

Maunga Taranaki Egmont National Park

Nei ra te mihi atu ki a koutou i raro i te korowai o to tātou nei tauheke ara ko Taranaki
Greetings to everyone who sits under the cloak of our ancestor "Maunga Taranaki".

1080 Operation a success

Native forests and vulnerable bird species have been provided a precious lifeline after February's successful 1080 operation in Egmont National Park.

The Department of Conservation (DOC) treated more than 30,000 hectares of National Park and over 1,200 hectares of private bush with cereal baits containing biodegradable 1080 in mid-February as part of ongoing pest control to manage threats to the park.

Monitoring results indicate possum, stoat and rat numbers have plummeted since the operation.

"This is a great result - the best we have seen to date in our ongoing pest control operations within the park," says DOC Taranaki Area Manager Phil Mohi.

"Possum numbers were poised to cause huge damage to the forest, full stop. Other predators such as stoats and rats are threatening the survival of species like blue duck/whio, kiwi and the giant powelliaphanta land

snail. We have to undertake regular intervention to protect this unique area."

Operation Egmont was one of the most public recent 1080 possum control operations carried out by the Department says Phil.

"In Taranaki many people can look out their kitchen windows and see the maunga - its part of their everyday landscape and they feel a strong connection to it." Given the community's connection with the maunga, careful planning and good communication with Iwi, key stakeholders, neighbours and community groups was important for a successful operation.

"The health of the park's forests is of huge importance to the Taranaki region - from a tourism, cultural and agricultural perspective as well as conservation. It is really pleasing to see Operation Egmont delivering such good results."

Protecting Park critical for Taranaki's tourism industry

Mount Taranaki, and Egmont National Park form the cornerstone of Taranaki's visitor industry says Venture Taranaki's Paul Stancliffe-White. Perceptions of the region almost always centre on the mountain and this is reflected in the way many of our businesses operate. You only need to look at the number of logos or Taranaki websites that feature the mountain to see just how important and widespread the picture-perfect peak is to this industry and its customers.

Mount Taranaki appeals to visitors on many levels. From its untouched native bush to countless walking tracks, to pristine waterfalls and alpine climbing opportunities, it offers something for everyone, whether they're seeking a gentle outing or an epic adventure. Protecting this valuable taonga is critical not only to maintain the region's visitor industry, but is at the very heart of what it means to be from Taranaki.

