

Progress Report STP 2017-017 (FY 2021-2022)

Is there a housing crisis in tropical savannas? Changing fire regimes, hollows and declining arboreal mammals

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Project Team

required

Program Leader

required

Directorate

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Arboreal nest box/camera studies suggest that the greatest benefit of using nest boxes in augmenting nesting sites is gained in intermediate savanna/forest habitats where large tree and hollow density is medium. Arboreal species overlap in their hollow and tree use; however the brush tailed rabbit rat build their dens closer to the ground in dead trees and hollow logs, and forages at ground level. This makes it more susceptible to terrestrial threatening processes (fire, feral cats, cattle and buffalo) compared to larger, more arboreal species including black footed tree rat, brush tailed possum and savanna gliders. Despite the importance of arboreal habitat features like hollows, the strongest explanatory variables for presence of threatened arboreal mammals were terrestrial factors including fire regimes, presence of cats, shrub density and vegetation damage by cattle and water buffalo.

One journal paper has been published and one accepted for publication.