MESSAGE FROM THE CHAIRMAN, DR GARY BRAMLEY

2015 marks the 12th year of operation for the Puketi Forest Trust, and I invite all of our supporters, and others interested, to attend the 13th Annual General Meeting to be held on Saturday, 7 November 2015 (see notice below for more details). If you would like to take part as a trustee, or would like to nominate someone else, please make contact with an existing trustee to find out the process. We are always welcoming of new ideas and energy and the demands are not particularly onerous.

Once again the trustees have put together an interesting mix of articles about our activities in the forest and I hope you will enjoy the newsletter. One of the articles that intrigued me concerns the kiwi heard during the day. Back in 2006 Carey and I left our children with their grandparents and travelled to Stewart Island, where kiwi are also diurnally active. Although I had seen kiwi in the wild before, this was the first time for Carey and something all New Zealanders should experience. I have also heard of kiwi being active during the day at Purerua (east of Kerikeri, where kiwi populations are unusually high) and elsewhere in Northland during the summer drought of 2013/14.

The question that arises is "why would a normally nocturnal species be out and about during the day?" The most obvious hypothesis is that the birds need to forage longer, using daylight as well as night, to meet their energetic demands. Three potential reasons for hungry kiwi spring to mind; firstly, it might be that there is a shortage of food for some reason (e.g. a severe drought or an increase in energetic demand brought on by breeding), secondly, it might be that there are now so many kiwi that there is not enough food for them all or, thirdly, the active birds might be young birds who have not yet established a territory and are forced to "float" around the territories of other birds. I'm not sure which might apply at Puketi but note that there is no evidence to suggest our population is particularly dense or that there is a shortage of food. We will probably never

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WWW.PUKETI.ORG.NZ

Email: info@puketi.org.nz

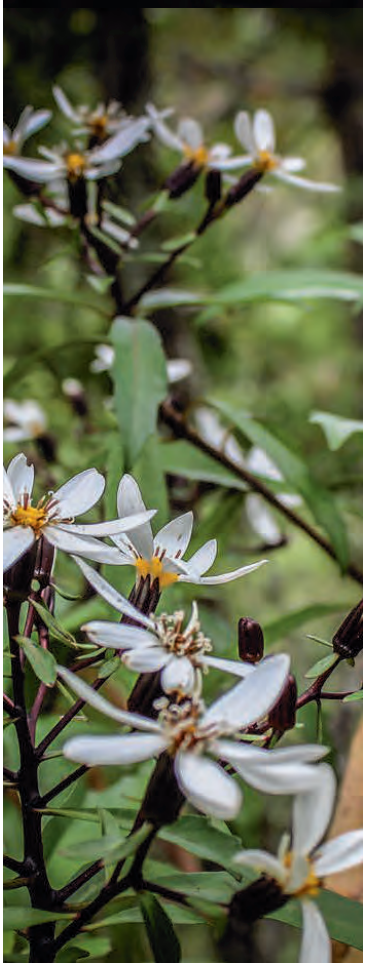
Phone: 09 405 0074

Post: PO Box 257 Kaeo Northland 0448

Find us on: facebook

SPECIAL THANKS to the following organisations who have made significant donations or contributions in kind since our last newsletter:

Community Conservation Partnerships Fund
Department of Conservation, Bay of Islands Office
Kerikeri Shadehouse
New World Kaikohe
Foundation North
Kiwis for kiwi
Tiny Mighty Power
Ken and Ray Proctor memorial



know, but how interesting it is to get these observations from people who spend so much time in the forest and are alert to what goes on around them.

This year also marks the 5th year since we last released robins or toutouwai in the Te Tawa catchment (the first release was in 2009). One of the measures we determined to assess whether the release was successful or not was a survival rate of 40% or more for the translocated birds, followed by successful breeding. Both of those benchmarks were met and as described here, toutouwai are now encountered more commonly throughout the forest. After an absence of perhaps 100 years those first birds captured southwest of Otorohanga did all that we expected of them and more. We can now regard robins as successfully re-established at Puketi. That is not to say the population will not need our ongoing support – the agents of decline that wiped out the robins and other birds here initially are still present, and it is only through managing the predators that we can ensure their persistence into the future. Nonetheless how satisfying it is that with the help of our sponsors and volunteers we have been able to bring them back.

