

What to do with used rat bait

The next question of how to dispose of large quantities of expired rat bait is tricky for those on island who are undertaking rat control over large areas or even steady control around small properties.

In the Windy Hill Sanctuary trials have been carried out to find out how much bait in their 2500 stations is actually eaten. Over two years, 800 baits were weighed as they were put out and pulled back in 12 weeks later and re-weighed. At best, rats ate about 42% of the bait put out which meant that with the 2500 bait stations in the Sanctuary the amount of uneaten bait to be disposed of was large.



Any rat bait is a tiny part toxin and the rest made up of grain, wax, colour, and lure – all organic. Nevertheless that tiny part of poison is potent and, for some baits, very long lasting so its disposal has to be done to the manufacturer's instructions: bury bait with other organic material on the active tip face of an appropriately managed landfill or buried within the biologically active layer of soil elsewhere within a secure area. With such a lot of uneaten bait this was a problem so a creative solution was embarked on 18 months ago - **Worm farms.**

Worms are regarded as being able to revitalise pretty much any substance that is put in front of them and this has proved so at Windy Hill. Two worm farms were established for two different toxins – brodifacoum and diphacenone. The trial was supported by the Auckland Council Biosecurity team who supplied one bin and the costs of the first worm casting analysis. This first analysis of worm castings was carried out in October last year. The brodifacoum sample came back at non-detectable levels but, surprisingly the diphacenone, which is a much less potent bait, was still detectable. Samples were sent off again in February this year to Landcare Research and the results for both baits came back as below minimum detectable levels. The worms are doing their job. The worm castings and compost created can now confidently be used in the garden.

However, the Sanctuary has quickly outgrown the small worm farms and larger models have been made from pallets. Samples from these larger worm farms will be tested later this year when the worms have had time to do their job.



We will let you know how that progresses.

So, you don't need to put your unused bait in the Landfill , it can processed by worms in compost or in a worm farm.