

RGS-IBG Field Research Programmes

- Kora Research Project
- Kenya
- 1983

Joint venture with the National Museums of Kenya

An ecological inventory of the Kora National Reserve, Kenya for the Wildlife Conservation and Management Department of the Kenya Government.

Joint Leader: Dr Malcolm Coe, Department of Zoology, University of Oxford
Joint Leader: Richard Leakey, Director, National Museums of Kenya

Number of members: 27 Kenyan, 25 British Duration: July-September 1983

The aim of the Kora Research Project was to provide an ecological description of the Kora National Reserve for the Wildlife Conservation and Management Department of the Kenya Government, in order that they may plan for the future management and utilisation of this conservation area. A secondary objective was to collect biological material for deposit and study in the collections of the National Museum. Such inventories are a vital, but often overlooked element of management planning. Without a thorough knowledge of the physical and biological attributes of a protected area, there is no baseline against which to measure human-induced environmental changes.

The Kora National Reserve is a 1700 km² triangle of dense *Acacia* woodland and *Commiphora* scrub to the south of the Tana River. At first sight it appears to be an unprepossessing wilderness but it is rich in species, and is typical of many similar landscapes throughout Africa which are threatened by an ever increasing human population. An important objective was to find commercial uses for acacia resins, as an inducement to persuade local people not to destroy the trees for firewood or grazing.

Campi y Ndovu, the Base Camp, was built on the banks of the Tana River with help from the Royal Engineers. Surrounded by a stout chain-link fence, it contained a workshop to service the four new 110 Land Rovers lent by their manufacturers to transport scientists around the reserve, tented accommodation, a laboratory and central eating area. Before the main team arrived an aerial survey was flown. Extensive literature searches by the National Museum staff had produced a preliminary list of all animals and plants expected to be found in the Reserve. Whilst NASA's Goddard Space Flight Centre provided enhanced Landsat images which were later calibrated by their staff in the field.

A team of geomorphologists analysed the available hydrological data, sampled the major geological and superficial deposits, and investigated the nature and origins of the residual hills (inselbergs) which peep above the *nyika* bush. Botanists from the East African Herbarium identified 720 plant species with as many as 49 endemics. Special attention was given to the chemical composition of resins which have a commercial potential. Ecological studies of



the *Acacia-Commiphora* bushland, land classification and estimates of standing phytomass were undertaken. The unique natural history of the inselbergs, the fish populations of the Tana River, the riverside arthropod communities and small mammal populations were all sampled. As were the larger mammals, birds, reptiles and amphibians, molluscs, and insects of the tree canopies. These are now documented in a single monograph (Coe and Collins, 1986)

The dangers to wilderness areas such as Kora are greater each year. Dam construction on the upper reaches of the Tana River has already altered its flow, and further dams are planned. Subsistence agriculture on the borders of the Reserve and the intrusion of pastoralists with their herds of sheep and camels are a further threat. It is hoped that the data gathered by the Project for Kenya will come to the attention of the decision-makers, other scientists, and the local guardians and so contribute to sustainable development in this part of Africa.

Major sponsors included:

Barclays Bank (Kenya) Ltd., East African Industries Ltd., Ker and Downey Safaris Ltd., Otis Elevators (Kenya) Ltd., Land Rover Ltd., Royal Air Force, British Airways, Overseas Development Administration, Kora Wildlife Preservation Trust, Royal Society. and United Nations Environmental Programme.

Further reading:

- Coe, M. and Collins, N. M., (eds.) (1986) *Kora: an ecological inventory of the Kora National Reserve, Kenya.*, Royal Geographical Society, London, 340 pp., plates, maps, figs, tabs.
- Coe, M., (1985) *Islands in the Bush: a natural history of the Kora National Reserve, Kenya.* George Philip and Son Ltd, London. ISBN 0 540 01086 3. (251e / 607g)

KORA RESEARCH PROJECT, KENYA, 1983

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