

Summary of feeding experiments

To test the potential risk to spotted-tailed quolls from poisoned meat baits such as commonly used to control wild dogs, we conducted tests of the amount of meat consumed in a night by quolls in the wild. We also tested the ability of quolls to find and excavate buried meat baits. Of course none of the meat baits used were actually poisoned.

We set pre-weighed meat baits out along a little-used logging road in the wet tropics area, where quolls were known to occur at high numbers.

Fifty meat baits were laid out every 250m along this road. We alternated buried with non-buried meat along this transect.



Buried meat baits were buried below the ground surface (not under a mound of earth)



...and the earth plug replaced over the bait.

Non-buried baits were wired to saplings and both buried and non-buried baits were surrounded with sand, which recorded the footprints of animals that visited the baits. Baits that were buried, were buried to a depth of 15cm.

During four nights and five days at the site, no buried baits were excavated by quolls or other wildlife. Twenty of the 26 non-buried baits were wholly or partly consumed by quolls. Other wildlife that visited the baits included small rodents (probably *Rattus fuscipes* and *R. leucopus*), Musky Rat Kangaroos, *Hypsiprymnodon moschatus* and Long-nosed bandicoots *Perameles nasuta* however none of these species consumed significant quantities of meat to be at risk of 1080 poisoning.



Paul Davis and an off-sider of the Department of Natural Resources and Mines, and TKMG's Scott Van Barnevald set-up a bait station.



Our project officer, Scott Van Barnevald demonstrates a non-buried bait station with meat placed in the center of a sand pad which records the footprints of visiting animals.

Of the 11.9kg of unburied meat baits deployed during this study, 10.25kg were consumed by quolls over the 5 days. Twelve of the 26 unburied baits set out were consumed in single evening, and 20 of the 26 baits had been fully or partially consumed over the four nights of the study.

These results suggest that had the meat baits been loaded with the standard dose of 1080 (i.e. 6mg), they would have posed a significant risk to spotted-tailed quolls at the site.

The results also indicate that the risk to quolls from 1080 meat baits can be significantly reduced when those baits are buried 15cm below the surface of the ground.



The sand around this now empty unburied meat bait station records the activity of spotted-tailed quolls which consumed this 500g bait in a single night.