



Oho Mai Puketi

www.puketi.org.nz

Issue 26: July 2013

Newsletter of the Puketi Forest Trust

PO Box 257 Kaeo, Northland 0448

Ph 09 4050074

Patron: DAME KIRI TE KANAWA

Message from the Chairman, John Dawn

[Puketi Forest Trust
is on Facebook](#)



The trustees are working on the next 5-year strategic plan. This involves reviewing progress to date and considering what goals should be set for the longer term.

Monitoring indicates that we are achieving the pest control targets in the management area, and the forest vegetation and native wildlife are responding to reduced browsing, predation and competition, particularly in the core area which has continuous rat and possum control. It would be good to extend this protection beyond the present management area and eventually to the whole forest. This would be a challenge with present technologies and resources.

The operating costs of the trust's continuous trapping regime per hectare per year are about \$64 for rats, \$24 for possums and \$8 for mustelids and feral cats, not including a considerable amount of volunteer time. To provide this level and method of pest control over the whole forest would cost about \$3 million to set up and \$1.5 million per year to operate. Continuous control using ground based toxins would cost more.

Some forest protection projects use toxins seasonally to protect nesting birds. This can be effective in reducing nest predation, but continuous pest control is necessary to allow recovery of forest vegetation and invertebrates. A combination of wide area intermittent pest control and continuous control within one or more core areas might be a practical compromise. Intermittent pest control is more effective the larger the area treated (re-invasion is slower) and the higher the percentage removed (pest breeding recovery is slower).

The trustees are closely following the development of self re-setting traps. These have promise, but progress reports indicate they are not ready for widespread use yet, the main limitations being mechanical reliability and lack of an effective lure. Reliability is steadily improving through design modifications, but a highly attractive and long lasting lure is necessary to allow wider trap spacing and reduced checking frequency. Trap trials are continuing at several locations and the Department of Conservation has established a 'Future of Predator Control' programme for more research. New Zealand has a good record of innovation in pest control to protect native biodiversity, so improvements at some stage are hopefully anticipated.

Perhaps Sir Paul Callaghan's vision of a pest free New Zealand (no rats, possums or stoats) will be achieved one day, but in the meantime we must do our best with the knowledge and resources available. The trustees do not wish to commit to an expansion that cannot be sustained. Either a large increase in funding or an innovative approach to pest control will be required to allow a substantial expansion of the Puketi management area.

In This Issue:

Kokako Update...	2
Toutouwai...	2
2013 Robin Census...	3
Kiwi Monitoring...	3
Stoat Control...	4
Predator Control Results...	4
Peripatus...	4
Long Tailed Cuckoo...	5
ANZ Volunteers...	5
Report from DOC...	6
Working Bees...	6
Sponsorship Form...	7

The trustees gratefully acknowledge the following organisations which have made grants, significant donations or contributions in kind to the trust since the last newsletter:

ASB Community Trust

Kiwis for kiwi

Department of Conservation,

Pub Charity

Oxford Sports Trust Inc.

Bay of Islands Area Office.

Kokako Update

The 10 kokako from Mataraua are all still living on the plateau, within the core pest control area. The four pairs remain intact and appear to have settled into territories. This is fortunate, because the transmitter batteries are reaching the end of their lives and finding the kokako will be much more difficult from now on. At least we know where to start looking.

A catching team went again to Lady Alice Island in April and caught the younger of the two males last seen there. He was flown to Puketi on 11th April and released at the north end of the plateau where the two single females from Mataraua have been spending most of their time. He has been followed with the radio tracking gear and observed to fly around over quite a large area, as the Mataraua birds did when first released. On the last few occasions he has been observed back on the plateau, close to the two females. Hopefully he will pair with one of them.

The older male bird on Lady Alice Island could not be found on the last visit. Another trip to look for him will be made in the spring.

