u>Leopards</u> have been occasionally reported, but the last official sighting was in 1991. [6]

Insects are abundant and some are quite spectacular, such as <u>Goliath beetles</u>, pink and green <u>Flower Mantis</u>, and numerous colorful butterflies (489 species). Particularly well represented

groups are ants (Formicidae), <u>Lepidopterans</u>, <u>Orthopterans</u>, and <u>beetles</u>. <u>Gastropods</u>, <u>millipedes</u> and <u>spiders</u> are also common.

Environmental issues

Many local inhabitants rely on the forest to supply important resources, such as firewood, building poles and traditional medicines. Cattle grazing occurs in some of the glades. The region is said to be one of the most densely populated rural areas in the world, and pressure on the Forest resources is considerable. The German funded project BIOTA East worked in the forest from 2001 until 2010, creating forest inventories for many life forms and aiming to find strategies for a sustainable use of the forest.

Treasures of the Forest

(Kakamega Forest and its People)

The Forest

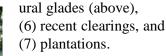
The Kakamega Forest is the only tropical rainforest in Kenya. It was was once part of the great forest that blanketed equatorial Africa, forming the easternmost edge. Because of this unique evolutionary history with lowland rainforests



and influence from the higher elevation Nandi escarpment, it is the only one of its kind in Kenya and is an island of immense biodiversity with species found nowhere else. It presently covers an approximate 240 km² in western Kenya just west of the Rift valley escarpment. It receives an average of 200 cm of

rain per year with temperatures ranging from 15-27 centigrade. Seven major habitat types are found in the Kakamega

Forest: (1) virgin rainforest (below), (2) colonizing forest, (3) disturbed forest, (4) riverine forest, (5) nat-

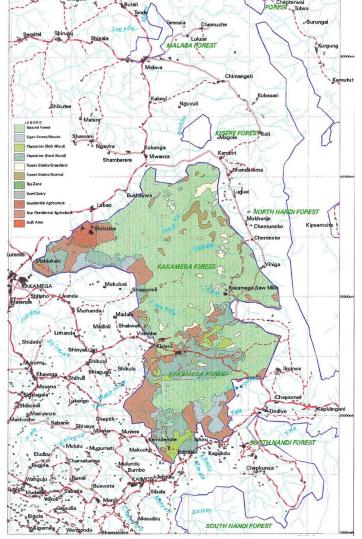




Satellite images, historical maps and photos, and recent surveys show that, after becoming isolated in the late 1800's, the Kakamega forest has shrunk in size and has been fragmented into several small islands. At present, it consists of 5 rainforest islands ranging in size from 100 ha

(Malava forest) to 8600 ha (Kakamega forest proper). In 1991, surveys show a 50% loss of area in the last 26 years, due primarily to agriculture (below) and illegal logging.





The Inhabitants and their status

Because of its unique tie with western Africa and the influence from the higher elevation Nandi Escarpment, the Kakamega Forest has very high levels of biodiversity and an extraordinary blend of species found no where else in Kenya. It is estimated that 10-20% of the species found in the Kakamega Forest are endemic (KIFCON 1994). For example, there are 380 recorded species of plants. This includes 60 species of ferns, 150 species of trees and shrubs, and 170 species of flowering plants including 60 species of orchids with 9 species found only



in this forest. There are over 367 species of birds recorded in the Kakamega Forest such as the west African Great Blue Turaco (left) and Black & White Casqued Hornbill. At least 9 birds are not found anywhere else. There are at least 30 species



of mammals including 6 primates (e.g Black & White Colobus – above), the largest bat on the African mainland, and the endemic Bush-tailed porcupine and Giant water shrew. The forest is also extremely rich in butterflies and other insects, but to my knowledge have not been extensively studied.

Because of decreasing size, fragmentation, and overuse, many species have gone locally extinct and many others are threatened. Historically, the forest harbored an elephant population, water buffalo, the bongo,



and the leopard which haven't been observed in decades. There are at least 12 endangered bird

species (e.g. Gray parrot – right), and a recent study (Brooks et al. 1999) suggests that forest fragmentation will eventually lead to extinction of half of the bird species within 23 and 80 years depending on the size of the forest and

its isolation. population rare deBrazza's Interestingly, there is a healthy of two breeding troops of the monkey (left) in the northern areas of the forest.

