

Restoring nature's health: Investigating the effects of ecosystem restoration on zoonotic disease risk

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AIM

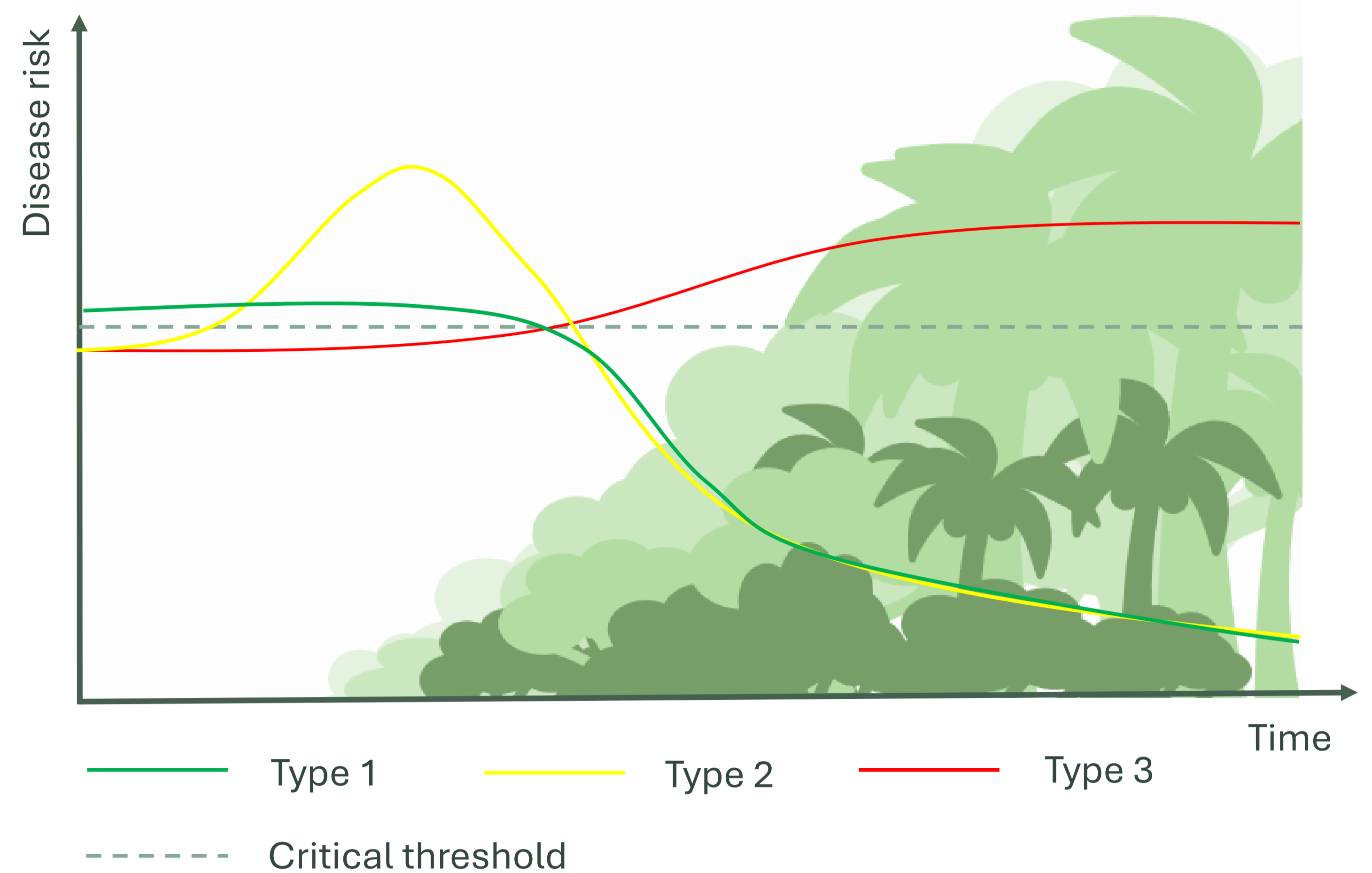
To delve deeper into the mechanisms underlying the impact of ecosystem restoration on zoonotic disease risk by examining the small mammal and microparasite diversity within sampling sites following a chronosequence of ecosystem restoration in the Congo Basin.

