

K O R A

**An Ecological Inventory of the  
Kora National Reserve, Kenya**

Edited by

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A SURVEY OF THE REPTILES AND AMPHIBIANS OF  
KORA NATIONAL RESERVE

by

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Members of the herpetology team visited Kora on the following dates:- 2-5 Oct 1982, 5 May 1983, 22-24 June 1983, 6-27 Aug 1983, 11 Dec-16 Jan 1984, 24-27 Feb 1984. In addition one of us (A. D-M.) did a small survey during the Tana River Expedition of 1976.

The following is a brief account of all the species recorded or collected. Catalogue numbers are those of the Herpetology Department, National Museum of Kenya.

REPTILES AND AMPHIBIANS RECORDED AT KORA

LIZARDS

Agamidae

Agama agama Red headed agama. 9 specimens; 1774/1-4; 1800; 1802; 1804/1&2. Occurred in 2 main habitats, the rock outcrops and the river banks. They were particularly abundant along the river under the shade of doumpalms and Acacia elatior, where they fed mainly on the abundant supply of ants. They were comparatively few and far between on the rock outcrops, and they were very wary. It was almost impossible to approach within 20 m of them without them fleeing. Diets were 98% similar between river bank and Kiume Hill populations. Oviposition was observed along the river banks, presumably due to higher soil moisture.

Agama ruppelli. 1 specimen; 1803. Only one was collected and it was on the ground in rather open woodland on the lower slope of Kiume Hill.

Chamaeleontidae

Chamaeleo gracilis. 1 specimen; 1793 (dessicated). One specimen was found by the base camp at the beginning of the expedition, and the only other found was dying out due to the drought. Small numbers might be expected to survived in the riverine habitat of the reserve. Indeed three individuals were found in January 1984 along the river at Asako outside the eastern boundary. One was an adult female collected by George Adamson and two were juveniles about 2 months old. Chamaeleons do not aestivate and are very susceptible to dessication in the dry season. One of us (J.H.) has observed large population fluctuations due to this elsewhere in the Mwingi area.

Gekkonidae

Lygodactylus picturatus. 5 specimens; 1771/1-4, 1794. Were common in places along the river. They are arboreal and seem to prefer Cordia sinensis (perhaps because of the texture of the bark) and there were often several in one tree. They are diurnal.



Rhamphiophus oxyrhynchus. Brown beaked snake. 1 specimen; 2967. They are fairly common in Kora and occur all over the reserve in open woodland. Individuals seem to occupy a definite home range, because when they are disturbed they nearly always make off at high speed in a straight line to a hole in the ground, or a termitarium, and vanish into it. They may be as much as 20 or 30 metres from the hole.

R. rubropunctatus. Red headed beaked snake. 1 specimen; 2973. While trying to escape, these snakes climb up into bushes. They appear to be less common than R. oxyrhynchus.

Psammophis punctulatus. Spotted sand snake. 1 specimen. 2960. Fairly abundant in the reserve. It is a large and very active snake which feeds on both lizards and small mammals, of which it must be an important predator.

P. biseriatus. Link marked sand snake; 6 specimens; 2909/1&2, 2962, 2963, 2966, 2969. Many were seen and they are probably very common as they are very cryptic and difficult to find unless they move. They appear to feed mainly upon lizards, principally Eremias speki.

Atractaspis microlepidota. Burrowing viper. 2 specimens; 2930, 2961. Two specimens were found in camp after rain. Burrowing vipers spend most of their lives underground, and so their distribution depends upon that of suitable soil. It may be that they occur only along the river at Kora.

Dasypeltis scabra. Egg eater. 1 specimen; 2965. A single individual was found at night, in the southern part of the reserve, coiled up in a small bush. Egg eaters occupy a wide range of habitats and almost certainly occur throughout Kora.

#### Elapidae

Naja pallida. Red spitting cobra. One in captivity (not catalogued). One specimen was collected as it was crossing the road. It was the bright red form.