The People

The people that live in and around the Kakamega Forest are predominately Luhya. The Luhya are said to have immigrated from Uganda to this area beginning in the mid 1600's, and share cultural and linguist similarities with Bantu people. They are divided into a large number of sub-tribes such as the Bukusu, Ragooli, and Tiriki, each with their own language and customs. The Luhya are primarily agriculturists, raising millet, sweet potatoes, beans, and cash crops like tea, coffee, and sugar cane. Large tea crops (right) often mark the border of the forest in many regions. Luhya also tend cattle and use the forest commonly for grazing.





There are over 50 small, vaguely defined communities around the Kakamega Forest. They are vaguely defined because the area, although rural, is very densely populated, recently recognized as the densest rural population in the world with a annual growth rate of 2.8%. There are small markets and shops scattered through the rolling hills and plots of land with thatched homes. People are engaged in whatever type of work they can find. Young men commonly

venture into the forest to cut trees to sell for lumber (right) or for

making and selling charcoal. There are a series of roads that encircle the forest and 3 or 4 that pass through it. Near the forest, public transportation is generally unavailable and many young men have taken to using bicycles as "taxis" (below). There are many (>100) primary and secondary schools near the forest ranging from large, well-funded government schools to small, dilapidated harambee schools (below).







Forest Services

Like other forests, the Kakamega Forest provides important services to the natural community and to the human community locally, regionally, and globally. Forests can act as powerful stabilizers of long-term climate patterns, and because East Africa is generally dry and seasonal, these forests are also important for watershed dynamics. For Kenya, the forest is an island of biodiversity with 20% of Kenya's species found in this forest. Because of this and the loss of forests in Kenya (240,000 ha at turn of century to 23,000 ha presently), the Kakamega forest was ranked as the third highest priority for conservation by the IUCN in 1995.



The forest provides many services to the local human community for basic needs. Many animals are hunted for meat (e.g. Blue duiker, harlequine quail, bush pig). At least 50 species of plants are used medicinally (eg. *Antiaris*



toxicara). Wood is used for cooking and building, grasses for livestock grazing and thatching roofs, and vines and bark for ropes and clothe. Many areas are also important for religious sites and ceremonies. For example, the Tiriki use the forest for Kavunyonje (circumcision rites) and honor their ancestors through the Muguma tree (*Ficus thonningii*). Wild Nandi coffee (*Coffee eugenoides*) grows in the forest and many other plants supplement the diet.

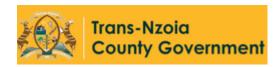


The forest is being lost primarily by conversion to agriculture and illegal logging. Most people who live in this area are subsistence farmers, growing maize, beans, and green vegetables. There are also some areas with large coffee and tea plantations, especially near the perimeter of the forest.

Photos by Udo Savilli, Brent Smith, KIFCON, Christopher Kauffman, Eden Robertson, ICIPE, and Mark Lung.

Map from Intl Center for Insect Physiology and Ecology (IC1PE)

Trans-Nzoia County





Location of Trans-Nzoia County (Green)

Trans-Nzoia County is a <u>county</u> in the former <u>Rift Valley Province</u>, <u>Kenya</u>, located between the <u>Nzoia River</u> and <u>Mount Elgon</u> with its centre at the town of <u>Kitale</u> which is the capital and largest town of the county, and 380 km North West of <u>Nairobi</u>. The county borders <u>Bungoma</u> to the west, <u>Uasin Gishu</u> and <u>Kakamega</u> to the south, <u>Elgeyo Marakwet</u> to the east, <u>West Pokot</u> to the north and the republic of <u>Uganda</u> to North West. Trans Nzoia covers an area of 2495.5 square kilometres. [2]

Historically the area has been inhabited by the <u>Kalenjin</u> and <u>Bukusu</u> people. After independence many of the farms vacated by white settlers were bought by individuals from other <u>ethnic groups</u> in Kenya.

The county is largely Agricultural with both large scale and small scale wheat, maize and dairy farming. The county is fondly referred to as the basket of Kenya for its role in food production in the country.

