

## Patch Mosaic Burning: Traditional Knowledge Supporting Management Decision Making

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**ABSTRACT** – Patch mosaic burning is a practice performed by many traditional peoples and communities who use fire in the management of savanna landscapes around the world. However, in Brazil, for a long time, this ancestral practice was understood as an archaic and low-tech technique. An example of this is the case study at the Serra Geral do Tocantins Ecological Station (EESGT), where traditional community were treated as incendiaries by environmental managers. This perception neglected for more than a decade real opportunities to incorporate them into the territory conservation project. Therefore, only in 2012 to 2014, a commitment term between EESGT and quilombolas community, recognized and allowed the traditional use of fire for agricultural, pastoral and extractives practices. At this same period, the environmental agency was also transiting from a pyrophobic institutional management approach to an integrated fire management (IFM) approach, leading with news perceptions of the ecological and social role of fire in Jalapão and advocated the use of prescribed burns for fuel management and for pyrodiversity promotion. The practice of patch mosaic burning has also been adopted by managers in other tropical savannas protected areas around the world, such as Australia and South Africa, resulting in reductions of mega-fire occurrences. We conclude that actions to protect EESGT sociobiodiversity require a multidisciplinary, holistic and participatory management approach that seeks to understand the complexity of relationships between people, fire and protected areas.

**Keywords:** mosaic burning, integrated fire management, prescribed burning, pyrodiversity, fire prevention.