

# Possum Peril

by Ian James



*The forests may have been protected from logging, but how can they be protected from possums?* Photo: Terry Fitzgibbon

**W**HAT A TRAGEDY for New Zealand when possums were first introduced from Australia in 1837. Now 150 years later it is hard not to feel a sense of despair when confronting the enormity of the changes they have wrought to our native plants and animals.

Possums are most damaging to forests when their numbers reach a maximum following the colonisation of new habitat. The West Coast passed through this peak phase in the 1950s and 1960s when the central alpine valleys suffered extensive dieback of rata, kamahi, and Hall's totara. This is why such concern is being expressed at the present time for the dieback in the pohutukawa and kauri forests of Northland. When one considers that the trees in both areas have life cycles of several centuries it is obvious that the forests will take many years to stabilise.

Because the funds available for controlling possums are limited it is important that we make the best choices in protecting conservation values. We must also remember that the commitment will be ongoing for decades, or longer, unless some effective biological control becomes available.

There are only two strategies for wild animals: to eradicate or control numbers. Eradication, the most desirable and cost-effective option over the longterm, is possible only for islands where there is no chance of recolonisation. The only realistic strategy for possums on mainland New Zealand is sustained control.

## Determining Priorities

The Department of Conservation (DoC) is currently rethinking its strategies for possum control. In the past the Forest Service priorities were set primarily on the degree of rata

dieback in mountain valleys, and the downstream capital values believed to be at risk from induced erosion and flooding. DoC is taking a more holistic approach in that both the forest and wildlife values are considered equally.

The first stage is to identify and rank the most important conservation values. For management purposes it is better to identify a single endangered species because the success of control can then be measured directly by the response of this species. The conservation values are classified according to how vulnerable they are to possums.

Then comes the practical realities of control. What has been the history of control in the area? Is it possible to maintain possum numbers at the level required to protect the conservation value? What is the risk of recolonisation from adjacent areas? Are other damaging wild animals present and can they be controlled?

Each proposal for possum control is ranked according to the above factors and considered on equal terms with every other proposal. It is a process involving difficult choices, especially where many deserving cases will miss out through lack of funds.

Because there are many value judgements within the process, the priorities should not only be made by a few specialist people. Every interested person should have the chance to participate and are welcome to contribute their views.

On the West Coast DoC has determined that its priorities should include the Paparoa National Park. The goal is to protect magnificent northern rata trees and the unique coastal forests, and to prevent possums interfering with the nesting sites of the Westland Black Petrel.

## Shifting the balance

By Forest and Bird Northern Conservation Officer Fiona Edwards

**P**ART TIME professional possum trapper Bryan Innes is not your usual bushman. Equally at home waxing poetic about human's relationship to nature as following a trapline in the forest, he is a man with a mission – to rid native forests of destructive possums, and at the same time provide employment for the people of the north.

"We must learn to live with the possum – it is here to stay. We are the possum's only predator and as such we must ensure the balance which will enable our native bush to survive in something approaching its present form," Whangarei-based Bryan says.

The scope of the possum problem in the north is staggering. New Zealand-wide there are estimated to be 70 million possums. In Northland alone the population is put at around 20 million, with one of our best known forests, Waipoua – home to giant kauri such as Tane Mahuta and Te Matua Ngahere – containing an estimated 300,000 possums.



*Bryan Innes and Shelley Trotter with a night's possum haul from Tangihua Forest.*  
Photo: Fiona Edwards

Department of Conservation's John Beechman suggests there are between 5 and 10 possums per hectare.

Despite this low density, because of possums' selective eating habits the damage is dramatic. Bryan Innes puts it this way:

"Possums target their preferred or 'ice cream' species for the season such as rata or kohekohe. Like sheep which pre-

fer sweet new grass, possums prefer new growth. After being browsed, a healthy tree will push out new growth in order to survive. This new growth attracts all the possums in the surrounding area and is heavily browsed by them.

"The result is that the poor tree has all its new growth for the entire season eaten as it is produced. The average life of the leaves on a tree is one to two