



Anticoagulant rodenticide exposure in possums and impact on native predators

- In 2021 we investigated the exposure of powerful owls to second-generation anticoagulant rodenticides (SGARs), with detections in 83.3% of dead powerful owls (Cooke et al. 2022).
- Brodifacoum (a commonly available SGAR that prevents clotting of blood), was detected in all owls where a rodenticide was detected.
- Given that powerful owls feed almost exclusively on arboreal marsupials (possums and gliders) and not rodents, we believe that non-target poisoning of possums may be leading to secondary poisoning of powerful owls. Ingestion of SGARs raises serious welfare and conservation concerns for possums and their native predators such as powerful owls.

The use of SGARs to manage rodents in Australia is widespread, with these products readily available in supermarkets and hardware stores. The extent of ingestion of rodenticides by non-target wildlife such as possums is currently unknown. This research will test dead common ringtail and common brushtail possums for exposure to SGARs. We aim to sample as many common ringtail and common brushtail possums as possible from different land-use types across Victoria between April and October 2022.

How can you help?

1. Collect any dead (presented dead or euthanised) common ringtail possums and common brushtail possums (also faecal pellets if available) between April and October 2022.
2. Where possible remove the liver and place in a sealed zip lock bag in your **freezer**. Please label the bag and attach the identification slip below to the bag. The rest of the possum should then be disposed of as per clinic protocol for wildlife.
3. If you cannot remove the liver, please freeze the entire possum in a sealed bag and attach the identification slip on the next page to the bag.
4. Contact us to organise collection of the liver samples / possums.

The research team:

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Reference: Cooke R, Whiteley P, Jin Y, Death C, Weston MA, Carter N, White JG (2022) 'Widespread exposure of powerful owls to second-generation anticoagulant rodenticides in Australia spans an urban to agricultural and forest landscape', *Science of the Total Environment*, 819: 153024. doi:

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Identification Slip – Deakin Possum Rodenticide research study, April – October 2022
(DELWP Flora and Fauna authorisation number 10010301)

Please complete this and attach it to the liver sample / possum for our reference

Species (circle): Common ringtail possum or Common brushtail possum	Date of collection:
Sex (circle): M F Unknown	Age (circle): Adult Juvenile Unknown
Location where possum found (street address or GPS location – please be as specific as possible):	
Cause of death (if known):	
Any other comments or important information about clinical presentation/ diagnostic tests / treatment provided (e.g. Vit K)/ necropsy findings:	
Collector's (or your) contact details:	