

## CONTENTS

---

Lizards and geckos	1
Mammals	3

## LIZARDS AND GECKOS

---

### **A study of home range, territoriality and activity level of *Zonosaurus laticaudatus* in the dry and semideciduous forest of Kirindy**

#### **Abstract**

The study was conducted to determine home range, territoriality and the level of activity for different periods of the day. It also analyses the effect of size and sex on home range size. Twenty one individuals were marked (9 males, 11 females) and observed between 17 and 24 November 2002. The data showed no correlation between home range size with both individual body size and sex. The territories of different individuals showed little overlap suggesting territoriality. Overlap was more pronounced within the same sex than for both sexes. The data showed a variation in the level of activity and the type of activity performed for different times of day.

Samuel Ayesu, University of Sciences and Technology, Ghana

Razafindrakoto Germain Fanomezantsoa, University of Antananarivo, Madagascar

Toto Volahy Anselme, Durrell Wildlife Conservation Trust, Madagascar

2002

---

### **Survey of the nocturnal ground geckos of the genus *Paroedura* in the dry deciduous forest of Kirindy**

#### **Abstract**

The nocturnal ground geckos of the endemic *Paroedura* genus are one of the lesser-known groups of reptiles of Madagascar. Not even the systematics has been studied cleared, new species are still steadily discovered. We tried to sort out the relationships within the *Paroedura* of Kirindy forest. Two species are easily to be distinguished *Paroedura bastardi* and *Paroedura picta*. But *P. picta* was found to occur in three phenotypes that differ in colour pattern and as we found also in other morphological characteristics. Some people believe these three types to be distinct species; our results can't clearly favour a pro or contra. We hope this study will contribute in understanding the morphological and ecological features of the *Paroedura* species of Kirindy. The structure within this genus is still unclear but Raxworthy & Nussbaum are working on the phylogeny of this genus at the moment.

Sven Selbert, Humboldt University Berlin, Germany

Jonah van Beijnen, Wageningen University, The Netherlands

2003

---

### **Rotten logs: their importance as a microhabitat for geckos in Kirindy Forest**

#### **Abstract**

The main aim of this project was to assess the role of rotten logs in the Kirindy forest reserve as a microhabitat for geckos. Transects of 140 m by 20 m were sampled over six days for road, path and forest habitat types. Some physical parameters of the logs were also measured. 68 individuals belonging to seven genera and nine species were observed for 360 logs sampled. Results also showed that geckos use these logs irrespectively of the temperature, but primarily for protection, as they preferred being within vertical logs, allowing them to climb away from ground based predators.

Benjamin Isambert, Natural History Museum, UK

Rosemary Nanji, University of Yaounde I, Cameroon

Lalandy Razafy Sehen, University of Antananarivo, Madagascar

2006

---

### **Behavioural ecology of iguanid lizard *Oplurus cuvieri* in Kirindy forest: associations with sex and colour morph**

#### **Abstract**

Kirindy dry deciduous forest is a Special Reserve in the central western region of Madagascar. *Oplurus cuvieri* an endemic species of iguanid (Oplurine) lizard found in the region was investigated in order to determine whether the natural colour variability bears an association with behaviour. The distribution of colour morphs (light, intermediate and dark) between sexes show that it is more likely to be a sex-linked trait rather than one which might affect behaviour or thermoregulation. Furthermore, our study found differences in behavioural activity patterns between males and females. In particular, males move greater distances than females as a facet of breeding season, while females hold smaller home ranges.

Harry Fox, Durham University, England

Jan Schnitzler, Royal Botanic Gardens, Kew, England

2007

---

### **Activity patterns of Ground Geckos (*Paroedura picta*) in Kirindy Forest**

#### **Abstract**

Little is known about behaviour of nocturnal ground geckos. To augment existing knowledge on that topic, activity patterns of *Paroedura picta* were observed in Kirindy Forest, Madagascar, and mark-recapture methods were applied. In total 70 adult and 48 juvenile geckos were observed during the study. There was no difference between early and late night activities; between males and females and between adults and juveniles. The distance moved ranged between 0 and 25.8 m per night with a mean of 7.4 m. No preferences were observed either for soil type or for vegetation density.