The pair of kokako in Hamilton Zoo were put into quarantine in March and subjected to a series of health checks, all of which they passed. Wiremu Williams (trustee) and Steve McManus (DOC) travelled to Hamilton and met Hamilton Zoo and Tainui representatives to receive the kokako on 11th May. Early next morning, Sunday 12th May, they caught the first flight back to Kerikeri, with the birds travelling free courtesy of Air New Zealand. The kokako were transferred by helicopter to Puketi and released at 10:30am, from near the hut at the same location as the Mataraua kokako last spring. Both kokako were alert and flew off in a healthy manner. Obviously they have been well looked after at the zoo, but we were a little nervous about their ability to survive in the wild with no previous experience. Radio tracking confirmed that they were moving around over the next few days, then no signals were picked up. This was not an immediate concern, because several of the Mataraua kokako have disappeared for two weeks or more and then been re-discovered back on the plateau. The radio tracking is strictly line of sight, so a bird in a gully or behind a hill can go undetected. Despite thorough searches on the ground, they were not found over the following month so a fixed wing plane with tracking aerials was used to search from the air. The female's signals were picked up from beside the Waipapa River, less than a kilometre from the north edge of the plateau, and a ground party confirmed she was alive and moving around two days later. Signals from the male were not picked up, but there is a good chance that he is not far away. This part of the forest is rugged, with steep narrow gullies that make radio tracking difficult. We will continue monitoring, and hope that both these kokako will be attracted back to the plateau by the Mataraua kokako that have already settled there.

Preparations have begun for the next stage, transfer of another 10 kokako from Mataraua in September – October this year. The Mataraua birds that have already chosen territories are also very likely to nest, so it will be a busy time for monitoring. If you would like to join the team of monitoring volunteers, please contact John Dawn, phone (09) 407 4790 or email info@puketi.org.nz.

Toutouwai in the Te Tawa 2009 - 2013

Thirty toutouwai (North Island robins) were released in the Te Tawa catchment in June 2009, including unfortunately only 8 females. In the Te Tawa catchment, which we have been able to monitor closely, ten males were observed defending territories in the 2009-2010 breeding season. Five of these attracted mates and four pairs were observed breeding successfully.

In the autumn of 2010 a further 30 robins were released in the same area – 15 of each sex. In the 2010-2011 breeding season, one, or possibly two pairs from this release settled in the Te Tawa catchment and the five bachelors from the first release also attracted mates: two chicks from the

previous breeding season, two females from the 2010 release and one unidentified female. Thus eleven pairs were observed in the Te Tawa catchment during the second breeding season, of which eight were close enough to be monitored regularly and were seen to breed successfully. Two of the 2010 release males and an unbanded "Puketi" male established territories in the Te Tawa catchment but were without mates.

In the 2011-2012 breeding season, the three bachelors just mentioned found mates. There was some wife swapping, and 13 pairs were observed in the Te Tawa catchment, all of which are believed to have bred successfully. There was less intensive

monitoring during the 2012-2013 season, but all except one of the previous year's pairs were observed again.

The toutouwai have bred successfully every season since release, but most of the young birds move out of the Te Tawa catchment and are being seen all over the forest. Those settling on the plateau have every chance of breeding success as they are still in the area receiving intensive predator control, but those that move further afield are less likely to rear

young successfully. At least four pairs have been observed resident on the plateau since 2011.

To date only one young Puketi bred male is known to have set up a territory in the Te Tawa catchment, but we are hoping more will stay and occupy areas that appear to be suitable robin habitat. Recently there have been numerous reports of robins in these areas and elsewhere in the forest. During the annual robin survey in July we hope to confirm these sightings, find additional robins, and monitor the survival of the original birds.

2013 Robin Census

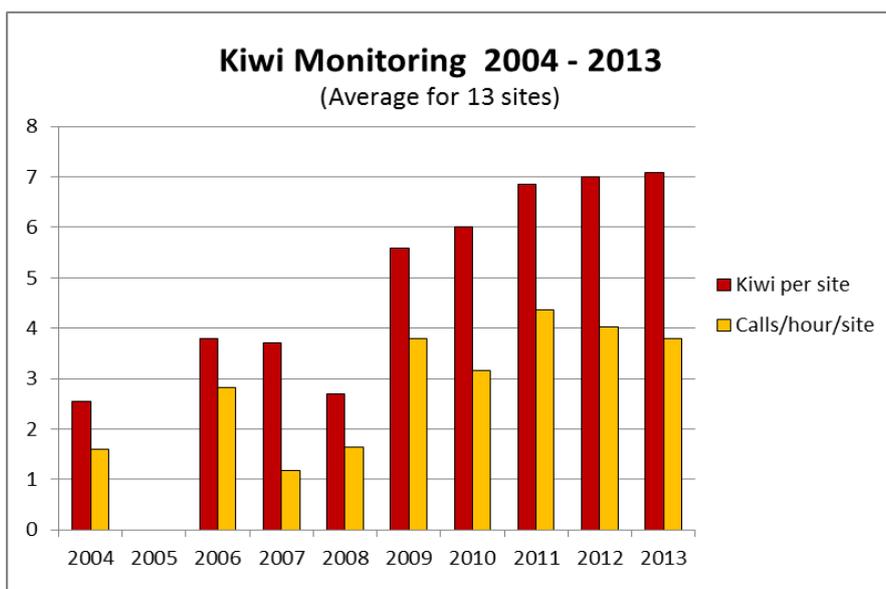
This year's survey will start on Saturday 20th July, weather permitting, and will continue as volunteers are available on subsequent fine weekend days until the whole Te Tawa area has been covered.

