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Small mammal composition, abundance and diversity in Ukaguru Eastern Arc Mountains, Tanzania

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Conservation of any landscape requires knowledge of the available resources in the area. Ukaguru Eastern Arc Mountains, Tanzania, have received considerable attention in terms of research on plants, amphibians, reptiles and birds. Scarce information exists on the small mammals of these mountains. This study is aimed at providing information on composition, abundance and diversity of the small mammals of this landscape. Habitats sampled include intact and disturbed forests, farmlands, fallow lands and peridomestic areas. Capture-mark-recapture and removal trapping techniques were employed for 3 nights per month. Fourteen species were recorded over a 12-month sampling period at altitudes ranging from 1500 to 1818 m above sea level. These are *Praomys* sp, *Beamys* sp, *Lophuromys* sp, *Grammomys* sp, *Graphiurus* sp, *Mastomys natalensis*, *Mus* spp, *Lemniscomys* sp, *Acomys* sp, *Arvicanthis neumanni*, *Crocidura* sp, *Rattus rattus* and *Xerus* sp. *Crocidura* sp was recorded in all habitats; *Mastomys natalensis* and *Mus* spp in disturbed and farm habitats. *Lophuromys* sp. and *Graphiurus* sp. were present in intact forests but not in disturbed forests. *Praomys* sp. accounted for 92% and 80% of all captures in disturbed and intact forests, respectively. *Mus* spp were dominant in cultivations (54%). The species diversities from both intact forest and cultivations were significantly higher than in disturbed forest ($p < 0.05$). The study suggests that human disturbance is a factor responsible for the observed diversity of small mammals in Ukaguru Mountains.

(ORAL PRESENTATION)

The species and quantity of bats sold at the Maele island market (Kisangani, Tshopo province, DRC) and the associated health hazards as perceived by traders and customers

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In order to identify and quantify the bats exploited as game in Kisangani, to inquire about the level of perception of the health hazard incurred as a result of this exploitation, investigations were carried out at the Maele market from January to December 2013 by direct observation of carcasses, counting and surveys within different social and occupational

groups. The observations revealed 5 species of fruit-eating bats: *Eidolon helvum* (Kerr, 1792), *Hypsignathus monstrosus* H. Allen 1861, *Epomops franqueti* (Tomes, 1860), *Rousettus aegyptiacus* (E. Geoffroy, 1810), *Myonycteris torquata* (Dobson, 1878). Of a total of 3266 carcasses surveyed during the entire period of our study, 92.8% belong to the *E. helvum* and 4.5% to *H. monstrosus*. And an annual income of \$ 3180 USD for a body biomass of 607.3 kg. Surveys of social and professional groups revealed that bats are marketed and consumed throughout the year in Kisangani. As for health threats via bats for humans, 46.7% of respondents do not know about them; 16.7% talked about the transmission of the Ebola virus; 12.8% report the risks associated with bites; 9.4% recognize that they can give diseases (without mentioning them by name) to humans.

(ORAL PRESENTATION)

Abundance and diversity of rodents and shrews along altitudinal gradients in Simien mountains national park, Ethiopia

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Abundance, species diversity and distribution of rodents and shrews along altitudinal gradients in Simien mountains national park were studied by using Sherman live traps. Four altitudinal ranges (2800m a.s.l., 3200m a.s.l., 3600m a.s.l. and 4000m a.s.l.) in the park and 3100m a.s.l. around human settlements and farmlands were sampled for this study. A total of 68 individuals were captured. Out of these, 59 individuals were rodents and nine individuals were shrews. In total there were eight species of rodents and one shrew species. The relative abundances were *L. simensis* (33.8%), *S. albipes* (22.1%) and *O. typus* (14.7%). *Dryomys nitedula* and *Desmomys harringtoni* had the lowest abundance across the study area (1.47%). The highest species diversity across altitudinal gradients was recorded at 3100m a.s.l. ($H'=1.49$) around human settlements on the periphery of the park and at 2800m a.s.l. ($H'=1.338$) inside the national park. The highest species diversity across habitat types was recorded in the forest habitat ($H'=1.754$). The diversity, abundance and distribution of rodents and shrews varied along altitudinal gradient and habitat types. This study reports for the first time the rodent and shrew diversity and distribution along elevational gradients and habitat types in the Siemens Mountains in Ethiopia.

(POSTER)