Authority	Type	Population*	Urban pop.
<u>Kitale</u>	Municipality	86,055	63,245
Nzoia	County	489,607	0
Total	-	575,662	63,245

Climate and Weather

* 1999 census. Source: [1]

Situated in the slopes of the mountain, Trans Nzoia has a cool and temperate climate with average annual temperatures ranging between a minimum of 10°C to a maximum of 27°C. The county receives annual precipitation ranging between 1000 and 1200mm, with the wettest months being experienced between April and October.

Religion and Culture

Majority of people living in Trans Nzoia County are Christians. [3] Prominent churches in the county include Anglican (A.C.K.), Roman Catholic and Presbyterians. There are numerous evangelical churches among them the Deliverance, A.G.C, P.E.F.A, Full Gospel and Assemblies of God. Other faiths such as Islam and Hinduism are also professed especially in major towns.

The indigenous Sabaot tribe or the 'Elgon Maasai' live near Mount Elgon and have a lot of similarities with Kalenjins. They value their culture and guard it with pride. They are traditionally pastoralists. They used to believe that their god lived in elevated places where they couldn't reach such as on top of Mount Elgon or up in the sky. However due to influence of Christianity, education and intermarriage, most of these traditions have been replaced by modern culture, a reason why the one time pastoralists are now big farmers in the region.

Major Towns

Kitale

Located between Mt. Elgon and Cherangany Hills, <u>Kitale</u> is the largest town and Trans Nzoia's administrative capital. Mainly an agricultural town, Kitale has recently shown a lot of economic potential, with agribusiness, real estate and commercial businesses booming the most. The town is home to over 220,000 people and as the last stop of the Kenya railway line, it's an important center for movement of goods in the North Rift.

Kiminini

Kiminini is a small yet a busy town located some 22 kilometers along Kitale Webuye road. It's a significant agricultural center. St. Brigids Girls high school is located at Kiminini.

Maili Saba

Maili Saba means '7 miles' in Swahili and it's the town that welcomes you to Kitale when coming from Eldoret.

Endebess

Situated close to Mt. Elgon, some 17 kilometers North Western side of Kitale town, Endebess is an important agricultural town, which also serves as a local administrative and commercial center for Kwanza division.

Economy

Trans Nzoia County's arable land makes agriculture the top economic activity, where maize farming is widely practised, and mostly at a commercial level. Tea, coffee, horticulture and commercial businesses are also very significant to the county's economy. There's dairy farming and tourism - owing to an array of touring sites within the county. A number of companies such as Kenya seed company, Western Seed Company, K.C.C and various government institutions provide employment to many people living in the urban centers.

Health Facilities

There are about 78 health institutions in Trans Nzoia County - 2 District Hospitals, 2 Sub-District Hospitals and 33 Dispensaries. The county has 7 health centers, 28 medical clinics and about 6 nursing homes. Among the notable health facilities include Kitale District Hospital and Kapsara District Hospital.

Education

Currently, there are over 470 primary schools and 120 secondary schools in Trans Nzoia. Some of the prominent secondary schools include St. Brigids Girls, St. Monica, St. Joseph's Boys, St. Joseph's Girls, Kitale School and Boma Secondary schools. Trans Nzoia has over 20 tertiary institutions, including a university campus, a nursing training college, a teachers' training college, farmers training institute, youth polytechnic and a number of commercial colleges.

Notable Personalities

Some of the prominent personalities who hail from Trans Nzoia include the former renowned Vice President Michael Kijana Wamalwa, the first vice president to die in office in 2003. Others include Milcah Chemos who's a reigning commonwealth games' champion and Wesley Korir, a long distance runner who also dabbles as an elected Member of Parliament.

Places of Interest

Most outstanding places of interest include Mount Elgon National Park, Saiwa Swamp National Park and Kitale Nature Conservancy. Mt. Elgon National Park is located approximately 11 kilometers from Kitale town. Some of the wild animals found here include elephants, buffalos, black and white colobus, giant forest hog and over 420 bird species.

Saiwa Swamp National Park is located some 27 kilometers from Kitale town towards Kitale - Kapenguria road and is good for game viewing and camping. Kitale Museum, located in the heart of Kitale town is one of the most interesting places in the county. Apart from hosting varieties of traditional artifacts, the Museum is also home to different snakes' species as well as having one of the largest crocodile pits in Kenya.

