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Afrotropical bat's functional variability as a disturbance impact indicator

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Bats' morphological trait assemblages are biological indicators of habitat state. This study aims to predict landscape resilience, considering that high potential of bats population flows allows ecological restoration of disturbed areas. Fieldwork was conducted in the Tshuapa-Lomami-Lualaba landscape in the central Congo basin in the Democratic Republic of Congo. Bat monitoring was performed using capture-recapture protocol of aerial insectivores (AIB), shrub frugivores and nectarivores (FNB). Population dispersion mechanism was simulated using morphological variables. During 1296 mnh (one mist net hour "mnh" equals one 9 m net or one harp trap open for one hour), interspecific comparison of flight parameters showed high aspect ratio (AR) in Hipposideridae and low values in Pteropodidae, Nycteridae or Vespertilionidae. Body mass (M) variability influenced the flight patterns, particularly among *Epomops franqueti* (95 g, 22 km/h) or *Doryrhina cyclops* (28 g, 17 km/h), *Hypsugo muscivulus* (4 g, 15 km/h). Generally, AR is negatively correlated to M ($r = -0.96$, $**p < 0.001$), while M correlated significantly to the flight speed ($r = 0.92$, $*p < 0.05$). Horizontal undergrowth visibility (HVI) indicates a significant effect on various bat species presence in any sampled forest ($p < 0.035$). The probability of AIB presence is high in mixed old-growth forest with an HVI around to 30 m. However, FNB presence remains static during efficient leafing season in swamp and secondary forest, regardless of trees density. Our study indicates that bat's responses are mostly species-specific and vary in their navigation capacities in a broad range of habitat factors affecting movement.

(ORAL PRESENTATION)

Diversity and distribution of multimammate rats of the genus *Mastomys* in Ethiopia

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The multimammate rats of the genus *Mastomys* are widespread in sub-Saharan Africa and occur in wide spectrum of open habitats. Representatives of the genus are the most common African rodents, the main vertebrate agricultural pests and vectors of some human pathogens. In