

# Local Concern



*Mike Morrison's not the sort to sit around and wait for something to happen. So when possums started killing a beautiful forest remnant next door, he and his neighbours fought back. But as they found out, possums are no pushover.*

Mike Morrison came to Hikuai 25 years ago, when kiwi were still calling from the magnificent stands of kauri and northern rata in Momoparaua forest behind his back boundary.

The possums arrived about 10 years later.

"They were everywhere in no time," recalls Mike, a keen trumper and Federated Farmers representative.

Summers of bright scarlet rata bloom began to dim. The kiwi fell quiet, and were never heard again. "You could see the deterioration in the forest," he remembers. "The possums were everywhere; they were even coming down the chimney."

Something had to be done, and Mike Morrison went looking for allies.

He found them in his neighbours – other farmers whose properties backed onto the 500 ha forest block. And in Environment Waikato (EW), which had a fund available for those willing to tackle pests on their own initiative.

"The possums were eating more than our cows were."

"About four years ago," he says, "we set out to determine the extent of our possum problem. We put 20 traps out over three nights and the result was unheard of. People couldn't believe our figures of seventy per cent Residual Trap Catch" (RTC – next page).

So the group began with boundary control, placing 500 bait stations around the forest edge but the baits disappeared quickly.

"After about a year," says Mike, "we realised that what we were doing was pointless. Unless we hit the bush where the possums lived we'd never get on top of the problem. They would just keep reinvading." He decided 1080 was the answer.

So Mike got "writing and ringing: Project Crimson, the Lotteries Board, the QE II Trust all helped with funding. And when DOC saw we were serious, they pitched in, as well as taking care of the permits for us."

The Hikuai-Wharekawa Community Possum Control Scheme was in business.

But it wasn't all straightforward. "We struck enormous resistance to 1080, particularly from pig hunters

***"What we have here is unique," says Morrison.  
"I've never seen rata forest like it."***

worried about their dogs.”

Over the summer of 2000-01, a contractor began controlling possums in Momoparaua forest. But the first round, recalls Mike, went to the possums. “On the first post-op monitoring, the results were poor, so the contractor went back in and controlled the possums to even lower levels.” The RTC was down to 2 per cent.

Encouraged, the group recently decided to expand their battle front into an adjoining 380 ha block in the Kaituna Stream catchment. Most of the original sponsors signed up again, but a couple of neighbours new to the block were adamant they didn’t want 1080 used near their properties. “No matter”, said Mike. They’d use Feratox® in those areas instead. However, the contractor once more missed his RTC target. “One particular line failed by over 50 per cent,” says Mike, who believes that if they’d been



When the rata forest behind his Coromandel farm succumbed to possums, Hikuai farmer Mike Morrison (L) rallied neighbours like Barbara Earnshaw (R) to form the Hikuai-Wharekawa Community Possum Control Scheme. “What we have here is unique,” says Morrison. “I’ve never seen rata forest like it.”

able to use 1080 throughout, the target would have been achieved.

Undaunted, the operation was repeated. The group awaits the results. For neighbouring dairy farmer Barbara Earnshaw, it’s simple. “If we give up the bush will die. That’s the bottom line, and nobody wants to see

that.”

Besides, the forest is already responding in kind. “This last autumn,” she says, “we saw huge flocks of kereru. And there’s so much more red in the bush nowadays; the rata is blooming again.

“The bush is more alive.”

**RTC**  
Residual Trap Catch

# Keeping Tabs on Possums

*With so many possums about, how do forest managers keep track of their numbers? And how do they know if control operations are working?*

*They rely on a standard method of assessing possum levels called Residual Trap Catch (RTC).*

“The method relies on the fact that possums are nosy critters” says DOC Wanganui scientist Astrid Dijkgraaf.

“RTC is a standardised national protocol that’s been put together by the Animal Health Board, the Department of Conservation, regional councils and others,” she says. “Basically, it’s a method for getting an index of possum numbers before and after a control operation... not absolute numbers but an index.”

For an area of given size, researchers lay a number of trap lines – each one 200m long with ten traps 20m apart. The lines have to be 200m apart because possums will travel that far in a night.

The traps are checked for three fine nights – and the total number of traps that have caught a possum are added up, plus those that were sprung, but didn’t catch a possum.

From that it is possible to work out the number of possums per line.

The totals are then converted to a percentage, which is used as a universal reference.

While RTC is currently considered the most accurate way to keep tabs on possums, it seems some post-operation counts still appear unnaturally low. Territorial differences may have something to with it.

Quite often, in areas with very high possum densities, there are possums whose territories are ground-based and others that stay in the canopy.

It may be that those canopy-living possums haven’t yet figured out that there is a lot more ground territory available after a 1080 drop.

Forest and wildlife managers rely on RTC counts to measure the success of control operations. In most cases, pest control contractors are paid for an operation only once RTC monitoring has shown they’ve met a pre-determined target.

RTC is also used to tell them when the next operation is needed by setting a “trigger” or possum tolerance level, based on an RTC percentage.

For instance, in Westland forests, where the Department of Conservation is trying to slow the decline of trees like fuchsia and mistletoe, managers may mount an operation when RTC figures reach just 2 per cent, a very low threshold.

In other ecosystems that may already be seriously degraded, or are better able to withstand possum damage, that trigger point may be 5 per cent or higher.