Mount Elgon





Mount Elgon Koitobos Peak 4321 m (left) and Great Rift Valley (right)

Geology

Type Shield volcano

Age of rock Miocene origin

Last eruption Unknown

Climbing

First ascent 1911 by Kmunke and Stigler

Physical features

It is the oldest and largest solitary volcano in East Africa, covering an area around 3500 km². Other features of note are:

- The caldera Elgon's is one of the largest intact calderas in the world.
- The warm springs by the <u>Suam River</u>
- Endebess Bluff (2563 m or 8408 ft)
- Ngwarisha, Makingeny, Chepnyalil, and Kitum caves: <u>Kitum Cave</u> is over 60 m wide and penetrates 200 m. The cave contains <u>salt</u> deposits and it is frequented by wild <u>elephants</u> that lick the salt exposed by gouging the walls with their tusks. It became notorious following the publication of Richard Preston's book <u>The Hot Zone</u> in 1994 for its association with the <u>Marburg virus</u> after two people who had visited the cave (one in 1980 and another in 1987) contracted the disease and died.

The mountain soils are red <u>laterite</u>. The mountain is the catchment area for the several rivers such as the <u>Suam River</u>, which becomes the Turkwel downstream and which drains into Lake Turkana, the <u>Nzoia River</u> and the <u>Lwakhakha River</u> which flow to <u>Lake Victoria</u>. The town of Kitale is in the foothills of the mountain. The area around the mountain is protected by two <u>Mount Elgon National Parks</u>, one on each side of the international border.

Some rare plants are found on the mountain, including <u>Ardisiandra wettsteinii</u>, <u>Carduus afromontanus</u>, <u>Echinops hoehnelii</u>, <u>Ranunculus keniensis</u>, and <u>Romulea keniensis</u>. [7]

In 1896, <u>C. W. Hobley</u> became the first European to circumnavigate the mountain. Kmunke and Stigler made the first recorded ascent of Wagagai and Koitobos in 1911. F. Jackson, E. Gedge, and J. Martin made the first recorded ascent of Sudek in 1890. The main peak is an easy scramble and does not require any special <u>mountaineering</u> skills.

Name

The mountain is named after the <u>Elgeyo</u> tribe, who once lived in huge caves on the south side of the mountain. [citation needed]

It was known as *Ol Doinyo Ilgoon* (Breast Mountain) by the <u>Maasai</u> and as *Masaba* on the Ugandan side by the Bamasaba.

Mt. Elgon consists of five major peaks:

- Wagagai (4,321 m), in Uganda
- Sudek (4,302 m or 14,140;ft) on the Kenya/Uganda border
- Koitobos (4,222 m or 13,851;ft), a flat-topped basalt column in Kenya
- **Mubiyi** (4,211 m or 13,816;ft) in Uganda
- **Masaba** (4,161 m or 13,650;ft) in Uganda

Mount Elgon is a massive solitary volcanic mountain on the border of eastern Uganda and western Kenya. Its vast form, 80 km in diameter, rises 3070 m above the surrounding plains, providing welcome relief in more than one sense of the word. Its mountainous terrain introduces variety to an otherwise monotonous regional landscape. Its cool heights offer respite for humans from the hot plains below, and its higher altitudes provide a refuge for flora and fauna.

Local ethnicities

Mount Elgon and its tributaries are home to four tribes, the <u>Bagisu</u>, the <u>Sapiiny</u>, the <u>Shana</u>, and the <u>Ogiek</u>, better known in the region under the derogatory umbrella term <u>Ndorobo</u>. The Bagisu, Sapiiny, and Shana are subsistence farmers and conduct circumcision ceremonies every even year to initiate young men (and in the Sapiiny's case, girls) into adulthood. Traditionally, the Bagisu, also known as the Bamasaba, consider Mount Elgon to be the embodiment of their founding father Masaba, and sometimes call the mountain by this name. The Sapiiny also consider it the home of their forefather Musobo. All life and livelihood really depend on the mountain forest. Local people have long depended on forest produce, but in recent years, the locals and park officials have been on running battles as they are completely prohibited from entering the park to harvest resources such as bamboo poles and bamboo shoots (a local delicacy). The Ogiek used to be hunters and honey gatherers, but have become more sedentary in recent decades, and have partially been moved downward by the government as complete conservation takes root.

