

## The challenges of broad-scale delivery of wildlife fertility control

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The application of fertility control to the management of widespread introduced mammal pests requires either an oral formulation or animal-to-animal transmission. Both these approaches have been investigated for control of Australian brushtail possums (*Trichosurus vulpecula*) introduced to New Zealand for their fur, but now having severe impacts on native plants and animals and through the spread of diseases, particularly bovine tuberculosis. Oral formulations focussed on the use of a bacterial ghost system expressing anti-fertility antigens, and transmissible delivery on the potential for genetic modification of a possum-specific intestinal nematode parasite to express infertility-causing antigens. Despite significant progress, ultimately neither of these approaches was successful. The failures resulted from a combination of technical, financial and social issues which are likely to remain relevant to future research into broad-scale delivery of wildlife fertility control. This suggests that greater international collaboration and pooling of resources will be needed to successfully deliver fertility control products for broad-scale pest management.