NATIONAL ACADEMIES Sciences Engineering Medicine

Greenhouse Gas Emissions from Wildland Fires Toward Improved Monitoring, Modeling, and Management—A Workshop

SEPTEMBER 13-15, 2023
VIRTUAL | KECK CENTER (500 5th St. NW Washington DC, 20001)

Session 3: Management of Fires and Ecosystems and Implications for GHG Emissions: Recent Past and Current

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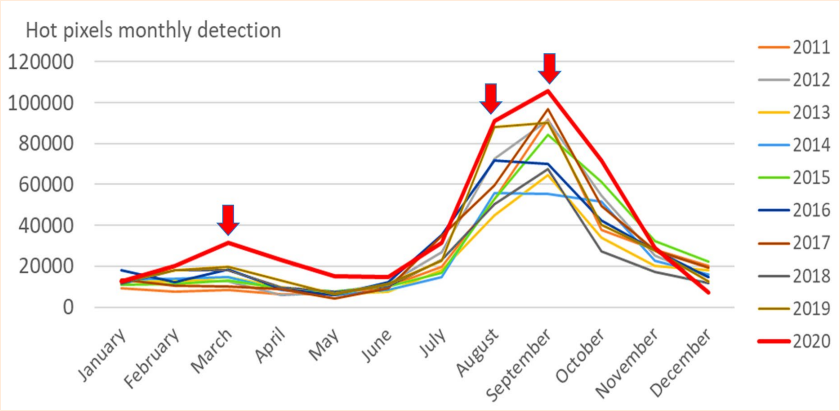
cobracollective for community owned solutions

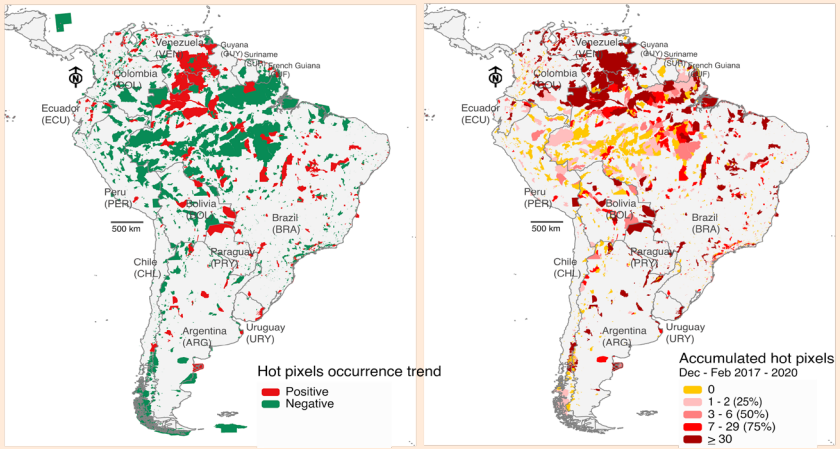
LANDMARC

FIRE-ADAPT



Monthly count of hot spots of active fires for South America, from 2011 to 2020. Data source: INPE/Queimadas. The red arrows denote the months in which hot spots of active fires in 2020 peaked, relative to the time series since 2011.

Anderson et al. 2020

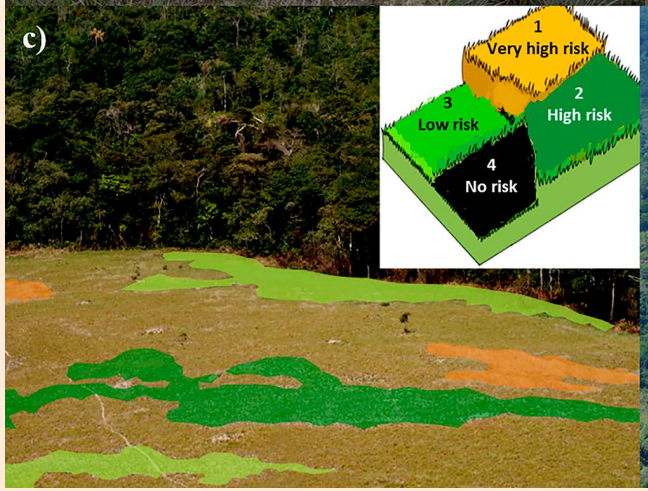


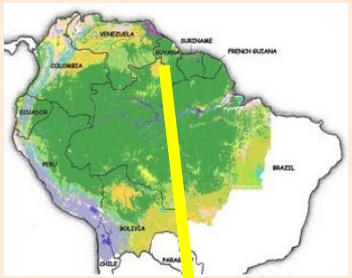
Trend of cumulative fires and hot spots in the period December-February 2017 to 2020 for South American Protected Areas

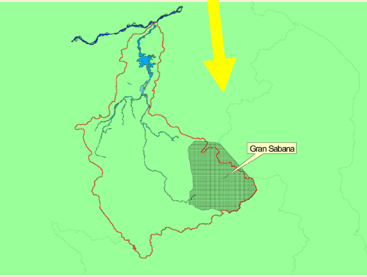
Anderson et al. 2020

In response, most countries adopted 'zero-fire' policies intended to exclude and control virtually any fires

COOPERATIVE LONG-TERM FIRE EXPERIMENT WITH PEMON INDIGENOUS PEOPLES NORTH AMAZONIAN LANDSCAPES







Savanna vegetation could support the creation of a mosaic of patches with different fire histories that could be used as firewalls, reducing the risk of hazardous wildfires, mainly in the vulnerable and **diverse *savanna - humid tropical forest transitions.*** This technique is referred to as patch mosaic burning (PMB).

This technique imitates ancient practices employed for centuries by the Pemon people through the cooperative burning of savannas in the use of fire for the sustainable management of the savanna–forest boundaries

Bilbao et al. 2009, 2010, 2016, 2021

TOWARDS A LEGITIMATE AND SUSTAINABLE ENVIRONMENTAL FIRE MANAGEMENT POLICY

ACTION-RESEARCH APPROACH

Researchers

Knowledge Exchange

Government Agencies

To negotiate, to support

Talent Training & Capacity Building

Pemón Indigenous Community

INTEGRATED FIRE MANAGEMENT WITH AN INTERCULTURAL VISION