The survey will involve walking along trap lines with meal worms and an MP3 player, playing song and recording sightings. Experience is not necessary as people go out in pairs and only one needs previous experience. You will need suitable clothing and footwear, lunch & drink, binoculars and MP3 player if you have them. Recording sheets, maps and meal worms will be provided. There is a spare MP3 player.

Contact Tricia Hodgson (407 6239) or Ian Wilson (401 9056) for details of when and where to meet if you would like to take part.

Kiwi Monitoring

Twenty three people took part in this year's annual kiwi listening at the end of May and during June. With five of our long time monitors overseas, it was pleasing to have nine new monitors attend our two training nights. The average call count from the 13 regular listening sites of 3.80 calls per hour is slightly down on last year's 4.03 but it is estimated 92 individual kiwi were heard, which is one more than last year. The number of females heard increased from 31 to 34. This is pleasing as we have been even more conservative than last year when estimating the number of individual birds. In addition to the thirteen regular listening sites, three gullies on the southern side of the forest were checked for the first time and kiwi were heard in all of them.



An excerpt from rat/possum trapper Chris Blyth's latest trapping report: "I saw a kiwi at 11:07am at R2-356. I was sitting on the log there having a drink and it walked then ran across in front of me, maybe 8 metres away, pretty cool."

Stoat Control

Where stoats are not controlled, they kill 90% of kiwi chicks. As described in the last newsletter, we are reducing the distance between stoat traps on all our lines from the previous best practice 200 metres to 100 metres, to improve the effectiveness of stoat control. Lines 1, 2, 5, 9 and 10 have already been upgraded and ANZ volunteers recently installed a further 30 traps on Lines 6 and 7. We

have now received a grant from Pub Charity that will allow us to complete upgrading of these two lines and line 8. The traps have been ordered and the boxes are being made by volunteers at the Northland Regional Corrections Facility, Ngawha. We will be calling for volunteers to set out the traps in September. The remaining lines 3 and 4 will be upgraded in 2014 and 2015.

According to figures from Landcare Research, rats, stoats and possums accounted for some 26.5 million native bird deaths in New Zealand's forests during 2012.

Sustained Predator Control Producing Results

Continuous predator control as provided by the trust's trapping programme has special benefits over intermittent control during the bird nesting season only. Within the core area, palatable plants such as the northern rata, fuchsia, kohekohe, raukawa and colensoa are all recovering thanks to continuous possum control.

A couple of months ago Jurgen (Joe) Vorwerk, rat/possum trapper, found a forest gecko clinging to a possum in one of his traps. A month later, one of the ANZ volunteers disturbed a skink while clearing

a trap-line. It has been rare to find lizards in Puketi, but it is hoped these are the first of many sightings in the core area.

Trish, an enthusiastic Trust supporter, was excited to discover a peripatus when she visited the forest recently (See box below).

Last year three kaka spent the winter in the core area, presumably because of abundant food that had not been eaten by rats and possums. With an improving food supply, they might eventually take up residence.

Peripatus

"In the darkness, a stalker lurks. Millimetres away, a cockroach preens itself, unaware of the danger. The predator's antennae extend towards the insect, curling on contact. Sensory bristles brush the cockroach's body with feather-light touch. The antennae withdraw. Silently, the head rears up revealing a mouth with lobe-shaped lips and curved mandibles, flanked by a pair of tuberous nozzles. Suddenly, from each nozzle shoots a jet of translucent fluid that hits the unsuspecting cockroach like twin blasts from a glue gun. The insect's



struggles simply ensnare it more securely in the sticky threads. Soon, its attempts to extricate itself grow increasingly feeble, and it lies still, enmeshed." This is the start of an article by Mark Bathurst that appeared in number 46 of the New Zealand Geographic in April 2000. It describes a peripatus hunting.