BACKGROUND

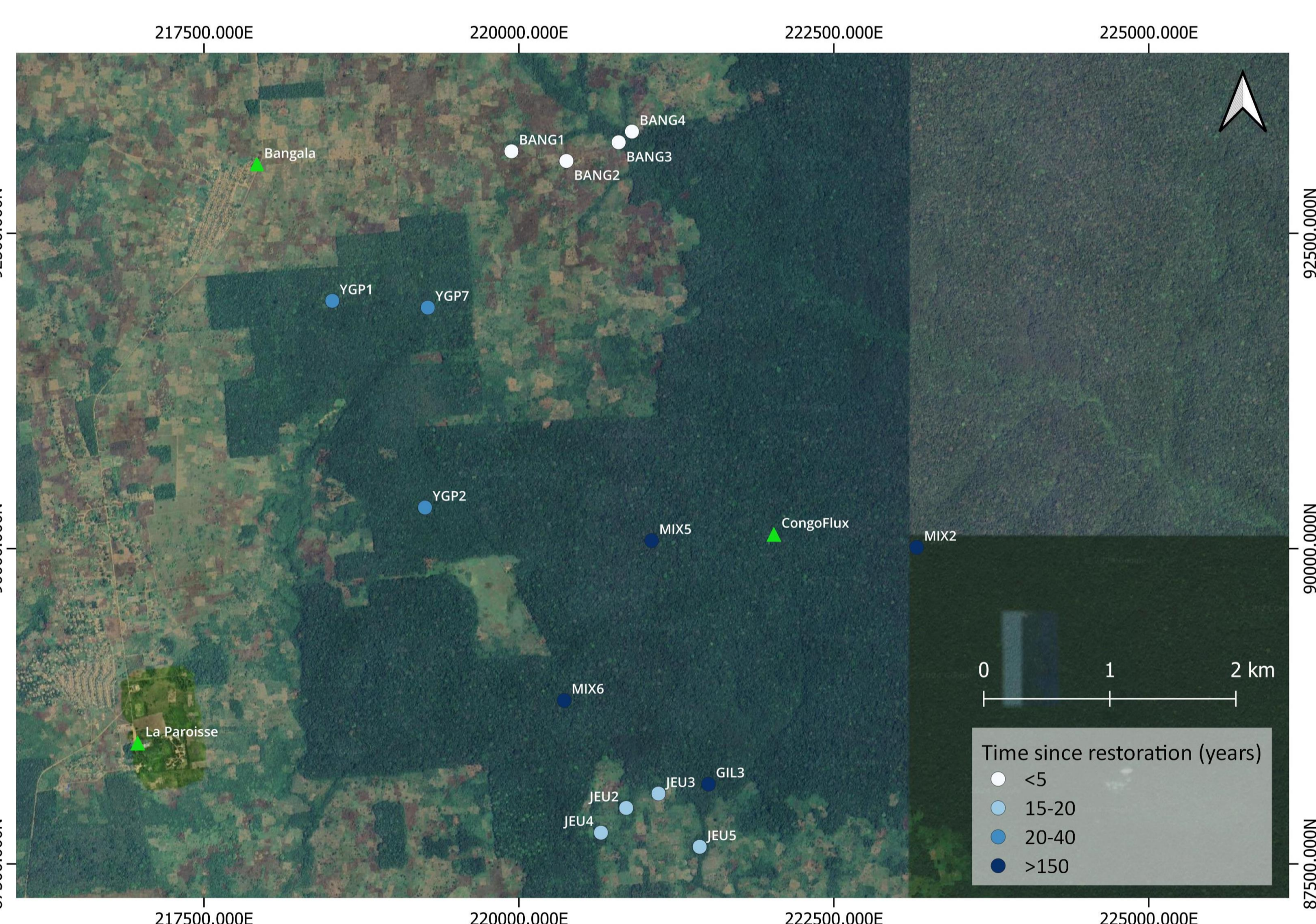
Emerging infectious diseases (EIDs) pose a significant threat to global public health. Among the factors contributing to the increase of EIDs today, habitat degradation stands out as a prominent driver, exerting both direct and indirect influences on disease dynamics. While it is commonly assumed that simply reversing ecosystem degradation will restore disease regulation mechanisms, such a presumption may oversimplify the complex response involved.

