

New technology, PAPPutty to make wild dog traps more humane.



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Wildlife and pest managers and stakeholders all aim to improve animal-welfare outcomes when trapping pest animals such as foxes or wild dogs with soft jaw foot-hold traps. The use of rubber jaws assists by reducing leg injuries when compared to banned steel jaw traps, but an animal may still be stressed while attempting to escape the new traps. Thus, there remains a need to further reduce stress of trapped animals before a shooter can visit the trap. Moreover, with even soft jaw padded traps regulations currently require the trapper to visit every trap within 24 hours of deployment. This is expensive and difficult in some terrain. In some states strychnine can be fitted to trap jaws to induce euthanasia when the dog bites at the trap, but this is considered to have undesirable animal-welfare outcomes because animals are conscious while clinical signs of intoxication occur. Many groups have recommended against its continued use on welfare grounds.

Accordingly, the Invasive Animals Cooperative Research Centre (IA-CRC) and its Centre for Invasive Species Solutions successor has worked with NSW Dept Primary Industries, School of Environmental & Rural Sciences at UNE, and Connovation (NZ) to develop a method to apply a lethal dose of para-amino propiophenone ("PAPP") to traps. Funding

support came from the Australian Government's Cooperative Research Program and Established Pests & Animals & Weeds Measure. The registered name for this new product is **PAPPutty Lethal Paste for Wild Canids**.

Once a trapped dog bites at this material a lethal dose of PAPP is administered and the trapped dog dies quietly, due to the humane mode of action of PAPP.

PAPP is metabolised by dogs and foxes in a way which leads to the formation of methaemoglobin, that prevents transport of oxygen in blood. The affected animal becomes unconscious and dies quickly with very similar symptoms to carbon monoxide intoxication, which is known to be very humane. Other animals are less susceptible than canids as they metabolise PAPP in a different way. ACTA pioneered applications of PAPP in the registered FOXECUTE® and DOGABAIT® baits ([animalcontrol.squarespace.com/products-overview](https://www.animalcontrol.squarespace.com/products-overview)).

Large field trials were conducted by Dr Paul Meek and colleagues near Moomba in SA to test five different soft jaw wild dog trap types, fitted with PAPP dosed cloths, containing a semi solid "PAPPutty" formulation. Camera data was used to record animal behaviours after capture and to determine the efficacy. Every trapped wild dog (n = 117) gnawed at the treated traps and, of 56 dogs caught, 87% were killed. The mean time from trap-to-death was 68 min for PAPP-cloths. ([see full research paper at animalcontrol.com](https://www.animalcontrol.com) with Meek et al 2019 Paper).

The PAPPutty lethal paste offers a practical option and improves the welfare outcomes for trapped predators. It also allows the trap visitation limit to be increased from 24 hours to three days, which is a considerable increase in flexibility and reduced cost to operators.

Availability:

ACTA has been licensed to manufacture and supply the PAPPutty lethal paste and has formulated the product into 3mL syringes (25 per carton) to allow easy administration to a cloth wrapped around either jaw of a trap. The high dose (2g of PAPP/dose) allows for imperfect absorption by dogs to achieve maximum reliability. This product is a restricted S7 and is only supplied by ACTA directly to approved licensed pest controllers and authorised staff. The product is stable for long periods at room temperature storage. A training video has been developed by the Centre for Invasive Species Solution (CISS) <https://invasives.com.au>



Application of PAPPutty can be applied to either jaw of a soft jaw foot-hold trap.

Photo: Centre for Invasive Species Solutions - still from video at 3:00.378