Mount Elgon National Park

Mount Elgon National Park is located on the border of Kenya and Uganda. 140 km North East of Lake Victoria. The park covers an area of 1279 km² and is bisected by the border of Kenya and Uganda. The Ugandan part of the park covers 1110 km² while the Kenyan part covers 169 km². It is uniquely split down the middle by the Kenyan-Ugandan border. Mount Elgon is an important water catchment for the Nzoia River which flows to Lake Victoria and for the Turkwel River which flows into Lake Turkana.

Climate

The climate is moist to moderate dry. Annual rainfall is over 1,270mm. The dry season runs from June to August, and December to March, although it can rain at any time.

Vegetation

Elgon's slopes support a rich variety of vegetation ranging from montane forest to high open moorland studded with the giant lobelia and groundsel plants. The vegetation varies with altitude. The mountain slopes are covered with olive Olea hochstetteri and Aningueria adolfifriedericii wet montane forest. At higher altitudes, this changes to olive and Podocarpus gracilior forest, and then a Podocarpus and bamboo Arundinaria alpina zone. Higher still is a Hagenia abyssinica zone and then moorland with heaths Erica arborea and Philippia trimera, tussock grasses such as Agrostis gracilifolia and Festuca pilgeri, herbs such as Alchemilla, Helichrysum, Lobelia, and the giant groundsels Senecio barbatipes and Senecio elgonensis.

The botanical diversity of the park includes giant podocarpus, juniper and Elgon olive trees cedar Juniperus procera, pillarwood Cassipourea malosana, elder Sambucus adnata, pure stands of Podocarpus gracilior and many orchids.

Of the 400 species recorded for the area the following are of particular note as they only occur in high altitude broad-leaf montane forest: Ardisiandra wettsteinii, Carduus afromontanus, Echinops hoehnelii, Ranunculus keniensis (previously thought endemic to Mount Kenya), and Romulea keniensis.

Wildlife

Mammals

Elephants and <u>buffalo</u> can be found on the lower slopes. The park is also home to a variety of small <u>antelope</u> and <u>duiker</u>, as well forest monkeys, including the <u>black-and-white colobus</u> and <u>blue monkey</u>. <u>red-tailed monkey</u> have been reported after being thought to be locally extinct. Both leopard and hyena existed there in the late 1990s. [6]

Birds

Mount Elgon is home to at least 144 bird species. Of particular interest are <u>Jackson's</u> <u>francolin</u>, the <u>eastern bronze-naped pigeon</u>, <u>Hartlaub's turaco</u>, the <u>Tacazze sunbird</u> and the endangered <u>lammergeier</u>, due to their restricted range. [6]

Invertebrates

<u>Maathai's longleg</u>, an <u>endangered dragonfly</u> was discovered here in 2005 and named after Nobel Prize winner <u>Wangari Mathaai</u>. [7]

Half of Uganda's butterfly species have been reported in Mt. Elgon. [6]

