



Oho Mai Puketi

www.puketi.org.nz

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Newsletter of the Puketi Forest Trust
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Patron: DAME KIRI TE KANAWA

Message from the Chairman, John Dawn

Puketi Forest Trust
is on Facebook



The 2011/2012 annual report was presented to the Trust AGM on 24th November. Much of the detail has been included in this and previous newsletters, so the report is not repeated in full in this newsletter but it is available on the website at www.puketi.org.nz/annual_report/report2012.pdf.

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The Trust is on target to meet its goals and is in good financial health. Pig disturbance of rat traps has largely been overcome and pest control targets are being met. Toutouwai continue to thrive and breed in Puketi. The first ten kokako have been successfully transferred from Mataraua. Monitoring has indicated an increase in kiwi numbers for four years in a row. The trustees and volunteers are active and are doing a tremendous amount of work. The Trust has good relations with the Department of Conservation, which provides significant valuable support to the Trust.

The Trust has been well supported by donations and grants this year. Thank you all for your support. In addition to members' donations, grants have been received from the ASB Community Trust, Kiwis for kiwi, The Lion Foundation, Pub Charity, The Oxford Sports Trust Inc. and the Ron & Edna Greenwood Environmental Trust. The Trust is in a sound financial position, but the trustees remain aware that sustained funding of pest control is required to preserve the achievements to date. Although a large proportion of the trust's expenses are funded by grants, we are still very reliant on supporter's donations for the ongoing work in the forest. We would not receive grants from funding organisations without the community support demonstrated by individual donations.

The second five year plan of the Puketi Forest Trust expires in 2013. The trustees are developing a new plan for the next five years and welcome any suggestions from trust supporters regarding appropriate goals and strategies.

The Trust AGM on 24th November was well attended. The formal meeting was brief, then we enjoyed a walk to Te Tangi o te Tui, largest kauri in Puketi and fourth largest overall, where we ate lunch. The existing trustees were re-elected so the trust board remains the same, i.e. :

Chairman: John Dawn

Secretary: Cherry Beaver

Treasurer and Forest & Bird Far North Branch representative: Gary Bramley

Piki Te Aroha Marae representative: Wiremu Williams

Trustees: Di Maxwell, Gordon Salt and Ian Wilson.

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

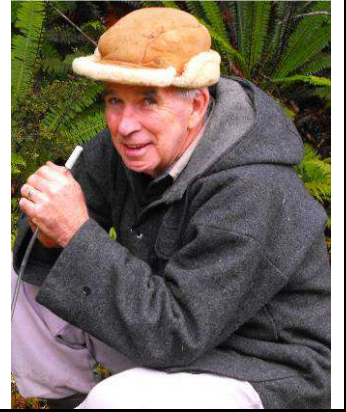
ASB Community Trust

Kiwis for kiwi

Department of Conservation,
Bay of Islands Area Office.

Jock Hodgson

Local Trust supporters are saddened by the recent death of Jock Hodgson, an energetic and enthusiastic supporter and volunteer in Puketi. Despite being busy people, Jock and his wife Tricia have been regular kiwi listeners for several years, and have cleared trap lines, set out and retrieved rat monitoring cards, monitored toutouwai and kokako, and twice travelled to Mangatutu to catch toutouwai for transfer to Puketi. Jock is missed not only for the work he did but also for his good humour and stories. Jock requested that instead of flowers, donations be made to Puketi Forest Trust. Those donations have been added to the Capital Fund so that they will continue to protect the forest in perpetuity.



Kokako Update

The 10 kokako from Mataraua appear to be doing well in Puketi. They have been monitored regularly by volunteers and DOC staff, who have confirmed their locations by radio tracking and observation. The four audio anchors attracted the interest of the kokako, which were often found close by in the early mornings when the recordings played. The anchors appear to have been successful in encouraging the kokako to settle in the core area. They were switched off on 2nd November, four weeks after release of the last pair.

