



ANA CAROLINA M. PESSÔA

NATIONAL CENTER FOR MONITORING AND EARLY WARNING OF NATURAL DISASTERS (CEMADEN)

TROPICAL ECOSYSTEMS AND ENVIRONMENTAL SCIENCES LAB

ACMOREIRAPESSOA@GMAIL.COM / @ACMOREIRAPESSOA



www.treeslab.org
@trees.lab

BACKGROUND

- [2009-2013] BSc. Biological Sciences - Ecology at Federal University of Rio de Janeiro (UFRJ)
- [2012] Exchange year at University of Montana - USA granted by Science Without Borders program
- [2014-2016] MSc. Remote Sensing at National Institute for Space Research (INPE)
- [2016-2018] Research Assistant - Project *Tropical Deforestation and Economic Development* (NHH)
- [2018-2022] PhD. Remote Sensing at National Institute for Space Research (INPE)
- [2022-Current] FAPESP technical fellowship - Project *Voices in Recovery* (CEMADEN)

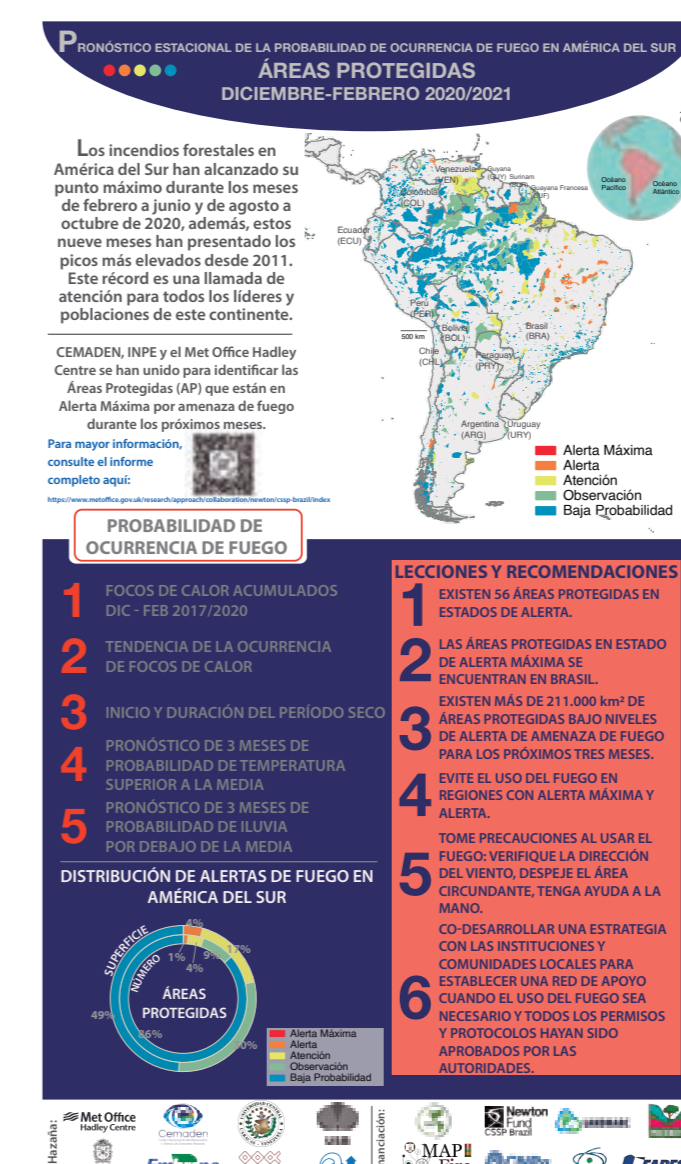
RECENT RESEARCH PROJECTS

Assessment of fire occurrence within protected areas in the Amazon basin from 2003 to 2020

- (i) Is fire a growing threat to Amazonian protected areas?
- (ii) What is the effect of protected areas on fire occurrence in the Amazon basin?



