My Manuscript

Emma Blanken

2022-09-15

Abstract

This LDP mini project seeks to confirm the findings from (Amponsah-Mensah *et al.* 2022), that roosts used by Gambian epauletted fruit bats differ from random potential roosts in the surrounding environment. The characteristics that provide an adequate roost are different from potential roosts in the rest of the environment, and the roosts bats choose reflect this difference. My analysis emphasizes this finding.

Introduction

Using a simply box-plot code in R that analyses data from (Amponsah-Mensah *et al.* 2022), I will create an entirely reproducble project for the LDP Productivity and Reproducibility course.

Methods

boxplot(roostvrandom$Height..m.$ *roostvrandom*Roost.non.roost, data=roostvrandom, main="Roost Use and Tree Height", xlab="Roost Use", ylab="Tree Height", col="light blue", border="dark green")

boxplot(roostvrandom$DBH..m.$ *roostvrandom*Roost.non.roost, data=roostvrandom, main="Roost Use and DBH", xlab="Roost Use", ylab="DBH", col="light blue", border="dark green")

boxplot(roostvrandom$Crown.Diameter.m.$ *roostvrandom*Roost.non.roost, data=roostvrandom, main="Roost Use and Crown Diameter", xlab="Roost Use", ylab="Crown Diameter", col="light blue", border="dark green")

Results

My findings confirm that the roosts used by the Gambian epauletted fruit bat differ from random roosts in the environment. There are certain roost characterisitcs such as diameter at breast height, tree height, and circumference that determine whether a roost will be occupied.

References

Amponsah-Mensah, K., A. A. Cunningham, J. L. N. Wood, and Y. Ntiamoa-Baidu. 2022. Roosting behavior and roost selection by *Epomophorus gambianus* (Pteropodidae) in a west African rural landscape. Biotropica 54: 1030–1041. Available at: http://dx.doi.org/10.1111/btp.13127.