Kritik

Bei seiner Gründung wurden rund 30.000 Sabiny (eine Ethnie dieser Region) in das so genannte Benet-Umsiedlungsareal zwangsumgesiedelt. Die erste Verfrachtung aus dem Nationalparkgelände auf dieses Umsiedlungsareal geschah 1983 und war nur "teilweise erfolgreich" - ein beträchtlicher Teil der Sabiny entzog sich der Umsiedlung und verblieb im Nationalpark. Den Umgesiedelten stellte die Regierung lediglich das nackte Land zur Verfügung. Starthilfen wie Baumaterial, landwirtschaftliche Geräte, Saatgut oder ähnliches wurde ihnen nicht geboten. Zu einer zweiten Umsiedlungswelle kam es 1992, als die Menschen mit vorgehaltener Waffe gezwungen wurden, den Nationalpark zu verlassen. Im Zuge dieser Strafaktion wurden Menschen geschlagen, es kam zu zahlreichen Körperverletzungen und Vergewaltigungen, das Vieh der Sabiny wurde abgeschlachtet, ihre Häuser wurden in Brand gesteckt. Damit nicht genug: Im Zuge dieser Vertreibung wurde die Größe der 1983 zur Verfügung gestellten Umsiedlungsfläche von der Uganda Wildlife Authority (UWA) überprüft und von 7.500 auf 6.000 Hektar reduziert. Das heißt über Nacht verloren rund 6.000 Menschen, die über zehn Jahre darauf verwendet hatten, das ihnen zugewiesene Land zu kultivieren, erneut ihre Lebensgrundlage. Wiederum wurden sie zu "Eindringlingen" und unerwünschten Siedlern. Weitere Verschiebungen der Grenzen des Umsiedlungsareals zu Lasten der Sabiny erfolgten 2002 und 2004. Zugleich wandten sich die UWA-Ranger nach dem Ende politischer Unruhen in Uganda einer strikteren Durchsetzung der Nationalpark-Gesetze zu. Menschen, die außerhalb der neu gezogenen Grenzen des Umsiedlungsareals lebten, waren ständigen Drohungen, Belästigungen und tätlichen Angriffen durch die UWA-Ranger ausgesetzt, bis hin zur Vergewaltigung Holz sammelnder Frauen. Von der relativen politischen Ruhe, die in Uganda seit einigen Jahren herrscht, profitieren die Ureinwohner dieser Region nicht. EU, Weltbank und die Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (GTZ) werden beschuldigt, durch ihre Weiterbildungsseminare für Mitarbeiter der ugandischen Forst- und Wildbehörden die Mitverantwortung an der Vertreibung von über 130 000 Menschen in Uganda zu tragen. [3]

Kapenguria

From Wikipedia, the free encyclopedia

Kapenguria is a town lying north east of <u>Kitale</u> on the <u>A1 road</u> in <u>Kenya</u>. Kapenguria is capital of the <u>West Pokot County</u>. Kapenguria forms a municipality with an urban population of 13,000 and a total population of 56,000 (1999 census).

Kapenguria municipality has seven wards (Chemwochoi, Kaibos, Kapenguria, Keringet/Psigirio, Kisiaunet, Siyoi and Talau). All of them belong to Kapenguria Constituency, which has a total of 23 wards, the remaining 15 are located within other local authorities.

Lying near the <u>Saiwa Swamp National Park</u>, Kapenguria is home to the <u>Kapenguria museum</u> in the <u>prison</u> where <u>Jomo Kenyatta</u> was incarcerated in 1953 for his alleged role in the <u>Mau</u> Mau Rebellion.

It is the home of <u>Tegla Loroupe</u>, world-record-holder in the marathon, half-marathon, 20,000-meter, 15,000-meter and 10,000-meter races. She holds annual <u>Peace Race</u> races here, to bring peace among the eight tribes in the West Pokot area.

This is the location of the <u>Tegla Loroupe Peace Academy</u>, founded to provide education for orphans from the tribal wars.

Kapenguria Six

The **Kapenguria Six** – <u>Bildad Kaggia</u>, <u>Kung'u Karumba</u>, <u>Jomo Kenyatta</u>, <u>Fred Kubai</u>, <u>Paul Ngei</u>, and <u>Achieng' Oneko</u> – were six leading Kenyan nationalists who were arrested in 1952, tried at Kapenguria in 1952–53, and imprisoned thereafter in Northern Kenya.

Prelude

Evelyn Baring was the new Governor, who arrived in Kenya on 30 September 1952.

After the European invasion, large amounts of Kenya's best land were alienated for exclusive white use. Black Africans were allowed to remain as tenant farmers ('squatters') on land they had previously owned or newly cultivated; their terms of service steadily worsened. At Olenguruoune in 1944, 11,000 squatters were expelled, the beginning of the last act of a land dispute that had raged since the 1920s. The first Mau Mau oaths were probably administered there and then. Kenyatta returned home from the UK in 1946. By 1947, oathing had spread all over Kikuyuland and into Nairobi. Mitchell, the previous Governor, proscribed the new organisation – now called Mau Mau – in 1950.

On 9 October 1952, Senior Chief Waruhiu was shot and killed by Mau Mau gunmen. Baring had been on a tour of Central Province. It was cut short. At the funeral, he and Kenyatta locked eyes over the casket; days afterwards, Baring signed the arrest warrants for the Six.