The four pairs have remained together since release and the two single females have remained in the same area. All have moved around a lot, no doubt exploring their new home and getting to know food sources. During January and February, one pair spent four weeks in the headwaters of the Pukatea Stream, 4 km east of the plateau and outside the core pest control area. They had found a nice patch of forest and we thought they might settle down and require some extra pest control, but in mid-February they returned to the plateau and at last monitoring all kokako were on or near the plateau and within the core area. The other three pairs have moved around less in the last two months and have been heard calling in the early morning. They appear to be establishing territories.

No breeding has been observed yet. The kokako seem to have spent this season getting to know their new home. Hopefully they will all be ready in spring this year.

A team went to Lady Alice Island in November. They located the two kokako there and set up net sites. Unfortunately weather conditions didn't come right for catching and they had to leave it for another day. Since then, weather opportunities and availability of all team members at short notice have not coincided. Catching requires calm mornings and the island is exposed, so suitable conditions are rare. Another attempt is planned for April.

The pair in Hamilton Zoo nested twice over the summer. Two eggs in the first nest were incubated full term but turned out to be infertile. One egg was laid in the second nest and incubated for two weeks before being lost. The birds are now in quarantine and arrangements are being made to release them in Puketi in April.

Autumn is considered a good time for release because food is plentiful and the kokako will have some time to settle in before the breeding season later in the year.

Toutouwai (North Island Robins)

The July 2012 robin survey in the Te Tawa catchment found 14 of the 16 banded birds (released June 2009 and April 2010) that had been seen the previous year. This is a very good survival rate as robins have an average life expectancy of three years. When follow up searches also failed to find the two missing birds it was assumed they had both died. However in November 2012, one of these, female OM-RB was seen alive and well with a new mate on the plateau three kilometres away from her previous territory. Her new mate is a bird who took up residence on the plateau soon after release in 2009 and had been there without a mate ever since. When offered meal worms they took away beakfuls and came back for more – a sure sign they had chicks. This is the third female to take a new mate while her old mate is still alive - unusual as robins do not normally take a new partner unless their mate dies.

The robins have not been monitored as intensively this year but a number of chicks have been seen and ten of the twelve pairs monitored in the Te Tawa catchment have been recorded carrying meal worms away to nests. The young unbanded birds are also dispersing to other parts of Puketi. The most recent sighting outside the Te Tawa catchment was in the headwaters of Camp Creek, 6 km to the north.

Kiwi Listening

The official period for annual kiwi monitoring this year will be 28th May to 17th June, with a backup period from 26th June to 16th July. Trust volunteers and DOC staff return to regular listening points and record kiwi calls for the first two hours of darkness on four calm nights with no moon. The numbers of kiwi heard have increased each of the last four years and we hope this trend will continue. In comparison with other areas that have had predator control for longer, Puketi still has a relatively low kiwi population density. There are some extra points that would be good to monitor if we have a few more volunteers. If you would like to help with kiwi listening, call Ian Wilson (09 401 9056). Training will be provided if you haven't done it before.

Trapping Update

Rats. In October the number of rats caught passed 20,000. Pig-proof doors have been fitted to the rat trap boxes that were being disturbed in the lower part of the core area. A load of doors has been flown up to the plateau hut and they are now being fitted. Pigs leave the plateau during dry summer weather. They will return to find their favourite rat traps 'pig-proofed'. The doors are working well. Pigs don't bother to disturb rat traps that have new doors fitted.

Feral Cats. The time and effort put into shooting rabbits and mincing them for fresh cat bait is proving well worthwhile. Over the last two years nearly 40 feral cats have been caught each year - twice the number we were catching with salted possum.

Possums. The *Trapinator* kill traps in the core area are proving very successful. Possum numbers are being kept very low with 1,084 killed in the core area last year - the majority of these were caught near the perimeter.