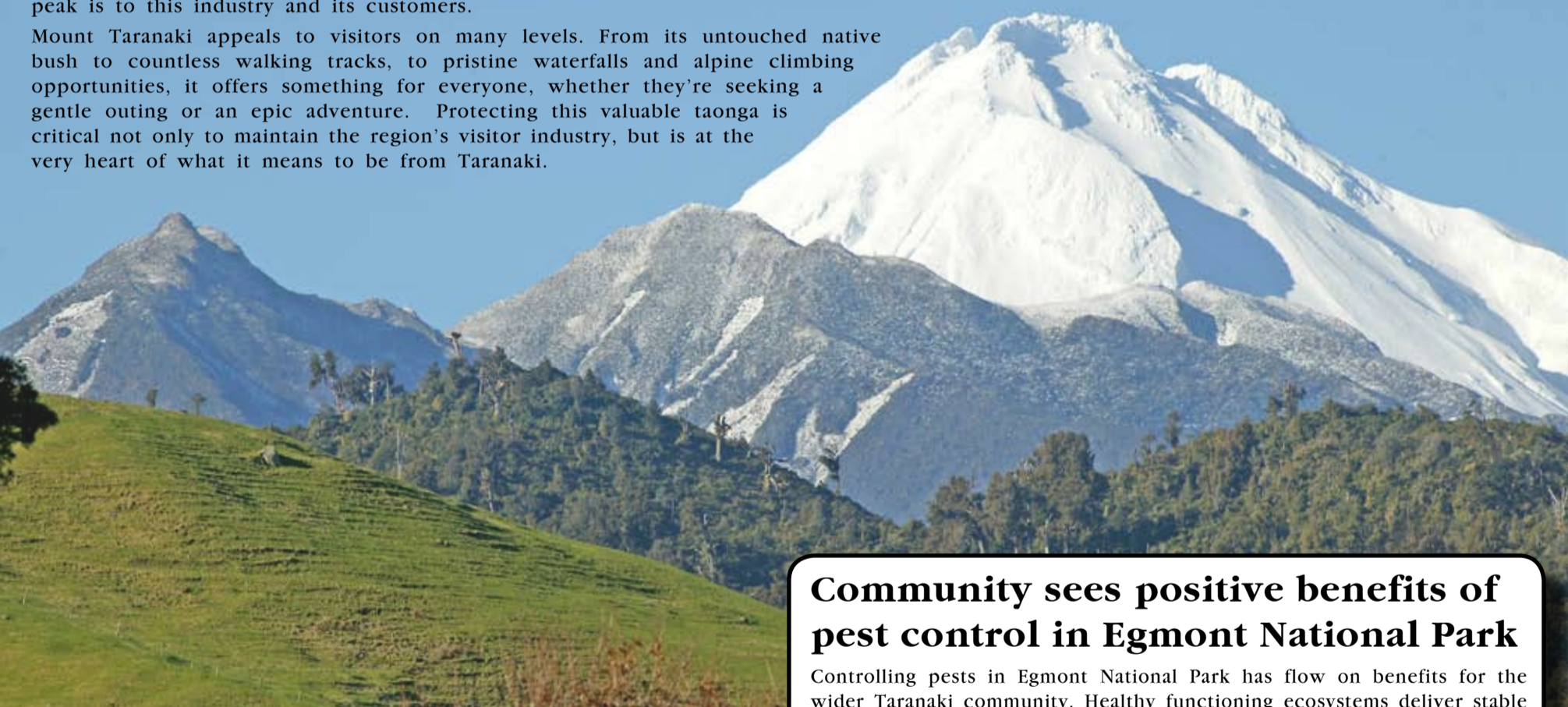


Photo: Rob Tucker

Community sees positive benefits of pest control in Egmont National Park

Controlling pests in Egmont National Park has flow on benefits for the wider Taranaki community. Healthy functioning ecosystems deliver stable soils, fresh water and landscapes that drive the tourism and agricultural industries powering our economy.

Good news for Taranaki bovine TB programme



Terry Hynes, Regional Coordinator for the Animal Health Board, says the knock down of possum numbers within Egmont National Park is good news for the bovine TB programme in the area. "From our point of view, the reduction of possums is really positive and has ongoing benefits both for the environment and the agricultural sector. With the recent herd breakdowns in South Taranaki we are working really hard to ensure that Taranaki remains mainly free of tuberculosis over most of the region. A low possum population reduces the chance of TB spreading and re-infecting cattle and deer".

An invitation – come visit the park

The flora and fauna of Egmont National Park is in one of the healthiest states it has been for many years thanks to ongoing pest management, intervention and resourcing - but don't take our word for it - come and see for yourself.

Visit one early morning in spring to catch up on the dawn chorus. Walk a track in early-mid summer when you will be able to see the increased flowering of species such as rata, kamahi and fuchsia that have benefitted from less possum browse.

Possoms not safe on land surrounding park

An extensive possum control operation has been taking place on farmland surrounding Egmont National Park in conjunction with Operation Egmont.

Co-ordinated by the Taranaki Regional Council, contractors have been working on 15,000 hectares of highly possum-prone land adjacent to the park, using traps and a range of baits (not including 1080).

The operation has been completed in some areas and is continuing in others.

“The results so far are very encouraging, with monitoring showing possum catch rates are now between 1.42% and 2.9%, which is well below our targets,” says the Council’s Director-Operations, Rob Phillips.

The operation is funded by the Council at no cost to land occupiers. “Land occupiers have co-operated well, and under the Self-Help Possum Control Programme they will be responsible for maintaining possum numbers at low levels,” says Mr Phillips.