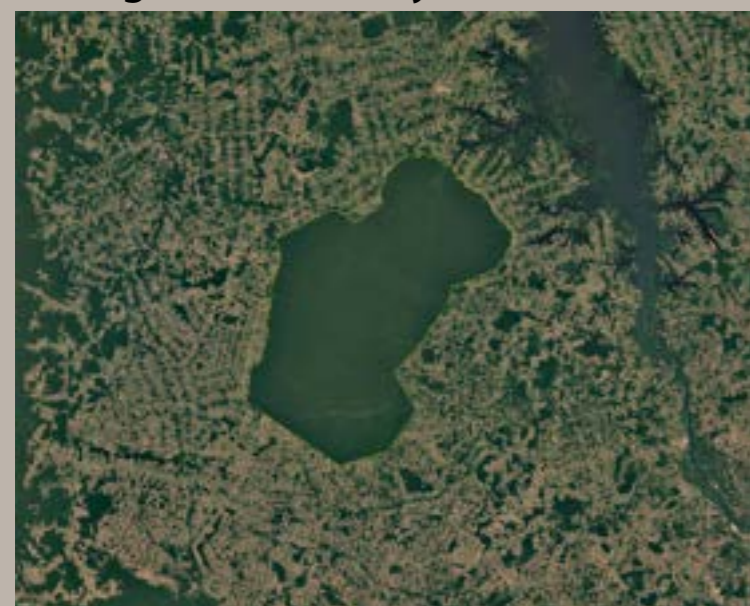
MAP-Fire
Strengthening of scientific, governmental and communities efforts for mitigating the occurrence of wildfires.



Book: efogo.weebly.com/
Platform: terra.cemaden.gov.br/griif/mapfire/monitor/

MOTIVATIONS AND MAIN RESULTS

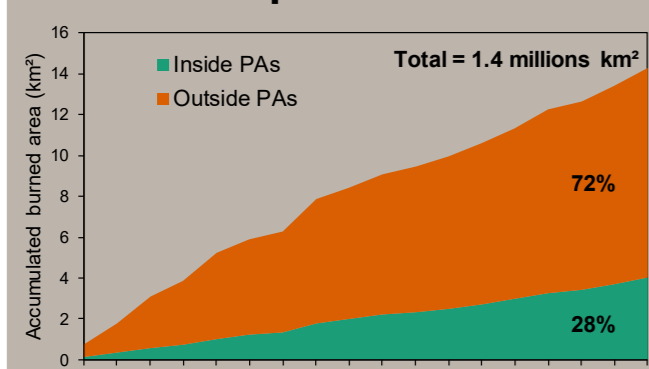
Indigenous territory Parakanã 2020



Urgent need for political strategies and mechanisms to break the degradation cycle and ensure the conservation of tropical ecosystems and, consequently, the maintenance of the ecological functions integrity and ecosystem services provision.

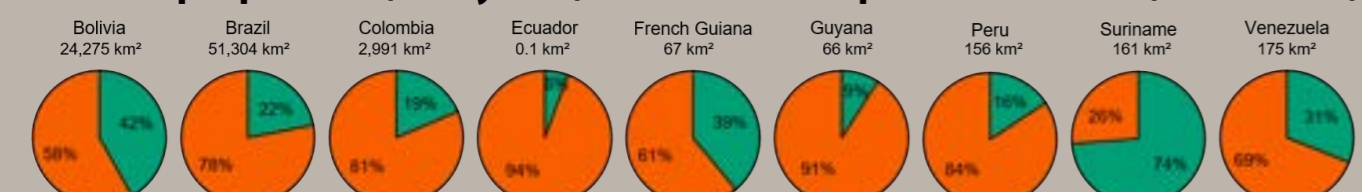
Protected areas are necessary for an effective global strategy to minimize climate change and preserve tropical forests and ecosystem services (NEPSTAD et al., 2006).