Stoats. When the Trust began trapping stoats in 2004, best practice was Fenn traps set two to a tunnel at two hundred metre intervals baited with salted rabbit or salted possum. The Trust took over five lines that had been set up by the Department of Conservation several years before following this best practice. When the time came to expand from 2,000 hectares trapped to 5,500 hectares, the Trust was fortunate to receive good advice from DOC'S predator control expert, Darren Peters, who was very supportive right from the start. Darren is extremely knowledgeable and practical, and thinks outside the square. He suggested we try the newly developed DOC200 trap, reduce the spacing to 100 metres and consider using eggs for bait. He thought two single sets might be more effective than one double set. He donated the traps (and put them out on line 1 during his summer holidays with help from Phil Waddington and their partners), to run trials to compare DOC200s with Fenns. The following year he gave us more traps to run a bait trial comparing eggs with salted possum. He stressed that it was important not to jump to conclusions too soon, as numbers are important for meaningful results. The Trust has now caught 1,359 stoats. Enough to give information that has high reliability.

Fenns/DOC200 trial. When this trial began we caught 6 stoats in the first seven months – 5 in Fenns and 1 in a DOC200. By the end of the trial we had caught 53 – 16 in Fenns and 37 in DOC200s. A good illustration of the importance of adequate numbers.

100 metre spacing. The first two lines the Trust set up were with DOC200s 200 metres apart (due to limited finance). They have caught 1.5 stoats per kilometre per year. Three other lines with traps 100 metres apart are catching 2.65 stoats per kilometre per year. Three of the five lines with Fenns at 200 metres have been up graded to DOC200s at 100 metres. Here the catch rate has gone up from 1.2 stoats per kilometre to 2.43.

Eggs/salted possum. This trial has been reported in previous newsletters. The surprising result was almost all stoats were caught on salted possum during the summer and nearly all catches were with eggs during the rest of the year. The pattern was the same throughout the three years of the trial during which 120 stoats were caught. Needless to say we now use salted possum (or rabbit, see below) in summer and eggs the rest of the year.

Single sets/double sets. The original five lines had alternating single and double sets. During the first few years of trapping we sometimes caught a stoat in both traps of a double set, but this has not happened over the last four years. The main advantage of a double set is that if a rat is caught in one of the traps, not only is there still a trap available to catch a stoat but there is fresh bait as well. Double sets may have advantages in other areas, but in Puketi the difference between single and double sets is not great. Doubles caught 55% of the 340 stoats trapped. As Darren suspected, single sets at 100 metres catch more stoats than double sets at 200 metres.

Salted possum/salted rabbit. For the last 3 summers we have compared salted possum and rabbit meat as bait in alternating stoat traps on trap line 9. So far of 55 stoats, 64% have been caught on salted rabbit. The trial will continue on line 9, but on the basis of these preliminary results we intend to use salted rabbit in all the other stoat traps next summer.

Northern rata



People setting out on the Waihoanga Gorge Kauri Walk get a fantastic forest view as they walk across paddocks towards the forest. To the left of the bridge that marks the start of the track, and rising up from the Waihoanga Gorge, are two low ridges covered with kauri, their massive crowns towering above the canopy. These magnificent trees are only there because the deep gorge made it impossible for bullocks to haul them out of the forest when the more accessible trees were harvested many years ago. To the right of the bridge is about 80 hectares of mature forest which has few kauri but does have a large number of other emergent trees such as kahikatea, totara and rimu. From mid December to the end of January, visitors to this part of Puketi were in for a

treat as a succession of northern rata (*Metrosideros robusta*) flowered – a sight not seen since the arrival of possums over 30 years ago. Half of Puketi's northern rata were soon wiped out by the possums while the remainder have been browsed so severely they seldom flower.

The mature northern rata is a forest giant, soaring above the canopy and dominating the trees around it. It begins growing when a tiny thread-like seed is blown by the wind into the exposed crown of a tall mature forest tree such as a rimu, kahikatea, totara, miro, pukatea or puriri. If the seed lands in a fork of a tree where there is an accumulation of rotted debris, it germinates and grows into a small epiphyte. As the young rata gets bigger it sends a long thin root down the trunk of its host to the ground. Extra nutrients from the soil enable it to grow faster and bigger and the root enlarges. More roots are sent down to the ground and others grow out of the main roots at right angles and encircle the trunk of the host. In time the host's trunk is enclosed by the rata's roots and its crown shaded by the rata's crown which is often 30 metres above the ground. The host is often an old tree when the rata starts growing and its old age combined with competition for light and nutrients means that eventually it dies and rots away leaving the rata standing on its own with a hollow pseudo-trunk, which is in fact its fused roots.