Finally, I'd like to acknowledge all the other groups doing their bit for conservation in Northland – it seems everywhere you look now there is a landcare group or a catchment management group or some other volunteer group working to enhance biodiversity on their patch. I read recently of the regular sightings of bellbirds near Whangarei (bellbirds have been extinct in Northland for many years). How fantastic it would be if those bellbirds are able to move through the landscape of managed areas and find themselves again at Puketi and the eastern Bay of Islands. I also read that DNA profiling from saliva had been used to identify the dogs killing kiwi near the Kerikeri Inlet and the dogs responsible had been put down, with one of the owners fined. No one likes to think of animals being unnecessarily killed, and no one likes to be responsible for killing a kiwi, but this case alone is sure to have brought the behaviour of their dogs to the attention of many people who keep dogs in kiwi areas. Congratulations to the Department of Conservation and the Far North District Council for following up on this matter.

I look forward to seeing you at the AGM.

PUKETI FOREST TRUST AGM
7 NOVEMBER 2015

The 2015 AGM of the Puketi Forest Trust will be held at the Puketi Forest Headquarters (Puketi Recreation Area) on Waiare Road at 10 am on Saturday, 7 November 2015. The meeting will be followed by a walk to the Merumeru kauri, the 17th largest kauri in existence, which stands in an exceptional grove of large kauri. To get to the Merumeru kauri, we will drive along Pirau Road in 4WD vehicles then walk about 500 metres and eat lunch under the trees. If you are coming for the walk, bring lunch, drink and clean boots, and wear long pants and long sleeves. Attendance on the walk will be dependent on sufficient seats in members' 4WD vehicles, so if you can bring a 4WD that will be helpful. Estimated time of return to Forest Headquarters: 3 pm.

ROBIN MONITOR 2015

Between 25 July and 1 August 2015, 11 people took part in the annual robin monitor which covers part of the Te Tawa catchment where robins were initially released in 2009. Twelve kilometres of trap-line were surveyed and robins were recorded at 42 sites. Six banded birds were recorded, five from the 2009 release and one from the 2010 release. The five robins from the 2009 release are at least seven years old. This is very reassuring as robins in unmanaged forests are thought to have a mean life expectancy of three years. While one banded robin that was seen last year was not seen this year, two unbanded birds were recorded in its territory. It is pleasing that there are other birds around that reoccupy vacant territories.

As expected robins have dispersed far and wide from the Te Tawa and we have had reports from all over Puketi Forest as well as from Omahuta Forest. There are good numbers on the plateau which, like the Te Tawa, is in the core area receiving intensive rat and possum control as well as stoat and feral cat control.

GRANTS TO COVER RUNNING COSTS

It is the Puketi Forest Trust's aim to generate enough income from our supporters' sponsorship of hectares and donations and from the Capital Fund to cover our annual running costs. Until all the hectares are sponsored and the Capital Fund is large enough, there will be a shortfall. To date Foundation North (formerly ASB Community Trust) and The Kiwi Trust (Kiwis for kiwi) have covered the majority of the shortfall. We are very grateful for their ongoing support and for the generous grants they have awarded to the Trust.

The Kiwi Trust seeks advice from the Kiwi Recovery Group before allocating their funds. In the letter informing the Puketi Forest Trust that its 2015 bid for funding had been successful, Kiwis for kiwi executive director, Michelle Impey, commented that "the Recovery Group and the [Kiwi] Trust both recognise that yours is a very well-run organisation with strong community buy-in and a strong volunteer base. We applaud you for your seemingly tireless efforts to protect kiwi (and other species) in your project." It is motivating that the dedication and hard work of our many volunteers is being recognised and rewarded.