#### Viperidae

Bitis arietans. Puff adder. One captured and released. Only one was seen in Dec. 1983 in a dry river bed. It was a large specimen but rather thin and had apparently not fed for a long time. Puff adders must surely occur throughout the reserve.

#### TERRAPINS AND TORTOISES

##### Pelomedusidae

Pelusios sinuatus. Serrated terrapin. 2 in captivity (not catalogued). This is a terrapin which inhabits permanent water and was found only in the river.

Pelomedusa subrufa. Common terrapin. None collected. This is a terrapin of temporary water and was found in rock pools after rain. It is to be expected in mud pools also.

##### Testudinidae

Testudo pardalis. Leopard tortoise. None collected. There were very

few seen It is to be expected in small numbers throughout the reserve. Carcasses of dead animals were common.

#### CROCODILES

##### Crocodylidae

Crocodylus niloticus. Nile crocodile. None collected. No specific study was made on crocodiles, but there is evidently a healthy population and there are many juveniles which indicates successful breeding. There is no sign of poaching on the S. side of the river.

#### FROGS

##### Ranidae

Ptychadena anchietae. Ridged frog. 6 specimens; 1470/1-4, 1472, 1474.  
P. mascareniensis. Ridged frog. 1 specimen; 1471.  
Phrynobatrachus acridoides. Cricket frog. 4 specimens; 1473/1-4.  
Pyxicephalus flavigula. Bull frog. 1 specimen; 1475  
P. marmoratus. 1 specimen; 1476.

Due to the prevailing dry conditions nothing worthwhile could be done on frogs.

#### FURTHER REMARKS

We should mention a few reptiles which were particularly searched for and which appear to be absent.

We found no boomslangs, Dispholidus typus, which means they must at least be rare if not totally absent. This rather surprised us at first but clearly Kora is much more arid than we expected. Their absence also ties in with the dearth of chamaeleons which normally constitute the major part of their diet.

Meru National Park has two coastal species of snakes, the green mamba, Dendroaspis angusticeps, and the coastal form of the forest cobra, Naja melanoleuca. These supposedly got there via a forest corridor along the Tana River, but at present there is no suitable habitat for them at Kora. There were reports of a large olive/brown cobra. This is most likely the other spitting cobra, Naja nigricollis which occurs sympatrically with Naja pallida practically throughout its range. Egyptian cobras, Naja haje, usually do not occur together with either of the spitting cobras.

The flat tortoise, Malacochersus tornieri, occurs at Mwingi and Nguni. It is listed by the IUCN as a threatened species and it was hoped it would occur in the reserve, but it has not turned up after a great deal of searching. We went to Nguni to compare habitats and concluded that Kora was much too dry.



Hemidactylus squamulatus. 1 specimen; 1807. 2 specimens not catalogued. Three of these nocturnal geckos were collected in the base camp, two beneath logs and one out at night in dense bush. It is noteworthy that all three were on the ground, so it may be that they are more terrestrial than other Hemidactylus.

Hemidactylus mabouia. 2 specimens; 1795, 1806.  
H. brooki. 1 specimen; 1805.

These were all found by stripping bark of dead trees or rotten logs (usually Acacia spp. and Terminalia pruinoides) in the daytime. We know very little about them.

Pachydactylus sp. 2 seen, none collected. 2 specimens were seen in a characteristic position deep in a fissure in a vertical rock face at Kiume. They could not be caught.

#### Scincidae

Mabuya quiguetaeniata. Blue tailed skink. 13 specimens; 1767, 1797/1-9, 1801/1-3.

Mabuya maculilabris. 5 specimens; 1798/1-5.

These two species seem to be almost entirely confined to the rock outcrops. They are very similar in build, and their activities and diet are similar. They occur in about equal numbers. Our preliminary studies have revealed nothing to prevent strong competition between them. (Rotich, Hebrard and McKay: this volume).