Sometimes called velvet worms or walking worms, peripatus belong to an ancient order of invertebrates believed to be the missing link between worms (Annelida) and centipedes, insects, spiders and crustaceans (Arthropoda). Five species have been described in New Zealand but there are probably more like thirty. They are up to about 50mm long and vary in colour. The colour ranges from dark purple through to blue or brown and may have intricate patterns of stripes and diamonds that may be bright red, orange, yellow, green or blue. Some species lay eggs, others are live-bearers but all thrive only in moist conditions away from light. Peripatus are never abundant and struggle to survive the pressures stacked against them. In New Zealand, only one tiny population is protected, yet it could be argued that the walking worm should be regarded as a national treasure, not an overlooked curiosity. In the Trust's core area its future is now brighter.

Long Tailed Cuckoo



In March Dave Wilson, another trapper, was surprised by a large bird flying over his head and landing in a nearby tree. Having seen similar birds further south, he recognised it as a long-tailed cuckoo.

Although it is about 30% larger than a tui, the long-tailed cuckoo's habit of perching high in the canopy and its brown plumage with black bars and streaks make it very difficult to spot. Long-tailed cuckoos parasitise the nests of yellowheads and brown creepers in the South Island and whiteheads in the North Island. As whiteheads are not present in Puketi (yet), long-tailed cuckoos head further south to breed. From January to April they migrate north passing through Northland, the Kermadecs, and Lord Howe Island to winter on islands in the tropical Pacific. The bird Dave saw would have been stopping to feed on its way north. Long term plans include re-introduction of whiteheads to Puketi. Hopefully that will also encourage long tailed cuckoos to spend the summers here.

The ANZ Bank Staff Volunteer Day

Earlier this year, in conjunction with the ANZ Young Farmers Contest, the ANZ Bank asked its customers to recommend community projects that their staff could help with for a day. From the larger number of recommendations, the bank chose three projects in each of seven regions that they considered the most worthy of support and asked their customers to vote for their favourite. We were delighted that ANZ customers in the north voted the Puketi Forest Trust as their favourite Young Farmer Staff Volunteer community project.

On the 2nd and 23rd of May, staff volunteers arrived ready to work. And work they did! Some were loaded up with stoat traps to carry along lines 6 and 7. Others spent the day clearing trap lines that had become over grown making it slow going for the rat/possum contractors and robin monitors.

The bank staff appeared to be impressed with what the Trust is doing and what it has achieved, and Trust volunteers accompanying them were impressed with how hard they worked. Thirty stoat traps were put out and one and a half kilometres of



trap-line cleared to a very high standard.

Comments from the ANZ Bank volunteers:

I had a fabulous day! A day in the forest was more like therapy for the soul, and great exercise to boot! The forest was beautiful and tranquil & I quite forgot I had a pack on my back. I'll be back when the opportunity arises.

Penny Lincoln

I really enjoyed being part of the team that got to lay stoat traps. It was great to go into an area of bush that very few people, sadly, ever get to see. I feel genuinely humbled by the work you & your volunteers have done, what has been achieved and to have played a small part in helping preserve the New Zealand bird life for my children and all future generations to enjoy.

Thank you for letting us help in such a wonderful project and letting us do our part to awaken Puketi.

Oho Mai Puketi!

Dave Twaddle

Report from the Department of Conservation

Department staff in the Bay of Islands Area Office are now preparing for possum control in Puketi during the new financial year (from 1st July 2013). As part of the three year cycle of possum control in Puketi-Omahuta, the trust's 650 hectare core management area is due for treatment this year. To supplement the trust's trapping work within the core area, the Department is proposing a knockdown of possums in the surrounding 2,000 hectares of forest. This should buffer the core area from possum re-invasion. The 2,000 hectare area will be divided into four blocks for treatment under separate contracts. Contractors will be paid a base price for providing possum control over their blocks and a bonus if they meet a target wax tag bite mark index in post-contract monitoring. The contractors will also derive income from fur recovery.

