

Ground Based Animal Control

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Prior to 2008 the major focus of Timberlands Possum control revolved around aerial 1080 operations. This was a highly successful system where by large areas of around ten to fifteen thousand hectares were treated annually. Where these large scale aerial operations were carried out possum damage was generally eliminated for between five to seven years.

During this time trappers did operate in the estate however they tended to be small operators focusing purely on fur recovery and not control. With the Forest Stewardship Council taking away the option of aerial operations on our estate (except for where the Animal Health Board or regional authority requires it to be done) we had to look at a new strategy to control possums. An association was formed with Trappers NZ and together we implemented some trials looking at how effective trapping could be, when carried out by a professional operator using a large number of traps.

Trials were carried out in Whakarewarewa forest and in Kaingaroa forest to determine what level of control could be achieved by trapping for fur alone, or if the trapper was being paid to continue trapping after it was no longer sustainable for fur. The results were encouraging: with the Whakarewarewa block originally with an average Residual Trap Catch (RTC) of 25% being reduced to 16% by trapping for fur alone and to 7% with a payment incentive. The Kaingaroa block had an original RTC of 11%, and was reduced to 6% with just trapping for fur.

It was notable that in Kaingaroa a higher number of possums were recovered than the RTC would suggest.

Subsequently we have utilised trapping for pre-establishment control in Whakarewarewa and Tarawera. A large contract block in Tarawera was also controlled using traps. Monitoring of these operations proved them to be successful (for forestry possum control) with RTC's of around 5% being achieved. Timberlands also use ground laid 1080 in Kaingaroa for pre establishment control as part of an integrated pest control plan as this toxin will also control rabbits. This operation is carried out by EPRO (an agricultural contractor in Taupo) and has been successfully protecting newly planted trees for many years.

In Kaingaroa forest (in areas not previously controlled using aerial 1080 by the Animal Health Board) an intensive large scale trapping and Feratox operation for fur has been carried out by Trappers NZ. This operation has just been completed and monitoring will be implemented to ascertain the success of this methodology at reducing possum numbers over large areas.

The key to successful and economic control (we think) using traps or hand laid baits is to use professional operators who operate at a scale large enough to ensure large areas can be controlled quickly to minimise reinvasion. Also in key areas, combining fur recovery with payment.

Goodnature automatic humane possum trap

Following the development of their self-resetting trap technology, first applied to the Henry v9 automatic stoat and rat trap, Wellington-based industrial design team Goodnature moved their focus to New Zealand's most ecologically harmful pest – the possum.

Developed with the support of the Department of Conservation (DOC), Goodnature's possum trap uses their unique technology of compressed carbon dioxide to automatically reset itself up to 12 times. This means the trapping is less labour-intensive and more cost-effective than single-action traps, which have to be reset manually.

At the start of the resetting trap development project DOC calculated that including the purchase price and cost of labour, the total cost to run a single-action trap for 20 years amounts to around \$2000,

whereas a Goodnature automatic trap would cost just \$480.

The Goodnature automatic possum trap, which is designed and made in New Zealand, is also more humane than traditional single-action traps. It kills possums instantly meaning no suffering. Following rigorous ethics trials, the trap has achieved the Class A standard for humaneness as set out in the National Animal Welfare Advisory Committee's guidelines.

This is the only possum trap ever to have met this standard.

The trap incorporates an automatic lure system that constantly drips a small amount of scented syrup into the trap to entice possums from the surrounding area. Having been drawn to the trap site, the possum activates the trap by biting and pulling on the baited