Operation Jock Scott

On the night of 20/21 October, a <u>mass arrest</u> was carried out of Mau Mau and KAU leaders. There is some doubt about the actual number of arrests. Baring had signed the Emergency order on the evening of the 20th, the emergency was publicly proclaimed on the morning of the 21st. Troops from the <u>Lancashire Fusiliers</u>, flown in on the 20th, were in place later that day, patrolling the African areas of segregated Nairobi.

The Trial

Anthony Somerhough, the Deputy Public Prosecutor, opened proceedings on 3 December 1952. The charge against the defendants was that they had jointly managed a proscribed society (and that the proscribed society, the <u>Mau Mau</u>, had conspired to murder all white residents of Kenya).

The defence was led by <u>Denis Nowell Pritt</u>, assisted by a multiracial team: HO Davies, a Nigerian; Chaman Lall, an Indian and friend of <u>Nehru</u>; and the Kenyans <u>Fitz De Souza</u>, <u>Achroo Kapila</u>, and Jaswant Singh. In line with the segregationist legislation then in force, they were prohibited from staying in the same hotel.

Baring offered Ransley Thacker, the presiding judge, an unusually large pension, and that from the Emergency fund rather than a more conventional source; the two also maintained secret contact during the trial. Witnesses were suborned, as Baring admitted in a letter to Lyttelton, saying that "every possible effort has been made to offer them rewards". Rawson Macharia, the key witness at the trial, was later to testify that he had been offered a university course in public administration at Exeter University College, protection for his family, and a government job on his return from the UK. Other witnesses were offered land at the Coast.

I would submit that it is the most childishly weak case made against any man in any important trial in the history of the British Empire.

—Dennis Lowell Pritt, QC, gives his view of the case against Kenyatta

The crucial piece of evidence was Macharia's. He testified that in March 1950, he had taken one of the Mau Mau oaths at Kenyatta's hands. He further claimed that the oath had required him to strip naked and drink human blood. Macharia's submissions were the only evidence of a direct link between Kenyatta and Mau Mau produced before the court. However, Mau Mau was proscribed in August 1950, so, even had the claims been true, it is unclear that they would have proved Kenyatta's membership, let alone management, of a proscribed organisation.

Aftermath

The defendants were all convicted, and sentenced to long terms and permanent restriction. All defendants got seven years each.

The remainder of the nationalist movement – in which <u>Mboya</u> and <u>Odinga</u> featured prominently – kept up the pressure for Uhuru and the release of the detainees: KANU's election slogan in the 1961 election was *Uhuru na Kenyatta* (*Independence and Kenyatta*). KANU won the election and then refused to form a government unless Kenyatta was released. Despite <u>Renison</u>'s famous dismissal of Kenyatta as the leader "unto darkness and death", it was clear that he was indispensable; he was duly released in 1961. The rest of the Six were released soon thereafter.

Kenyatta went on to the presidency of Kenya; Kaggia and Ngei served as ministers; Oneko was detained by Kenyatta between 1969 and 1974, before later serving as MP for <u>Rarieda</u> in Kenya's 7th Parliament; Kung'u Karumba disappeared in 1975, while in Uganda on business; Fred Kubai twice served as MP for Nakuru East – from 1963 to 1974, and from 1983 to 1988 – before his death in June 1996.

Cherangani Hills Forest

Cherangani Hills Forest (Cherangany Hills Forest) is a collection of thirteen forest reserve blocks in western Kenya, located in the <u>Cherangani Hills</u> on the western ridge of the <u>East African Rift</u>. The forested area is about 1,200 square kilometres (463 sq mi), ^[1] 956 square kilometres (369 sq mi) of which has been gazetted into forest reserves. ^[2] These forest reserves form the upper catchments of the Kerio and Nzoia and Turkwel rivers. ^[1]

