

# DEALING WITH UNWITED GUESTS

Unwelcome visits from rats or mice can make us reach straight for the rodent bait. While we ensure baits are put out of reach of children, pets and other animals, we rarely think about where rodents go after they have eaten baits. In fact, we probably try and think about it as little as possible.

The most commonly-used rodent poisons are **anticoagulant rodenticides (ARs)**. These act as blood thinners, so rats and mice can consume a lethal dose but not feel sick until later. Newer ARs, called **second generation anticoagulant rodenticides (SGARs)**, are powerful enough that a single feed can be lethal. But because of the time lag between taking a bait and feeling the effects, rodents can consume a more-than-lethal dose and still be wandering around - like walking time bombs.

Predators that naturally eat rodents, like owls and birds of prey, can then easily consume multiple poisoned rodents, in turn becoming poisoned themselves. SGARs don't break down quickly - some can stay in tissues and organs for months, even years. Unfortunately this just makes it easier for these bigger animals to get a lethal dose of toxins.

When we decide to use rodent baits around our homes and workplaces, our choices can have a serious impact on the native wildlife around us.

**But we can make better choices.**

## The evidence against SGARs

The link between SGARs and Australian birds was found when researching declining Southern Boobook populations. Almost 73% of samples tested from boobooks in southwest WA had detectable exposure to ARs. Of even greater concern, about 18% of all the boobooks tested had levels of exposure that were high enough to kill them directly. Almost all the toxins were identified as SGARs. These were found in both urban and rural birds.

While other factors may also be impacting the decline of these small predators, the potential impact of anticoagulant rodenticides cannot be ignored.



Black rat<sup>1</sup>

Southern Boobook<sup>4</sup>



Even at less-than-lethal levels, toxins still make birds clumsy and slower to respond to threats - making them less efficient hunters, and more likely to be hit by cars.

Birds that regularly eat mice and rats, like this Masked Owl, are at particularly high risk of SGAR poisoning.



Masked Owl<sup>5</sup>

The key differences between earlier, first generation anticoagulant rodenticides (FGARs) and SGARs is how long the toxins remain in the body. FGARs break down quicker, and so there is less chance of larger animals being poisoned. SGARs can stay in body tissues for months or even years. Yet Australia has little regulation on their use - SGARs can be easily purchased in hardware and grocery stores across the country.

## How do I tell which is which?

The flashy packaging of rodent baits can make it difficult to tell exactly what they contain. However, the label will state the **"Active Constituents"**, so look there for the FGAR compounds that are less harmful such as Warfarin or Coumatetralyl. If the bait contains more harmful SGARs like Brodifacoum, Bromadiolone, Difenacoum, Difethialone, or Flocoumafen, leave it on the shelf.

Less harmful first generation compounds:

- ✓ Warfarin
- ✓ Coumatetralyl

More harmful second generation compounds:

- ✗ Brodifacoum
- ✗ Bromadiolone
- ✗ Difenacoum
- ✗ Difethialone
- ✗ Flocoumafen

Globally SGARs have been responsible for declines in many carnivorous mammals and birds. Here in Australia it is not just Boobooks or other owls that are at risk. Other predatory and scavenging birds are also likely to be affected - from our eagles and falcons to our kookaburras, magpies, ravens, and currawongs. Native mammals like quolls and large reptiles like goannas and pythons are also likely to be affected.



Grey Currawong<sup>6</sup>



Laughing Kookaburra<sup>1</sup>

**It's not just owls, but other carnivorous and scavenging birds that could be suffering.**



# How can I help?

It is easy to minimise your impact. Which of these bird-friendly changes can you commit to?

Make your house and garden less friendly for rodents:

- tidy up garden waste (like brush piles),
- pick up any fallen fruit,
- ensure excess pet food isn't accessible,
- rodent-proof chook pens and aviaries,
- replace rat-friendly palms with owl-friendly natives, and
- seal potential roof/wall cavity access points that rodents might be using.

Encourage native predators:

- plant native trees, and
- install nest boxes for owls to breed in.

Reduce dependence on poison baits:

- consider other, non-poison pest control, like snap traps,
- only put out baits when you actually need to,
- read the labels on any poisons you buy and make the change to FGARs. Look for Active Constituents like Warfarin and Coumatetralyl, and
- leave SGARs on the shelf.

Become an advocate for our birds:

- spread the word about bird-friendly rodent control,
- if professional pest controllers come to your home or workplace, find out what products they use, and encourage them to operate in ways that reduce their impact on our native wildlife, and
- ask your local hardware and grocery store to stock alternatives to SGARs.



Eastern Barn Owl<sup>2</sup>

House Mouse<sup>3</sup>

Check out the science:  
Lohr, M.T (2018) Anticoagulant rodenticide exposure in an Australian predatory bird increases with proximity to developed habitat. *Science of the Total Environment* 643: 134-144.

For more information, please visit:  
BirdLife Australia's Urban Birds program:  
<http://birdlife.org.au/rodent-control/>



If you come across sick or injured wildlife, call the Wildcare Helpline (08 9474 9055) to find your nearest vet or wildlife rehabilitator.

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natural resource  
management program



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# Bird-friendly rodent control

Making better choices for our wildlife

Southern Boobook<sup>1</sup>



  
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