

Biography

Early career researcher interested in conservation biology of Australian small mammals. Began a PhD in early March 2017 investigating how fire regimes influence tree hollow availability and whether this is threatening the viability of arboreal mammals in Australian tropical savannas.

EcoTAS abstract

There has been much research into how the fire regimes of northern Australian savannas directly affect biodiversity. However, the ecology of tree hollows, and the extent to which they support hollow-dependent fauna, has been severely neglected. Hollows in standing trees and fallen logs are an important ecological resource for around 40% of vertebrates in the Top End, including mammals (many of which are threatened), reptiles and birds. This study aimed to determine the effectiveness of ground-based surveys of tree hollows in eucalypt savanna. Counts of tree hollows have been conducted across Melville Island, using two approaches, ground-based and climbing surveys (double sampling), for four tree species. We show that a high percentage of hollow-bearing trees and trees without hollows can be correctly classified by ground-based surveys due to the open nature of the savanna canopy. However, we also see significant overestimation of hollow abundance using ground-based surveys. These overestimates tend to be associated with multiple entrances allowing access to the same hollow, and termite nests blocking hollows. Earlier reports of very high densities of tree-hollows in the northern savannas, from ground-based surveys, may need to be re-evaluated.

Conservation Biology (1)

📅 Monday, November 27, 2017

🕒 11:00 AM - 1:00 PM

📍 Cypress #3

🗣️ Speed Talk PLUS Poster

👤 **Penton C**¹, Radford I², Woolley L¹, Murphy B¹

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Double sampling to assess the effectiveness of ground-based surveys of tree hollows in northern Australia



EcoTAS 2017

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Kiri (Reihana) Spraggs

EcoTAS abstract

The widespread degradation of water quality and quantity and its state of mauri, is a significant issue for Māori. This issue is represented by widespread degradation of

Open session (1)

Monday, November 27, 2017

3:45 PM - 5:45 PM

Sugarloaf Room

Oral presentation