The three western blocks, Kapkanyar, Kapolet and Kiptaberr, are larger and more consolidated and constitute about 20% of the Cherangani Hills Forest. Most of the rest of the forests are fragmented, cut by grasslands, bushlands, and croplands. [2] The forests themselves are quite varied in composition. To the west, the lower elevations are *Aningeria-Strombosia-Drypetes* forest, grading into mixed *Podocarpus latifolius* forest on the higher elevations. To the east are *Juniperus–Nuxia–Podocarpus falcatus* forest, particularly on south facing slopes. On the eastern slopes these are interspersed with *Podocarpus falcatus* forest, much disturbed by human activities. sizeable remnants of *Juniperus–Maytenus undata–Rapanea–Hagenia* forest can be found in the high valleys. In some of the stream valleys tree ferns such as *Cyathea manniana* can be found as well as small patches of the bamboo *Arundinaria alpina*. [2]

Issues

The Cherangani Hills Forest is threatened by increased pressures from a growing local population, as well as by pressure from downstream inhabitants. The problems range from overgrazing, to conversion of the forest to cropland, to excessive use of forest products in making charcoal and providing local lumber. [12]

Ruma National Park

Dubbed the "**Last Retreat of the Roan Antelope**", Ruma National Park is the only terrestrial park in <u>Nyanza</u> Province. The park protects the only indigenous population of rare <u>roan antelopes</u> within <u>Kenya</u>. At present, the population is on the verge of extinction with individual populations numbering approximately 40. The park was established in 1966 as Lambwe Valley Game Reserve. It was later renamed "Ruma" after one of Kenya's most powerful wizard, the much feared Gor Mahia who lived around the park (affiliated to <u>Gor Mahia F.C.</u>). The park is located in the vast <u>Lambwe Valley</u>. The park is assessable and motor-able all year round using three main circuits. However during the rainy season, 4 wheel drive vehicles are advised.

Wildlife

Game species range from <u>leopards</u>, <u>roan antelopes</u> <u>Hippotragus equinus</u>, <u>black rhinoceros</u> <u>Diceros bicornis</u>, <u>Rothschild's giraffes</u> <u>Giraffa camelopardalis rothschildi</u>, <u>oribis</u> <u>Ourebia ourebi</u>, <u>cape buffalos</u>, <u>Lelwel hartebeest</u> s <u>Alcelaphus buselaphus lelwel</u>, <u>olive baboons</u>, <u>Bohor reedbucks</u> <u>Redunca redunca</u>, <u>hyenas</u>, <u>servals</u> <u>Leptailurus serval</u>, <u>topis</u> <u>Damaliscus korrigum</u>, <u>honey badgers</u> <u>Mellivora capensis</u>, <u>bushpigs</u> <u>Potamochoerus larvatus</u> and <u>vervet</u> monkeys among others.

Bird watching

Over 400 species of <u>birds</u> have been recorded in the park, making it an <u>Important Bird Area</u> (IBA). The rare intra - African migrant, the <u>blue Swallow</u> *Hirundo atrocaerulea* is one such avian species.

Picnics

The Korlang'o historical picnic site was used as escape route by the <u>Kalenjin people</u> during the <u>British</u> colonial time when they were brought to Lambwe Valley to die during the resistance, as the place was un-inhabited due to <u>tsetse fly</u> and <u>malaria</u>. Twiga picnic site, situated in the middle of the park allows clients to snack with the animals.

Tsetse control and land-use change in Lambwe valley, south-western Kenya

G.W. Muriuki, T.J. Njoka, R.S. Reid, D.M. Nyariki

For a long time, trypanosomosis, spread by the tsetse fly *Glossina*, constrained human settlement in the Lambwe Valley, a south-western Kenya rangeland. After lengthy efforts to control tsetse over many years, the valley is currently experiencing an increase in human population growth rate, and rapid changes in land-use and cover are taking place. Using time-series aerial photograph interpretation, social survey methods, and a review of human population trends over five decades, a three-fold expansion in cultivation in the settled areas over a 50-year period, with a consequent decrease in woody vegetation cover was identified. In the Ruma National Park, occupying a third of the valley floor, shrublands and thickets have expanded while open grasslands have decreased. The sudden increase of land under cultivation adjacent to prime agricultural land designated for wildlife conservation, exacerbated by bush encroachment and dwindling resources for tsetse control could provide a situation suitable for land-use conflicts. Sustainability of this unique rangeland is dependent on how judiciously the resources are shared among all stakeholders in the valley. This study suggests continued tsetse surveillance and agricultural intensification in the settled areas to minimise chances of conflicts in land-use.