

## Cattle health risks from rats and mice

### *Why you still need a Tomcat*

THE cattle and human-health justification for controlling rodents can be overlooked alongside the more visible, damaging impacts of rats and mice to agricultural enterprises. But rats and mice can have major ramifications for both cattle health and the health of workers and families in beef and dairy farm businesses.

Catastrophic waves of cattle deaths by botulism on Australian dairy and intensive-beef enterprises in recent years, for example, have been caused by cattle consuming feed contaminated with the botulism toxin or bacteria from the decaying bodies of rats, mice and other animals, inadvertently collected, trapped and killed in silage, grain and hay during harvest or storage – and the botulism toxin spread throughout the cattle-feed ration via feed mills and mixer wagons.

As well as vaccinating stock against botulism, a major recommendation for reducing the risk of high stock mortalities is to control vermin and pest animals in the field and in storage areas.

Not commonly acknowledged, rats and mice are also known to carry an array of disease pathogens and parasites that are a threat to both humans and to livestock.

A 2009 Australian study listed them as carriers of bacterial diseases including *Streptobacillus*, *Leptospirosis*, *E Coli*; serious viruses including *GanGan* virus and potential mammary tumour virus; and parasites including lungworm, *Giardia* and *Neospora* (protozoa) – a significant cause of reproductive failure in cattle.

Diseases are transmitted to cattle and to humans via rat and mouse droppings and urine that contaminate feedstuffs, surfaces and the air; and via vermin such as ticks and fleas carried by these rodents.

This is a good time of year to consider the cattle and human-health implications of not controlling rats and mice on Australian farms. Studies of mouse plagues in Australia show the main breeding season usually from October through to May at least, with peak numbers and potential plague proportions by early autumn.

The easiest way to avoid plague proportions is to keep rat and mice populations to a minimum by implementing control as soon as they are detected – giving them something highly attractive but lethal to eat.

BARMAC business manager Chris Ramsey urged dairy and beef producers to commence a safe, year-round rodent-control program using TOMCAT baits and tamper-resistant bait stations for increased non-target animal safety, and for bait protection and longevity against the elements.

“TOMCAT rodenticides are being distributed exclusively by Barmac into the Australian agricultural retail market.

“For many years this world-leading rodenticide brand formulated by Bell Laboratories has shown superior palatability and effectiveness compared with other baits, with rats known to gnaw through the sealed plastic buckets to get to irresistible TOMCAT blox and pellets.”

Mr Ramsey said the distinctive 20-28 gram baits were a rectangular cog-like shape, giving rodents multiple gnawing points for increased feeding and satisfying their desire to gnaw. The extremely palatable, weather-resistant TOMCAT baits work well in both moist and dry conditions.

He advised for heavy infestations to start with TOMCAT II (Red), then once the population was reduced, to continue with TOMCAT (Green) to kill the occasional rodent and maximise non-target animal safety.

TOMCAT (Green) baits with active-ingredient Bromadiolone hold up well in adverse, moist conditions and are irresistibly effective, including against Warfarin-resistant rodents. Rats and mice can consume a lethal dose of TOMCAT (Green) in one feeding, with rats only requiring 2-3 mg. This bait is also available in 50 gm sachets to be thrown into hard-to-reach locations where rodents are known to hide, or they can be secured in TOMCAT bait stations. TOMCAT (Green) is the recommended product for use around homes and near other animals, with its lower toxicity to non-target animals and pets.

TOMCAT II (Red) containing powerful Brodifacoum – the strongest single-feeding anticoagulant – works especially well on persistent or high infestations of rats or mice. If TOMCAT (Green) baits are continually being eaten over a period of weeks, a high population is likely, and the more powerful TOMCAT II (Red) recommended to bring the population under control faster.

Mr Ramsey recommended TOMCAT bait stations for safe rodent control.

“Barmac has a complete line of tamper-resistant bait stations through the TOMCAT range, and recommends that rodent-baiting programs be as well-managed as all other farm activities.

“Check baits every week (more often with high populations) to determine activity; to ensure baits are replaced as soon as they are eaten; and to record all details –including bait-station locations, dates checked, and when fresh bait has been added.”

## PALATABILITY STUDY STUDIES CARRIED OUT IN THE US MARKET