HYPOTHESES

The relationship between ecosystem restoration and disease risk may exhibit three hypothesized patterns:



METHODOLOGY



Biodiversity monitoring



Soundscape analysis



Carrion flies (iDNA)

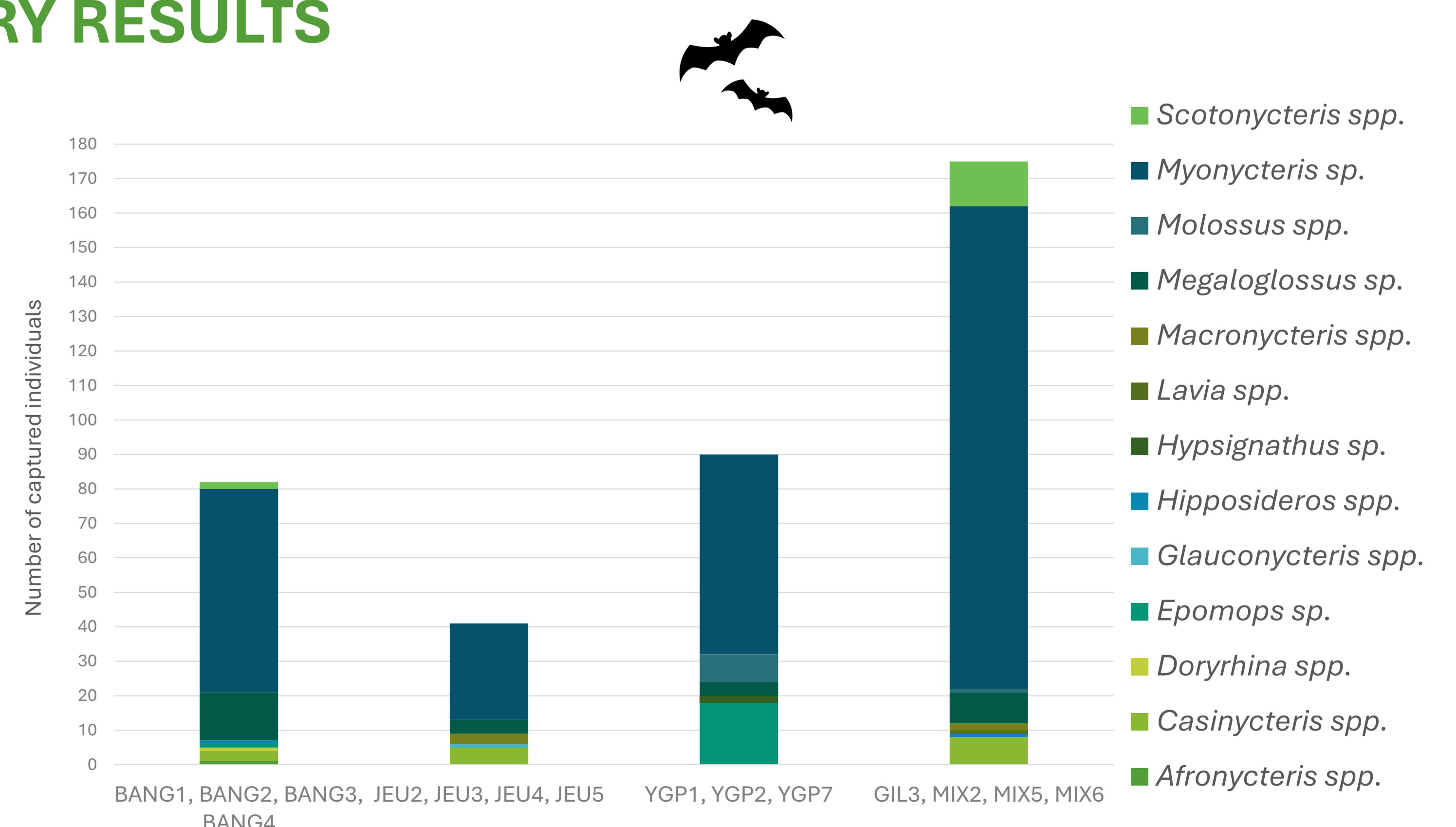
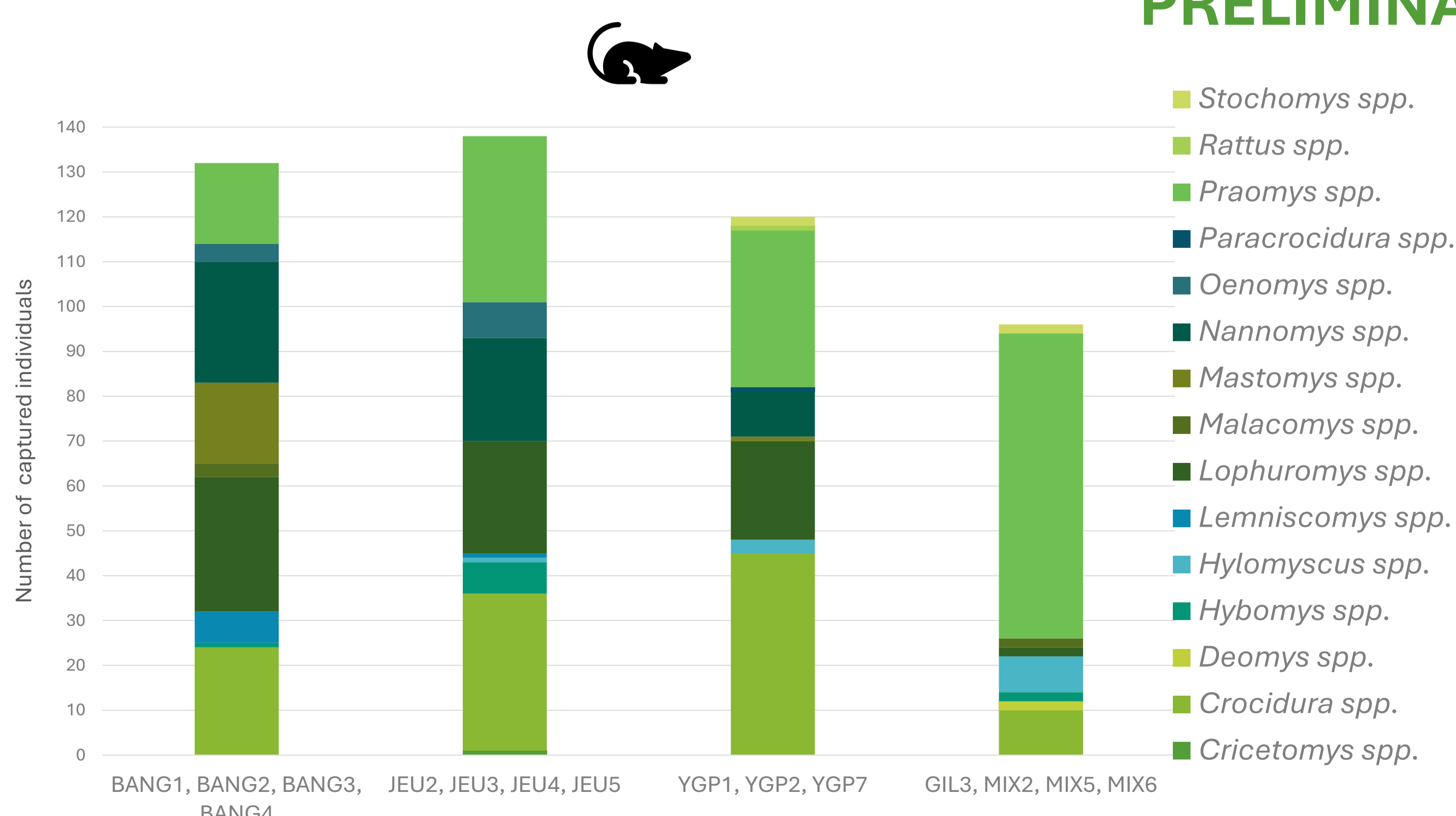


Vegetation swabs (eDNA)

Small mammal trapping and pathogen screening



PRELIMINARY RESULTS



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Graph Hypotheses: adapted from Prist et al. (2023)

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