The long-running and successful Self-Help Programme covers the entire Taranaki Ring Plain. The Council undertakes initial control operations to reduce possum numbers to at least a 5% catch rate. Land occupiers are then required to keep the possum numbers below a 10% catch rate. Council staff monitor and facilitate this maintenance work.

Mr Phillips says the Council and DOC worked together well with a shared aim of ensuring Operation Egmont was efficient and successful.



A Taranaki Regional Council Pest Management Officer (left) discusses control options with a farmer in the Self-Help Possum Control Programme.

Great news for *Dactylanthus*

The endangered parasitic plant *Dactylanthus taylori* is already benefitting from the reduction in possum numbers within Egmont National Park. The flower of the species is a tasty treat for possums and those not protected by wire cages are usually eaten before they get a chance to set seed. DOC staff monitoring the plants have noticed an increase in the number of “uncaged” *Dactylanthus* flowering and seeding since the possum control - great news for the future of this rare plant.



Dactylanthus taylori. Photo: Nga Manu Images.

Egmont National Park – observations over 50 years

Taranaki man Professor Bruce Clarkson is Director of the Centre for Biodiversity and Ecology Research at the University of Waikato

I have been observing the plants and animals of Egmont National Park for more than 50 years. As a teenager in the 1960s, I hunted goats which had reached plague proportions leading to the development of dead areas mainly in the shrubland zone. Here, shrubs were replaced by unpalatable grasses, sedges and ferns while the mountain horopito became abundant in damaged forests. In those days kiwi could be heard calling near the old York Road hut and whio (blue duck) inhabited the Manganui River.



Rata are flourishing after intensive pest control

Photo: Nga Manu Images.

In the 1970s, when I worked on my Masters and PhD theses, I recall the widespread defoliation of mamaku, five-finger and lancewood caused by the growing possum population.

When, in 1982 and 1988, the Kaitake Range kamahi forests were battered and broken by Cyclones Bernie and Bola, the possums finished them off by feasting on the resprouts they had produced in attempting to recover. The dieback was spectacular and affected up to 75% of the canopy in places.

In recent years, however, it has been gratifying to see the Park’s forests substantially return to their former glory. The goats are under control and a Christmas 2008 visit to the old hunting ground at Quarry Bluff found impenetrable shrubland completely covering these areas. And the forests along the main access roads, where I take my Masters Plant Ecology students each year to teach them survey and measurement techniques, have never looked and sounded better.

Palatable plants like toropapa show no signs of goat browsing. Canopy condition is generally very good and bark scratching and defoliation by possums is uncommon. Plants sensitive to possum browse are flourishing. And the birds, tui, bellbird and kereru are now more commonly seen or heard.

This has all clearly resulted from massive knock downs in possum and rat numbers achieved by the aerial 1080 poison programmes undertaken by the Department of Conservation. Indeed the widespread healthy condition of the forests makes it possible to contemplate the reintroduction of the premier songster, the kokako, last heard on the Mangorei Track in the 1930s.



Bellbirds are more commonly seen in the park.

Photo: Nga Manu Images.

DOC listens to Iwi concerns

Throughout the consultation process iwi raised issues around 1080 uptake in kākahi/freshwater mussels and kuku/saltwater mussels, and surrounding marae water bores. The Department took on board these concerns and provided evidence addressing these issues and undertook monitoring to back this up. The results from this monitoring showed no detection of 1080 uptake.

DOC will continue to work with all iwi around the maunga to ensure any concerns or issues relating to 1080 are taken seriously and possible solutions are sought.

Monitoring Results

Possum numbers at an all time low

Independent monitoring has shown possum numbers have plummeted to an all time low - with trap catch rates showing under one possum caught per 100 traps. This is more than 20 times lower than levels recorded in the mid-nineties before the aerial 1080 programme started. The latest results show an average Residual Trap Catch (RTC) rate within the park of 0.33% with slightly higher RTC on the boundary of 1.4%.



Birds will have a greater chance of survival with lower possum and rat numbers. Photo: Nga Manu Images.