Adam Cieplinski, University of Warsaw, Poland

Eleni Foui, University of Leeds, UK

Niklaus Peyer, University of Zurich, Switzerland

2008

**MAMMALS**

---

**The diversity of sifaka diet during a period of stress  
in Kirindy forest, Madagascar****Abstract**

The dry deciduous forest of Kirindy on the west coast of Madagascar is home to the Verreaux's Sifaka (*Propithecus verreauxi verreauxi*). The seasonality of the climate affects the foraging behaviour of the Sifaka. We analysed the dietary aspects of the Sifaka in a six day period at the end of the dry season. Our results show no preference for specific plant parts (leaves vs. other). The diet consists largely of endemic species, but preference was not significant. The onset of precipitation at the end of the dry season did not cause a foraging switch in feeding time on lianas but did so for trees. Our study shows that the Sifaka has a species rich diet at the end of the dry season. The persistence of viable Sifaka populations is coupled to the high species richness of Kirindy Forest. Additionally, the forest holds numerous local endemic species. We therefore suggest a preservation, rather than a conservation strategy, for the future management of the reserve.

Anna Norman, Stockholm University, Sweden

Joeri S. Strijk, Université Paul Sabatier, France

2006

---

**Diet overlap of *Propithecus verreauxi verreauxi* and *Eulemur fulvus rufus*  
during the late dry season in Kirindy forest****Abstract**

The aim of this short research project is to investigate whether two lemur species, the Verreaux's sifaka (*Propithecus verreauxi verreauxi*) and the red-fronted brown lemur (*Eulemur fulvus rufus*), show significant dietary overlap during the late dry season in Kirindy forest in Madagascar. Our main hypothesis is that there is a significant overlap in diet composition of these species, due to limited food availability during this period of the year 2010. A total of 21 plant species were observed to be consumed by the two species of lemurs of which five were used by both species. Further, we found that brown lemurs tend to rest more in the morning and feed more in the (late) afternoon. They tend to feed mostly on the lower half of the trees as well as on the ground, while sifakas preferred the upper part of the tree. Brown lemurs seem to have a more diverse diet, which also includes fruits, but nevertheless, both species seem to rely on leaves in this certain period of the year. The species thus show a certain overlap in diet composition, both in preferred tree species and in food items consumed.

Andrea Gollner, University of Innsbruck, Austria

Iris de Winter, Wageningen University, The Netherlands

Emmanuel Akom, Kwame Nkrumah University of Science and Technology, Ghana

2010

---

**Diet of Verreaux's sifaka (*Propithecus verreauxi verreauxi*) during the dry season  
in Kirindy Forest, Madagascar****Abstract**

We studied the diet of the Verreaux's sifaka in the dry season in Kirindy Forest. The diet mainly composed of leaves from nine plant species. Feeding duration of Verreaux's sifaka was not influenced by the time of day or the differences in sex. There was preference to feeding on plants with high water content as compared to those with low leaf water content. It was concluded that

food shortage during the dry season did not influence Verreaux's sifaka choice of food as they portrayed specialised feeding behaviour rather than a generalist one.

Josine Niwenshuti, National University of Rwanda, Rwanda

Ruth Lewo, Egerton University, Kenya

2011

---

### **In the mood for food: On the importance of water bodies for insectivorous bats**

#### **Abstract**

In seasonal environments, food supply fluctuates throughout the year. Bats, as small endothermic vertebrates, rely on regular and abundant food sources. To assure this in a habitat where resources are scarce, bats are thought to aggregate in areas where food abundance is highest, such as the last remaining water bodies in dry deciduous forests. We tested this hypothesis at Kirindy forest by recording bat activity with a Batlogger in different habitats: ponds, dry river bed and forest. We measured insect abundance using a simple and effective new method. Vegetation structure was also sampled. We found that activity of Vespertilionidae and Hipposideridae was highest at water sources and correlated with insect abundance. Further, the ponds appeared to have an influence on bat community structure. Therefore, water bodies seem to play an important role in survival in such fluctuating habitats.

Elias Bader, University of Zurich, Switzerland

Marta Acácio, University of Lisbon, Portugal

2011

---

### **Lemurs in the light: the effect of artificial light on the Grey Mouse Lemur (*Microcebus murinus*)**

#### **Abstract**

The impact of artificial light on the foraging behaviour of the Grey Mouse Lemur (*Microcebus murinus*) was investigated in Kirindy Forest. Artificial light can decrease activity and alter feeding behaviour of nocturnal primates. Using bananas and feeding stations we tested whether the presence of an artificial light source changed feeding quantity (amount of food removed), foraging activity (time spent foraging), and feeding location (feeding in or out of the illuminated area) of the lemurs in a natural forest environment. The quantity of banana removed was the same for light and dark feeding stations but the lemurs spent more time foraging in the dark feeding stations than the light ones. We found that the lemurs ate the banana inside the feeding station when it was illuminated and removed it to eat elsewhere when it was in darkness. The lemurs had a higher overall foraging efficiency in the light feeding stations. This may indicate that lemurs perceive a higher predation risk, causing them to feed and depart more quickly.

Lisa Karina Broekhuizen, Wageningen University, The Netherlands

Michelle Thoburn, Queen's University Belfast, Northern Ireland

2013

---