Accumulated burned area inside and outside protected areas

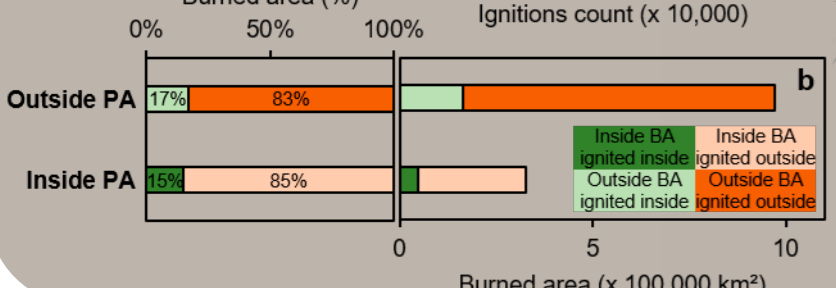
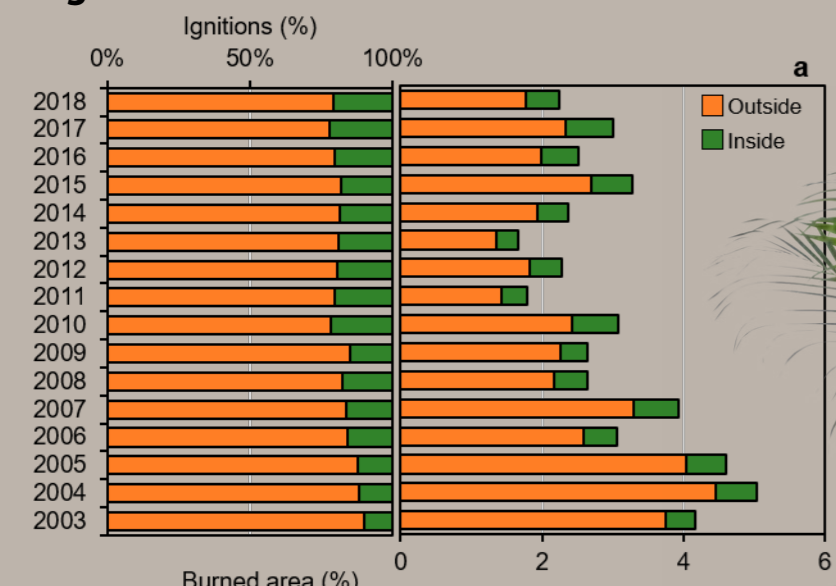


Burned area proportion in protected areas has grown more than twice from 2003 (18%) to 2020 (38%).

Burned proportion (km².year⁻¹) inside/outside protected areas (2003-2020)