The possum population was monitored using a method called Residual Trap Catch monitoring - known as RTC. Possum trap lines are set at random points along the park boundary and within the park and monitored over three nights. The number of possums caught per trap per night is converted to a percentage figure which gives an indication of the possum density in the various parts of the park. RTC rates of over 20% were recorded prior to the first treatment with biodegradable 1080 in 1993/94.

Water

Public concern around 1080 health risks is generally focussed around the potential of exposure to the toxin via water supplies.

1080 breaks down quickly in water and there is no evidence of harmful levels of 1080 in our waterways.

Just like the two previous possum control operations in Egmont National Park public water supplies (including marae water bores just outside the park) and streams were independently tested for 1080 contamination. And just like the previous operations no traces of 1080 were found.



Mussels

Following a request from local iwi we monitored kākahi/fresh water mussels, and kuku/salt water mussels to see if these filter feeders picked up any 1080. Fresh water mussels were monitored at 11 streams around the mountain and salt water mussels were sampled from sites at Ohawe and Kaupokonui. All mussels showed no 1080 contamination.

Rats and Stoats

Initial monitoring results indicate stoat and rat numbers have plunged after the 1080 operation - providing a valuable 'breathing space' for the park's forests and threatened species like kiwi and whio.

Tracking tunnel results show stoat numbers have fallen from 63% across the park to zero. Results from the 7,500 hectares intensively trapped area within the park show a fall from 14% to zero.



Monitoring results indicate stoat numbers have plummeted. Photo: Nga Manu Images.

Rat numbers across the park have reduced down to near zero. Tracking tunnels within the intensively trapped 7,500 hectares within the park showed a reduction in numbers from 61% down to 1.27%. Elsewhere no rats were tracked, where before the operation, tracking was at 50%.

Tracking tunnels were used to monitor the abundance of rats and stoats. The technique uses a "run through" tunnel containing a card with wet ink in the centre. As an animal runs through the tunnel it picks up ink on its feet, leaving footprints on the card. The number of tunnels with rat and stoat footprints present is converted into a percentage, providing an indication of these species abundance.

Egmont National Park is part of a New Zealand wide survey to measure recovery rates of rat and stoat populations after prefed aerial 1080 operations.

The forest canopy

It is too early to measure the impact of the operation on the forest canopy and to judge whether or not we are getting the hoped for improvement in the condition of tōtara. An aerial and ground survey will be undertaken in the summer of 2012, once the trees have had an opportunity to regenerate.

Dog owners take care

Dog owners are urged to remain vigilant over coming months and guard against pets scavenging possum carcasses.

This is particularly important in areas near the Egmont National Park boundary or around streams, rivers and local beaches as possum carcasses may be washed down from the park during floods.

Monitoring of possum carcasses is ongoing and warning signs around Egmont National park entrances and river mouths will remain in place until the risk posed by possums is gone.

Bees benefit too

Professional apiarist Mary-Anne Thomason has seen first hand the benefits of 1080 on the forest health of Egmont National Park.

The beekeeper had hives at road ends neighbouring the park from 1989 - 1995, a period prior to and just after the first 1080 drop in the area.

"We could see then that the tree fuchsia had basically been grazed out by the possums, the branches were like skeletons - you never saw it flowering. The rata had been hammered really badly, and the kamahi was starting to be affected. In spring the possums would graze the trees, the trees would send out new shoots try and recover and the possums would eat that too."

Back then Mary-Anne was getting an average crop of honey per hive from those neighbouring the park.

It was a different story when she took hives to the area 15 years and two 1080 operations later. Now working for Kintail Honey, the apiarist placed beehives at the same road ends she had years before. She noticed a big difference in the forest health.

"It was great to see the forest - the tree fuchsia flowering was amazing, the kamahi was doing really really well."

The resulting honey crop increased markedly from 15 years previously.

"We just hadn't seen the forest look so good before - it was amazing to see the forest recovery. It was obvious that knocking back the possums had had a really positive effect on the health of the trees."