DIURNAL KIWI

Over the past year or two a number of the volunteers that service line T7 have reported hearing a male kiwi calling during the day – normally about 10am. In April Oliver Adams, one of the Trust's trapping contractors, reported hearing a kiwi calling only 20 metres away from the track. It was the second time he had heard a kiwi calling in the same area. In June Oliver's assistant, Shayden, was servicing the traps in the same area when he saw two kiwi 100 metres apart.

FOUNDATION NORTH
Te Kaitiaki Pūtea o Tāmaki o Tai Tokerau

KIWIS FOR KIWI

NORTHLAND RIVER KOROMIKO *- Ian Wilson*

The Waipapa River meanders some 20 kilometres along the northern and western sides of the Puketi Forest Trust's 5,500 hectare pest control area. It is one of the few major rivers in Northland to have its catchment within a forest and flows with crystal clear, pristine water. Unsurprisingly, Forest Pools (the point where the Waipapa leaves the Puketi) is a popular place with locals flocking there in summer to swim and enjoy the forest atmosphere.

The Waipapa River is known to botanists as the stronghold of Northland river koromiko, *Hebe acutiflora*. Its distribution on steep rock banks which are swept periodically by flood waters suggests flooding may be essential to its survival. Until recently the only other known location for this at risk, naturally uncommon, Northland endemic was the Kerikeri River where it is close to extinction (mainly due to the spread of aggressive weeds from nearby gardens). More recently, it has been found in the Puketotara and Waipoua Rivers.

H. acutiflora grows to about a metre in height and produces spikes of small flowers from January to June that range in colour from white to violet/purple. Volunteers installing trapinators along the Waipapa River track in late June spotted the late flowering *H. acutiflora* pictured here.

MIST FLOWER - THREAT AND BIOCONTROL

A major threat to native riverside plant species is the mist flower, *Ageratina riparia*, a garden escapee first recorded as naturalised in 1931 and a close relative to mexican devil weed (*A. adenophora*). With each plant producing up to 100,000 wind dispersed seeds, it spreads rapidly, forming large dense colonies which completely smother existing plant communities and prevent regeneration. Its preference for warm, wet conditions and its ability to colonise undisturbed forest habitat (especially well-lit areas such as forest margins and stream banks) has been of great concern. It was considered to be the most aggressive weed in Puketi Forest and was once abundant along parts of the Waipapa River, as well as several other rivers and old logging roads.

In 1998 and 2001 two biological control agents were released to attack mist flower: the mist flower fungus and the mist flower gall fly. Their activity is complementary, with the fungus killing lower leaves and the gall fly attacking terminal leaves. Both agents established well and their effect has been so successful that mist flower is now seldom seen and no longer a threat to native plant species. Concerns that one weed may be replaced by another have proved unfounded as evidence collected to date suggests biological control of mist flower is benefiting native species more than other weedy exotics.

Lesser short tailed bat *(Mystacina tuberculata)*

NATIVE BATS - *Gary Bramley*

New Zealand has only two species of land based mammal, and both of them are bats – the long tailed bat (*Chalinolobus tuberculatus*) and the lesser short tailed bat (*Mystacina tuberculata*). A third species, the greater short tailed bat, is now extinct. Bats are the only mammals capable of sustained flight and Australia has more than 90 species of bat, so it is perhaps surprising that we have so few. Indeed the long tailed bat is probably descended from an Australian colonist, but it has evolved in isolation in New Zealand for at least a million years.

The short tailed bat belongs to a southern hemisphere family of bats with fossil relatives in Australia, but the genus *Mystacina* is the only surviving genus in that family, and is endemic to New Zealand. The short tailed bat is the only surviving species in that family. This family of bats evolved in isolation for so long that it has features not found in bats anywhere else in the world. Both species are small and weigh around 10 g. Both species are associated with forest habitats, but within forests they use different types of habitat.

The northern short tailed bat subspecies is regarded as "nationally endangered" (the second highest threat category), whilst the North Island long tailed bat is regarded as "nationally vulnerable" (the third highest category). Northern short tailed bats are known to be present at Puketi – Omahuta at low to moderate densities and they have been occasionally recorded at Warawara and Waipoua. The nearest population is Little Barrier Island, which makes the short-tailed bats at Puketi particularly important for conservation reasons. Long tailed bats have also been recorded at Puketi in the past, as well as in several other locations in western Northland.

