

WHY PRESCRIBED FIRE IS NEEDED IN THE CERRADO.

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Fire has long been recognized as a natural process in savanna ecosystems worldwide, being critical for maintenance of biodiversity. In protected areas of the Cerrado, however, management practices have not promoted natural fire regimes. At the root of this policy is an incorrect perception that fire is unnatural, destructive, and not essential for the Cerrado. This perception is faulty for various reasons. First, Cerrado plant species possess adaptations to fire that arose millions of years ago, consistent with the timing of the spread of savanna ecosystems in other parts of the tropics. Second, fire suppression results in a shift towards dense physiognomies, which leads to a decline in the species - rich groundlayer comprised of shade intolerant species. This process of succession is quite slow, and therefore proceeds largely unnoticed. Finally, unwillingness to use prescribed fires results in destructive, uncontrollable fires that occur at times of years that are likely uncharacteristic of natural fire regimes. Fortunately, many conservation areas have not succeeded in suppressing fire entirely, and have therefore avoided the biodiversity loss observed in other savannas of the world where fire has been largely eliminated. To avoid mistakes made in other areas of the world, management needs to quickly embrace a policy that includes prescribed fire.

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