The northern rata's spectacular red flowers produce an abundance of nectar which is sought by birds such as tui and silvereyes as well as a host of insects. It also makes particularly fine honey.



Eleven species of *Metrosideros* are found in New Zealand and all but one are endemic. The six species found in Puketi are all climbers except for the northern rata. Members of this genus have some of the showiest and most beautiful flowers in our bush. The somewhat rare and local *M. albiflora* is commonly encountered in Puketi and is covered with beautiful large white flowers during the spring. Also found during spring are the small pale pink flowers of *M. diffusa* and the crimson flowers of the uncommon *M. carminea*. In summer *M. perforata* produces masses of small white flowers while the showy orange-red flowers of *M. fulgens* brighten the forest canopy during autumn and winter.

Report from the Department of Conservation

Volunteers Wanted!

The department has obtained 43 DOC200 stoat traps to install on the Mangahorehore-Onekura tracks. These were recently lifted into the forest by helicopter. They will provide additional stoat control between the Trust's management area and pest control by the Native Forests Restoration Trust in Puketi Mokau Reserve to the north. There are already possum traps set out on these tracks. We are looking for volunteers to help set out the stoat traps and then service them. This loop track is a good walk through fine kauri stands and botanically interesting forest. Servicing will take a bit more than half a day and would suit a roster of teams of two.

There is more volunteer work available for people who are keen. Five other possum trap lines are set out around areas of special significance in Puketi and Omahuta. These vary in length. Servicing takes between 1 and 6 hours. It will be very valuable to have these traps regularly serviced.

The Puketi Weedbusters meet for about one morning each month (timing is flexible) to deal with weeds and native re-planting around the Puketi Headquarters. There will be a planting day in June.

If you would like to contribute some volunteer time to any of these worthwhile projects, please contact Dan O'Halloran in the Bay of Islands Area Office, phone 407 0300.

Possum control in Puketi continues on a three year cycle, targeting key areas. A number of contract arrangements have been tried in recent years. The most recent pays a base amount to the contractor for doing the work and then adds a bonus depending on the standard of control achieved. This seems to provide a fair balance of risk and reward satisfactory to both parties. Scott Candy has just completed a contract for 480 hectares of possum control west and north of the forest headquarters (including the Manginangina Reserve) and achieved a very good 6% wax tag bite mark index.

The annual goat control contract was carried out during December to February. Goats were not found in high numbers in any of the areas hunted. In 36 man days of hunting, 30 goats were killed.

Kiwi aversion training for dogs will be held again at Puketi Headquarters on 27th April. The training is free and is important for protection of kiwi. It is intended for working and hunting dogs that have reason to be in a kiwi area. Phone (09) 407 0300 to register. If you know anyone who is hunting without a permit or with dogs that have not been kiwi aversion trained, please ask them to contact us, or let us know so that we can talk to them. Hunting permits are also free.

Kauri Dieback

This disease of kauri is caused by infection of the roots with a species of phytophthora new to science (hence in the meantime called Phytophthora taxon *Agathis* – PTA). It is a matter of great concern because it is killing significant numbers of kauri in Waitakere Ranges Regional Park and has been found on Great Barrier Island and in several other Northland forests, including a small plantation of kauri in Omahuta Forest adjacent to Puketi. The pathogen is thought to have been accidentally introduced to New Zealand several decades ago, providing yet another example of the importance of bio-security. The disease is spread in soil on boots and equipment.

It has not yet been found in Puketi – let's keep it that way! Clean your boots and any equipment that might have soil on it before entering the forest. Keep to the track and avoid walking on kauri roots where possible. The Department of Conservation is installing cleaning stations at the main entrances to the forest with footbaths and spray bottles of disinfectant. As well, you should make a habit of scrubbing your boots after each walk in an area with kauri. For more information see the website: www.kauridieback.co.nz