

THE ROLE OF LINEAR STRIPS AND SMALL PATCHES OF WOODLAND IN CONSERVING ENDANGERED MAMMAL FAUNA

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1. Small patches of native vegetation in highly cleared landscapes are valuable for biodiversity.
2. Linear strips often support some of the highest quality remaining woodland.
3. Linear strips are irreplaceable, despite being suboptimal in shape.
4. Many animals need numerous trees with hollows, spread evenly across the landscape.
5. Existing structural elements provide critical resources for wildlife and should be the building blocks for restoration.
6. Active management of woodlands is critical.
7. Create and maintain a well-connected network of linear strips.
8. Tensions in the management of remnant woodlands need to be resolved.

Introduction

My research focuses broadly on quantifying and mitigating the impacts of human activities on wildlife and ecosystems. I have studied the response of a range of fauna (birds, reptiles, bats and small mammals) to habitat loss, fragmentation and degradation in agricultural and urban landscapes, two of the most human-dominated systems in the world. Most of my effort has focused on arboreal marsupials, however, especially the Squirrel Glider (*Petaurus norfolcensis*). Since 1995, I have studied the ecology of the Squirrel Glider in several environments in south-eastern Australia (see map on next page), but particularly in an agricultural landscape with less than 10% tree cover, where fauna must contend with extensive loss of habitat, ongoing decline in habitat quality, and most remaining habitat occurring as a network of narrow, linear strips along roads and watercourses.

I have used intensive and extensive spotlighting, hairtubing, trapping and radio-tracking to study the Squirrel Glider, Common Brushtail Possum (*Trichosurus vulpecula*), Brush-tailed Phascogale (*Phascogale tapoatafa*), Sugar Glider (*Petaurus breviceps*) and Yellow-footed