Mabuya planifrons. Forest skink. 1 specimen; 1768. Is an arboreal skink and was not uncommon along the river banks, particularly in the more heavily wooded parts. It was not found away from the river.

Mabuya brevicollis. Giant skink. 1 specimen; 1792. These are very large thick set skinks which live in underground burrows from which they never stray very far. They were along the river bank and elsewhere in dry thickets. One individual was dug out of its burrow at a depth of one metre.

Riopa sundevallii. Burrowing skink. 3 specimens; 1770/1-3. This is a thick set skink with a short tail and small legs which burrows in leaf litter and soft soil. It was common along the river bank.

Ablepharus wahlbergi. Snake eyed skink. 3 specimens of this small skink were collected in the base camp by the river.

#### Gerrhosauridae

Gerrhosaurus major. Plated lizard. 2 seen, none collected. Two individuals were seen, one in a decomposing doum palm log not far from the river, and the other under a large rock on Kiume Hill.

#### Lacertidae

Latastia longicaudata. Long tailed lizard. 2 specimens; 1775, 1776. Two specimens were collected and several seen at Kiume, and a few others noted crossing the road. There were very much fewer than during the 1976 Tana River Expedition when they were common.

Bremias spekii. Sand lizard. 1 specimen; 1772. Confined to sandy places such as dry river beds and occurs throughout the reserve. They are extremely agile and are active even during the hottest hours of the day. When disturbed they often disappear into small burrows among the roots of shrubs.

#### varanidae

Varanus niloticus. Nile monitor lizard. None collected. They are common along the river. They are semi-aquatic and dependent upon water. Several newly hatched lizards were seen in January 1984.

Varanus exanthematicus. Savannah monitor lizard. None collected. A number of these were seen scattered throughout the reserve. This species has the strange habit of aestivating high up in trees, and by the end of the dry season they are usually in a pitifully dehydrated and emaciated state, often appearing half dead. It is rather remarkable that they survived the drought at Kora.

#### SNAKES

##### Typhlopidae

Rhinotyphlops shlegelii. Blind snake. 1 specimen; 2971.

Typhlops sp. ? obtusus. Blind snake. 1 specimen; 2972. The identification of T. obtusus is not certain, but if correct it is a first record for Kenya. One specimen of each of these burrowing snakes was collected in camp at night after some heavy rain; usually they do not come above ground.

##### Boidae

Python sebae. Rock python. None collected. Three pythons were seen, all near the river, two while feeding upon francolin near the camp. They were the typical subspecies, which in Kenya occurs at the coast. Subspecies natalensis occurs at Nguni. Python tracks were very often seen in the morning across the road along the river, indicating a high population. Spme must have been very large. None were seen away from the river and they are unlikely to occur in the drier parts.

##### Colubridae

Coluber florulentus. One specimen; 2932. One was collected and quite a number seen. This is a species typically of the Horn of Africa which extends southwards as far as Voi in Kenya.

Philothamnus semivariegatus. Spotted bush snake. 1 specimen; 2908. It occurred in fair numbers in trees and bushes along the river, and one lived for a while in the roof of one of the main bandas. They are excellent climbers and swiftly climb up the vertical trunks of Acacia elatior. They are confined to the river bank.

Hemirhagerrhis kelleri. Striped bark snake. 2 specimens; 2981, 2970. Two specimens were collected, one at Kiume and another at base camp. The Kiume one is peculiar in lacking the dorsal and lateral dark stripes and being pale yellowish in colour with a row of brown spots along the side. The colour pattern of H. kelleri is usually very constant and such a strong departure from the normal must surely be a sport.

H. nototaeniata. Spotted bark snake. 1 specimen; 2968. One was collected beneath bark of a dead tree. The two species of Hemirhagerrhis are very similar, and rather surprisingly, are sympatric over a fairly wide area.