A Kintail Honey beekeeper tends hives near Egmont National Park

Setting the record straight

During the 1080 operation a series of false claims aired on television and in local media.

These claims included:

- a helicopter was operating within 150 metres of a local house and overflowed the home during the operation.
- DOC contractors working within the park were not informed about the drop and were “rained on” with pellets.
- local water supplies were put at risk by the operation in breach of ERMA guidelines.

All three complaints were investigated - and rejected - by the Civil Aviation Authority and the Taranaki District Health Board. GPS (a navigation system that records the position of the aircraft at all times) flight logs from the helicopter proved the house and water claims were incorrect, telephone logs showed conclusively the contractor involved was advised of the operation more than 48 hours before it began and independent water monitoring tests also came back clear.

Beck Helicopters undertook a highly accurate professional operation, says Mr Mohi. “They did an exceptional job and the use of GPS tracking technology proves that.”



Beck Helicopters undertook a highly professional operation.

A ranger's perspective

Dean Caskey, DOC Ranger, Flora Fauna

Working as a ranger in and around Egmont National Park for the last 24 years gives a good perspective of what is happening around you. I have a real passion for native wildlife and am fortunate to work as a threatened species ranger. Those who know me will attest that I tell it like I see it in the field.

Historical reports show the bird life in the Park has changed significantly over the past 200 years. Local extinctions have been common such as kokako, North Island robin and stitchbird. The remaining native bird populations are there in low to moderate numbers.

To understand what has caused these extinctions we don't need to look any further than the trap catch information from a relatively small area of the Park.

Since 2002 with the help of the Taranaki Kiwi Trust and the Central North Island Blue Duck Conservation Charitable Trust we installed around 1,160 stoat trap boxes targeting 7,500 hectares inside the Park. Since then 2,239 stoats, 75 ferrets, 137 weasels, 44 cats, 10,260 rats and 206 hedgehogs have been removed. Without intervention this wave of predation will continue.

My observations of bird life in the Park have been made over the last 24 years. This period includes six years prior to any wide scale 1080 possum control and all three 1080 possum control operations. Contrary to other opinions I have observed no death or reduction in numbers of native birds from these operations.

Since February's possum control operation I have heard or observed the usual density of native birds such as tui, bellbirds, grey warblers, fantails, tomtits, etc. A short visit at the Mangaoraka car park recorded pigeons, grey warblers, tomtits, silvereyes and blackbirds.

As predicted, the trap catch information is showing a significant decline of stoat and rat catches. For now, the Park will be a haven for birds until the tide of predators return. We will continue the battle!

Time to look to the future

It's timely to ask ourselves - what does the future hold for Egmont National Park?

“The park is looking really healthy at the moment - but this has only come about through ongoing intervention and management,” says DOC Taranaki Area Manager Phil Mohi. At present the Maunga has:

- No feral deer population.
- No wild pig population.
- Very low goat numbers as a result of a long standing programme.
- Very low possums numbers achieved through periodic 1080 operations and ongoing maintenance and boundary control.
- 7,500 hectares trapped for predators such as stoats.

These results give hugely positive outcomes for the forest, plants and animals on the mountain and the values that the community derives or attributes to Mt Taranaki.

“We and the community as a whole need to question - are we happy with the status quo in the park or do we want to think big and dream a little?” says Mr Mohi. “Do you want to see the return of North Island robin to the park? Or kokako? These are definite possibilities”.



What does the future hold for Egmont National Park?

Thanks Taranaki

DOC Taranaki thanks all those who supported February's 1080 operation in Egmont National Park: key stakeholders, Iwi, the TRC, staff, contractors, water supply operators and members of the public.

The operation caused disruption to neighbouring farmers and dog owners and we appreciate your ongoing patience and cooperation.

Community support is a vital ingredient in the ongoing battle to protect the flora and fauna of Egmont National Park from predators. Feedback we have received from this operation will be built into future community consultation plans.

For further information on 1080 check out the new website by Federated Farmers and Forest and Bird <http://www.1080facts.co.nz/> and the ERMA website www.ermanz.govt.nz