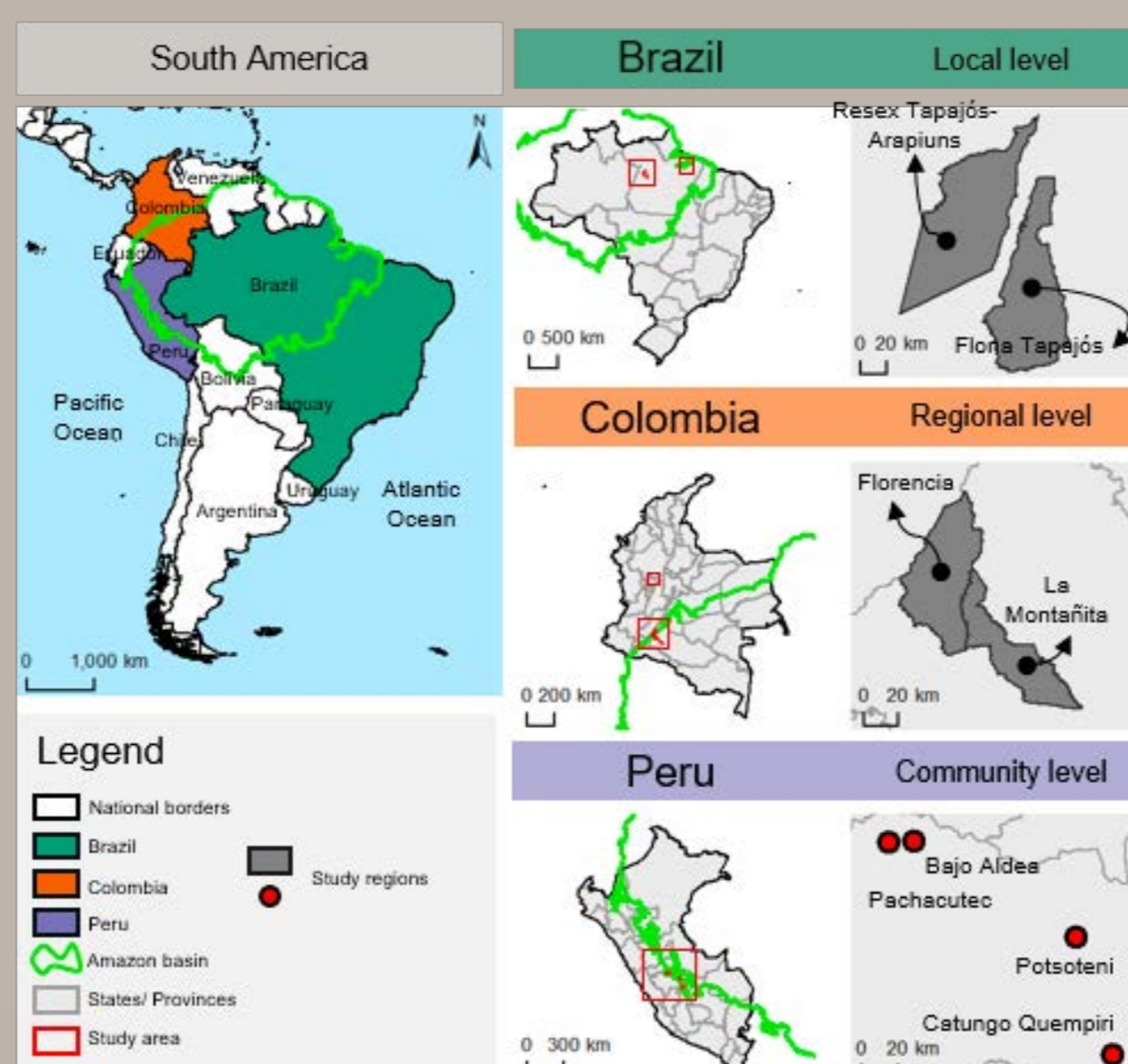


Ignition occurrence in the Amazon basin from 2003 to 2018



MOTIVATIONS AND EXPECTATIONS

The **COVID-19** pandemic has accentuated the vulnerabilities of traditional communities in Latin America. Along with the challenges that the disease itself has created, these communities are exposed to multiple socioeconomic and environmental threats, which intersect and shape the recovery paths traced by each one. The 'Voices in Recovery' project focuses on understanding and supporting the recovery paths of marginalized communities in Brazil, Colombia, and Peru.



Identifying the threats to which these communities are exposed to and their vulnerabilities is essential for these communities to more effectively shape decision-making processes around sustainable recovery and, eventually, for successful recovery paths to be replicated by other communities. **Local collaborations are fundamental so that this identification carries the contextualization of each country.**

CURRENT RESEARCH TOPIC

Voices in Recovery

The project seeks to understand what is highlighted and neglected in the public discourse on the needs of marginalized communities and what these communities themselves value and prioritize in light of their experiences during COVID-19.



COLLABORATIONS

Possible **cooperative work** could enrich the empirical analyzes with other perspectives and contexts. The project seeks collaborations of local protected areas actors in the three countries to deepen the discussions and expand the scope of results.

FUNDING:

