

Revive Rotoiti

ONE big step at a time....

The Rotoiti Nature Recovery Project (RNRP) is embarking on an exciting new direction – BNZ Operation Nest Egg™ (ONE) supported by the Bank of New Zealand Save the Kiwi Trust. A translocation plan has been written and iwi support given to transfer up to 14 great spotted kiwi eggs from the Goulard Downs area of Kahurangi National Park over the next four years. Eggs will be lifted from the burrows and taken to Willowbank Wildlife Reserve in Christchurch for hatching. The chicks will be “crèched” until they reach the relatively safe weight of 1.2kg before being released into the RNRP.

Recently, a team took part in a five-yearly great spotted kiwi census based at Saxon Hut on the Heaphy Track in Kahurangi National Park. During the trip, eight kiwi at Goulard Downs were fitted with transmitters to monitor them through the breeding season.

The 2008/09 great spotted kiwi breeding season has come to an end here at Rotoiti with no new chicks found. The newest chick, Marama, has grown from 700g when found in June last year, at around four months old, to just over 1.5kg at around 10 months old. Marama was found in excellent condition, burrowing alone in the territory of its parents, Takaka and Onekaka. Fairly large insect remains were apparent in the burrow so Marama is obviously taking good care of him/herself.



RNRP ranger Sarah Forder, holding a great spotted kiwi at Goulard Downs, and Rogan Colbourne, of DOC's Kiwi Recovery Group, with his kiwi dog Jade. Photo: Sarah Aylott, Heaphy Hut Warden



Fen's training as a kiwi tracking dog is going well. He is now obeying all commands including heel (even with rabbits around) and is proving to be a lovely-natured young dog. He recently passed his interim assessment with high marks from DOC's national dog coordinator so is ready to start his tracking career, and not a moment too soon. We have had a total of nine transmitters dropped by our kiwi in the past six months, due largely to bands being caught on the tree-fall covering the ground following last winter's heavy snow.



What a difference six months makes! RNRP ranger Sarah Forder with Fen last year at eight weeks old (left) and now at eight months old (right). His current introductory training includes getting used to wearing a muzzle. Photo (left): Sally Leggett, DOC, (right) Max Fiebig, DOC volunteer



Department of Conservation
Te Papa Atawhai

RNRP: Strategic Plan 2008 – 2013

Rodent control and tracking

The Rotoiti Nature Recovery Project is one of DOC's six 'mainland island' ecological restoration projects where science research and learning is the main focus. The Rotoiti Nature Recovery Project covers 5000 hectares of honeydew beech forest on the shores of Lake Rotoiti in the Nelson Lakes National Park.

The project's goals are to:

- restore native biodiversity at Rotoiti.
- increase our knowledge of how to restore biodiversity nationally.
- increase public support for ecological restoration.

The project is assisted by Friends of Rotoiti volunteers who carry out pest control adjoining the project area.

Beech mast in the making?



Is that a landed UFO? No, just one of the 40 seed trays used to measure the amount of seed produced by the beech trees.

This plan sets out the focus and direction of the project for the next five years with an emphasis on science and learning. This strategy is available online in the publications section of our website - www.doc.govt.nz.



Rodent tracking tunnels were run in February within the original RNRP core site of 825 hectares and at the Rotoroa non-treatment site as part of the normal tracking tunnel cycle (run quarterly). Across the two sites, 340 tunnels were set out with a centrally-inked card and end-baited with peanut butter for the night. Tracking rates for rodents were consistently very low at all sites with the tracking rate in the RNRP core area at 2% for rats and for mice.

Considering there is no rat control currently within the RNRP core, this suggests there are times within the local forest cycle when rodent numbers are naturally very low. This may be due to a lack of beech seed food since 2006. The tracking rates are likely to dramatically increase with the predicted large beech mast between March and June 2009. RNRP staff have noticed an increase in smaller birds within the core area including tomtits, fantails, robins and riflemen which could indicate a reduction in competition pressure and predation pressure on these birds from rodents.

The rat toxin trial using "Ratabate" (active ingredient diphacinone) which was set to go in March has been postponed following February's low rat-tracking tunnel results. This is now scheduled to take place in spring to counter a predicted rodent boom (tracking higher than 15%). Meanwhile the RNRP staff, volunteers and trainee rangers have all been putting in time to clear the remaining wind and snow falls in preparation for the trial.

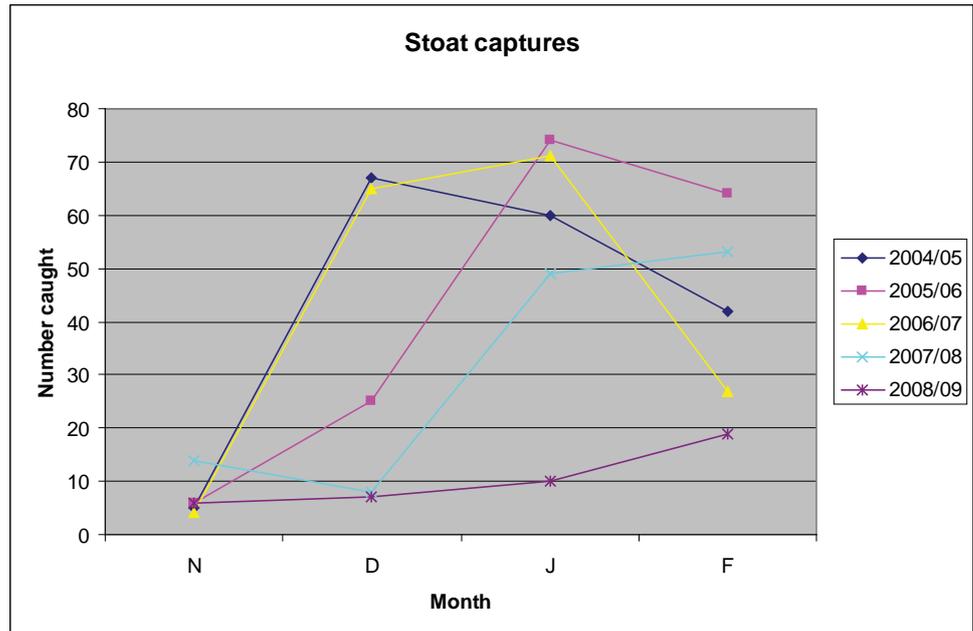
In October 2008 biodiversity rangers in the RNRP noted that the three beech species found in the project area were in heavy flower. Further observations in March suggest that we are looking at a heavy seeding (mast) year for all three species.

The seeding of red beech (*Nothofagus fusca*), silver beech (*Nothofagus menziesii*) and black/mountain beech (*Nothofagus solandrii*) are major drivers of the energy cycles and food webs of the native beech forest. Beech seeding can encourage the breeding of several of the parrot species (kaka and kakariki), but unfortunately can also support breeding of rodents to plague levels.

In early March, seed collection bags were put out on 20 seed trays within the RNRP and 20 seed trays at the Rotoroa non-treatment site. The bags will be in place until the end of June. The seed from these trays will be dried, sorted by species and tested for viability. This information will help us to predict the scale of the mast and the likely impact on native and pest species in the RNRP for 2009-2010. This information also feeds into national data sets to help researchers gain a better understanding of the ecology of beech forests. The last full mast was in 2000, with a partial mast in 2006 with red and silver beech seeding.

Stoat update

Stoat captures for the year to date have been extremely low with only 89 stoats caught since July last year. That's lower than the typical monthly totals for December and January in previous years.



While catching fewer stoats seems like a good thing, the RNRP have also recorded a higher than typical stoat tracking percentage rate of 8% in February along outer perimeter tracking lines (Big Bush). This could possibly highlight the need for a change of bait type, or it could possibly be due to the traps springing off before capturing the stoat causing stoats to become "trap shy". No tracks were recorded in the RNRP core area and by comparison, the Rotoroa non-treatment area was considerably higher at 34%.

Thanks for the helping hands

The RNRP DOC 200 traps roll out continues. In late March we had the help of 17 trainee rangers and managed to get the remaining St Arnaud range traps deployed (every second trap replaced with a DOC200).



RNRP ranger Anne Brow supervises trainee rangers James and Shannon along the top of the St Arnaud Range.
Photo: Anya (trainee ranger)

The trainees were flown to the top of the range to carry and deploy DOC traps and carry out the replaced trap - they did an awesome job. All seven groups then made their way to various campsites for the night to undertake a pilot "kiwi call" listening survey. Groups were stationed from the St Arnaud Range Track to Lakehead Hut (from just below the bush line to the lake edge). We were blessed with ideal call count weather i.e. no wind and no moon. All the groups sat out in their sleeping bags and listened to the night sounds from 8pm to midnight. About half of the groups heard at least one kiwi and with our relatively small population we were pleased with the results. These kiwi call counts are done every five years or so as a way of monitoring population change.

Trap type decisions

RNRP received funding earlier this year to buy the 450 DOC traps needed to replace the remaining Fenn trap network. We have made the decision to buy only DOC200 traps because of the very low ferret numbers recorded in the project area (zero in the past year). The 70 DOC250 traps deployed last year in "ferret terrain" (grass and farm lands) will be left at 200m spacing. The gaps will be filled with DOC200s which exclude ferrets and target stoats (the main mustelid predator). It is expected capture rates will increase as Fenn traps are replaced with DOC200s (see "Stoat update").

The other bonus is that we can modify the old Fenn trap boxes to fit DOC 200s - saving on costs and giving RNRP staff a great wet weather job to get on with. The Friends of Rotoiti have been busy over the past few months modifying their DOC250 boxes by attaching a new mesh front with a smaller entrance hole. This is to ensure that non-target species such as weka are excluded from these traps.

Friends of Rotoiti – wasp bait trial

In conjunction with Landcare Research, we have trialled different poisons for large scale wasp control at Lake Rotoiti over the last 10 years. This year, some Friends of Rotoiti members have been carrying out a trial as an extension to the wasp control research using bait stations on a transect line rather than a grid of stations covering a large area. The idea was to see how far out from the transect line the bait stations would be effective.

Fifteen bait stations were laid out every 25 m across the lower end at Duckpond Stream (Big Bush). Twenty-nine wasp nests were located up Duckpond Stream. These nests were marked and flight counts taken of wasps entering and leaving the nests over one minute.

Flight counts were recorded for six weeks after toxic Fipronil bait was put out. A noticeable drop off in flight counts was observed in wasp nests out to 400 m after three days of feeding. When the last check was done, 16 nests had a zero count and three were below 10. Nests between 400 m and 800 m showed no real change.

It would appear from the trial that parallel lines of bait stations approximately 400 m apart should be adequate for carrying out landscape wasp control to an acceptable level. We may look at continuing this trial next year if the toxin is still available.

The FOR members' time and effort on this has been much appreciated.



"All you can eat/carry"
Fipronil smorgasbord
provided for our unwanted
guests.

Photo: Bryce Buckland, FOR

New arrival

Our Community Relations Ranger Sally Leggett has her hands full with the arrival of son Finn. Congratulations to Sally and Scooter. Petr Carter will be filling Sally's shoes until November, working with the local community groups and schools and generally keeping everything on track.



Revive Rotoiti on-line

If you would like to receive future copies of Revive Rotoiti by email (saving the project printing and mailing costs), please contact Petr Carter by email at pccarter@doc.govt.nz