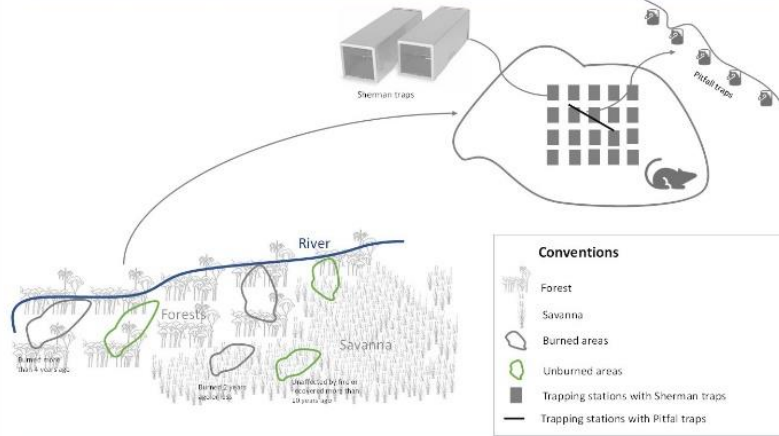


Introduction

The Colombian region of the Orinoco is an area considered a biodiversity hotspot. However, this is one of the most affected areas by Climate Change and productive activities. These features create a conducive environment to uncontrolled fires, increasing plant and animal mortality. At the tropics, there is little evidence of how mammals use burned and unburned habitats, and how biodiversity attributes are affected by fire. This project seeks to investigate what are the effects of fires on the diversity of the community of small mammals, and how does the landscape configuration resulting from fires affect their diversity.

Mammal sampling:



Microhabitat evaluation:

- Shrub and trees densities.
- Canopy cover percentage.
- Leaf litter depth.
- Distance between the sample station and the closest tree and shrub.
- Environmental characteristics.

Analysis of the influence of landscape configuration resulting from fires on small mammals' diversity.

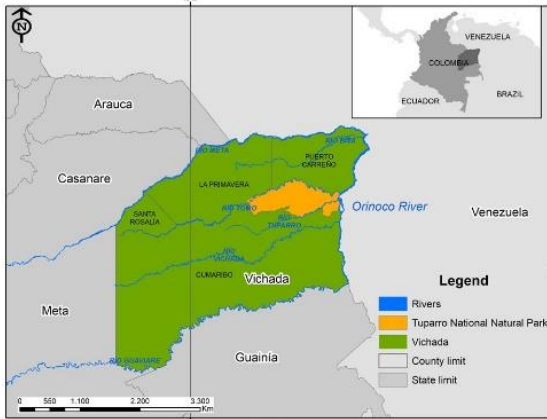


Figure 1. Study Area

Methods

Fire affected sites selection: Spatial examination of sites with vegetation affected by fire.

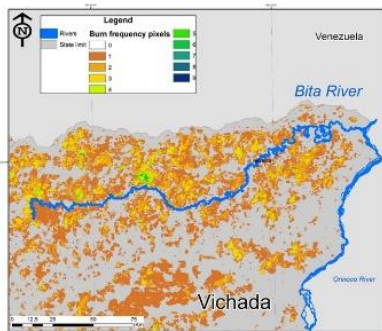


Figure 2. Frequency of pixels with burn areas for the period 2000-2014 prepared by Llano Corridor (2017).

Results



Impacts of fire on small non flying mammals composition

- Marmosa waterhousei*
 - Neacomys paracou*
 - Oecomys concolor*
 - Oryzomys megalcephalus*
 - Cavia porcellus*
- Neotropical species
- In unburned forests
- In burned and unburned forests



Funding



Conclusion

This research will promote the design of informed and adaptable management and conservation strategies, and support the development of the tropical fire ecology in Colombia.

¹ Laboratorio de Ecología del Paisaje y Modelación de Ecosistemas (ECOLMOD), Departamento de Biología, Facultad de Ciencias, Universidad Nacional de Colombia, Edificio 421, Bogotá, Colombia.

*tmgonzalezd@unal.edu.co