

# Backyard bandicoots could be key to urban bushland health

January 17 2017, by Pepita Smyth

---

Mandurah home gardens are about to be a source of great interest to Murdoch University scientists.

The University has begun a three year investigation into how Southern brown bandicoots (quendas) survive in urban bushland in the Mandurah region and the investigators need the help of [local residents](#).

Associate Professor Trish Fleming, Professor Giles Hardy, Dr Catherine Baudains and Dr Amanda Kristancic from Murdoch University will work with the local Mandurah community and the City of Mandurah to increase understanding of where quendas are found, the roles they are playing, and identify potential threats to their survival.

"Patches of native bushland are becoming increasingly isolated and we are interested in finding out the best ways to help the plant and animal biodiversity of urban bushland to thrive," Prof Fleming said.

"We believe that quendas could provide an important piece of the puzzle."

Prof Fleming said that quendas play a critical role in ecosystems.

"As quendas forage for invertebrates, subterranean fungi, and plant material they turn over substantial volumes of soil," she said.

"This soil turnover in turn contributes to water infiltration, nutrient

cycling, better microbe function and improved growth of plants."

Mandurah Mayor Marina Vergone said local residents had a key role to play in the project.

"Although urban reserves are under Council management, we rely on local residents to help us with this project, as they are important custodians of urban bushland who place a high value on the local environment for quality of life," Mayor Vergone said.

In particular, residents can help by having their garden surveyed and allowing researchers to place motion-sensor cameras on their properties, to capture visits by quendas and foxes.

"We will be working with Mandurah residents to identify how quenda are using the bushland in neighbouring parklands as well as their own backyards" said Dr Baudains.

"Over the next few years we will be identifying ways to improve the environment for quendas – discovering the best plants for food and shelter, identifying dangerous black spots on roads and finding corridors for quendas to move around the bush" said Dr Kristancic.

"We will also be tracking both quendas and foxes to identify how they move through urban areas."

Professor Hardy said the team will also trial new ways to improve plant health, by 'inoculating' the roots with bandicoot droppings.

"Fungi form an important part of the diet of quenda, and the spores of fungi pass through their digestive system to be deposited in their droppings. These mycorrhizal fungi form important associations with the roots of plants, boosting their capacity to obtain water and nutrients," he

said.

**More information:** The researchers would love to hear from Mandurah residents have quendas in their backyards and who would like to participate in the study. For more information can be found at [backyardbandicoots.wordpress.com/](https://backyardbandicoots.wordpress.com/)  
Contact Amanda Kristancic at [kristancic@murdoch.edu.au](mailto:kristancic@murdoch.edu.au)

Provided by Murdoch University

Citation: Backyard bandicoots could be key to urban bushland health (2017, January 17)  
retrieved 27 April 2024 from  
<https://phys.org/news/2017-01-backyard-bandicoots-key-urban-bushland.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.