

Reducing socio-environmental impacts of wildfire in sustainable-use reserves in Central Amazon: experiences of the No-Flames Project (“Projeto Sem-Flama”)

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ABSTRACT – Sustainable Use Reserves cover 728,270 km² of the Brazilian Amazon and sustain smallholder communities living in tandem with forest protection. These traditional peoples have used fire for centuries as a central component of their agricultural practices. Today, in the context of a changing climate, agricultural fires are more likely to escape from cultivation areas and promote large socioenvironmental impacts. This happened during the 2015-16 El-Niño, when large wildfires burned 1 Million ha of forests in the Tapajós region, including the Tapajós National Forest Reserve (Flona, 12% burned) and the Tapajós-Arapiuns Extractive Reserve (Resex, 23%). Addressing forest fires is key to mitigate climate change, control biodiversity loss and safeguard local livelihoods. However, interventions to reduce wildfires are implemented by top-down approaches neglecting both local knowledge and management preferences, which could explain performance failures. It is vital to co-develop innovative fire management policies with local communities to enhance the effectiveness of strategies. This presentation will summarize the transdisciplinary workshops held by the No-Flames Project in March 2019. Our main objectives are to engage with local communities, deepen our understanding of their realities, the problems they are facing with increasing fire and envisage possible interventions that can be co-created. We applied two participatory methods - World Cafe and Social Cartography – with representative community members in the Flona (n=8 communities) and the Resex (n=9). Initial results reveal a strong awareness of the increasing flammability of their forests and the multiple burdens arising in this context, from reduced food security to local transportation difficulties. Changes in the social structure (e.g. from collective to individual practices within communities and families) were among the recurrent factors associated to increasing wildfires in the region. Potential solutions perceived by communities were developing programs for environmental education for children and young adults, re-valuing traditional knowledge, especially that of seniors, and integrating it into daily practices, and access to technical support for ecological restoration. Our experience confirms that smallholder forest communities are suffering from wildfires and suggests that engagement with diverse perceptions of the problem can identify novel solutions that move beyond fire prohibition in the search for more equitable alternatives.

Keywords: Fire; traditional knowledge; conservation units; transdisciplinary networks; co-developed interventions; Amazonia

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