Cyanide is usually the toxin of choice for these possum control contracts, and the Department maintains basic consents in place for cyanide use over the whole of Puketi-Omahuta, so that only a minimum of paperwork and notification is required for each contract.

Two levels of consent are required for toxin use on public conservation land; an assessment of environmental effects and internal consent within the Department (valid for up to 5 years), and a consent from the Medical Officer of Health (valid for 1 year). Current consents for cyanide expire in November 2013 and will be renewed for another 12 months.

Cyanide has some limitations, e.g. it is only effective on possums, and some possums become bait shy

and avoid cyanide. For these reasons the Department is seeking internal consent for a range of other ground based toxins, to be used on a case by case basis. These toxins are: Cholecalciferol (possums and rats), Pindone (rats), Sodium fluoroacetate (1080, possums, rats and stoats), Coumatetralyl (Racumin, possums and rats), ZP (zinc phosphide, possums) and PAPP (para-aminopropiophenone, stoats and feral cats). Public consultation on these toxins will begin soon. Once internal consents have been obtained, any use of these alternative toxins will involve further consultation with people directly affected.

The stoat trap line has been installed around the Mangahorehore-Onekura tracks and serviced twice. Another stoat trapline has also been installed around the Aratoro Conservation Area, southeast of Puketi. This line has already caught two stoats.

Volunteers have been signed up to service supplementary possum control trap lines around Manginangina and Forest Pools. There are still other lines suitable for volunteers if you are interested – contact Dan O'Halloran, 09 407 0300.

Puketi Weedbusters held planting days in June and July and will hold another on 6th August, to complete planting more than 1,000 native plants around the forest headquarters.

The public hut at Puketi forest headquarters is being well used, especially by scouts, guides, and marae school holiday programmes.

Volunteer Working Bees

Once the robin survey is complete, the trustees will organise a series of occasional volunteer working bees for various jobs in the forest, such as light track clearing, replacing traps, etc. As well as helping to keep the project going, volunteers will get a close look at what the trust is doing. These working bees will mostly be held during the weekend and will take half a day or a bit longer. The first will probably be during Conservation week, 8th to 15th September. An announcement will be sent by email to local members and placed in the Bay Chronicle and Northern News. If you are interested in contributing, please email info@puketi.org.nz.



PUKETI FOREST TRUST

Sponsorship Form

Thank you for your support of the Puketi Forest Trust. You may like to continue with the sponsorship of your hectare, make a donation for more traps or make a contribution to the trust's Capital Fund.

You can easily renew your contribution by one of the following methods:

1. **By Mail:** Complete this form and send with a cheque or credit card details to –
The Puketi Forest Trust, PO Box 257, Kaeo 0448, New Zealand.
2. **By Fax:** Complete this form with credit card details and fax to 09 407 4793.
3. **By Visa or MasterCard through the web site:** www.puketi.org.nz/sponsor.html
(payments are processed through Payment Express, a secure payment system).
4. **By Direct Credit:** Puketi Forest Trust Account No 03-0351-0165464-00 (Westpac, Kerikeri)
And Please! advise us the details of your payment by completing this form and either:
Post it to the above address *or* **Fax** to 09 407 4793 *or* **email** to info@puketi.org.nz.

Name

Address.....

.....

.....

Email: Phone:.....

I would prefer to receive newsletters by *email / post* (select one).

I wish to:	Sponsor	___ hectares for ___ years @ \$50 each	\$ _____
	Sponsor	___ kilometres of track @ \$1000 per km	\$ _____
	Sponsor	___ rat traps @ \$10 each	\$ _____
	Sponsor	___ stoat traps @ \$20 each	\$ _____
	Sponsor	___ feral cat traps @ \$25 each	\$ _____
	Contribute to Capital Fund (minimum of \$1000)		\$ _____
		Total	\$ _____

Payment method: **Cheque** (payable to Puketi Forest Trust) .

or: **Credit Card.** Details: VISA MASTERCARD (select one)

Credit card number: _____/_____/_____/_____ Expiry: ____/____

Name on card: _____ Signature: _____.

or: **Direct Credit** (payment date: _____, payer account name: _____).

Your donations and sponsorships are tax deductible.

Thank you for your continuing support