Short tailed bats are the only known native pollinator of the wood rose (*Dactylanthus taylorii*) which is itself a threatened plant which grows underground, parasitic on other tree roots and only the flowers emerge above the soil's surface. Puketi has the northernmost known population of *Dactylanthus*, which is another reason why maintaining a bat population is important – to protect the wood rose population.

Being nocturnal, bats are difficult to see with the naked eye, although you can sometimes see bats (particularly long tailed bats) fluttering about above the canopy at dusk. Bats also use trees as roosts, which sometimes build up a layer of guano and a distinctive smell which gives the presence of the bats away. In order to reliably survey and study bats, workers make use of the ultrasonic sounds that bats emit and use as part of their echo-location. Small portable bat detectors are set up at likely locations and record these ultrasonic emissions electronically. Each species of bat uses predominantly different frequencies in their navigation and the sounds recorded digitally can be analysed (either visually by looking at the sound wave patterns or acoustically by converting the frequencies to one we can hear). The typical measure is the number of passes made per hour.

We don't know very much about the bats at Puketi, but we expect they are still there and we would like to know more. The best time to survey for bats is during the summer and early autumn months whilst the evening temperatures are warm enough for the insects the bats eat to be active. Surveying involves putting out bat detector boxes and activating the box recorders, returning 2-3 weeks later to collect the boxes, and use of specialist software to analyse recorded sounds. Once some basic surveying has been undertaken we will be in a position to know more about what we can do to assist the bats at Puketi.

We are planning to work with DOC staff this summer to survey the bats in Puketi and Omahuta. If there are any trust members interested in participating in these surveys, please make contact with one of the trustees and we will be more than happy to get you involved.

THE KERIKERI SHADEHOUSE - *John Dawn*

The Kerikeri Shadehouse is a remarkably effective community volunteer project producing up to 25,000 native plants a year with a minimum of fuss, organisation and paperwork. It was started in 2000 by Rod Brown, who saw the opportunity to resurrect an old native nursery attached to the Kerikeri DOC depot. 240,000 plants have since been distributed to conservation projects throughout Northland.

The Shadehouse is run by a team of about a dozen regular volunteers, with no formal structure, constitution, committees or AGM. Theresa Vujcich manages plant propagation and Rod looks after logistics and liaison with recipient projects, but all volunteers have a say in running the Shadehouse. The project is entirely self-funding. Plants are sold at modest prices to cover operating expenses. Surplus income is used for nursery development and for each of the last eight years significant donations have been made to the Puketi Forest Trust capital fund. Banking, finances and other administration are handled by the Far North Branch of Forest & Bird.

About 20% of the plants raised in the Shadehouse are used for island restoration in the Bay of Islands. The remainder go to Landcare and other community conservation groups for forest, wetland and dune restoration, mostly on DOC or council reserves. Pohutukawa and tree rata seedlings are raised for Project Crimson. Trees from seed collected in Puketi have been used by the Puketi Weedbusters for restoration planting around the Puketi Recreation Area and at Forest Pools.

Volunteers meet every Thursday morning to work in the shade house. Most of these volunteers are also active in other conservation groups and several are regular kiwi listeners, robin monitors and trap checkers in Puketi. The Shadehouse is an important part of the network of volunteer conservation groups in Northland and a fine example of integrated community conservation work.

Theresa and Susanna tending next season's kowhai seedlings

TRAPPING UPDATE

Most of the 564 new Trapinator possum traps strengthened with plywood backing boards have now been installed by volunteers. They are working well, catching 325 possums after two checks. As soon as the farmland dries out along the forest edge we will be able to drive across the paddocks and install the last 24 traps on line 5.

The New Zealand Army carried out training exercises in Puketi/Omahuta in late July and early August. We are grateful to the troops for assisting the Trust in distributing 112 DOC 200 stoat traps along trap line S4. All of the Trust's 100 kilometres of stoat lines are now equipped with DOC 200s at 100 metre spacings, replacing the Mark IV Fenn traps that were there previously. There are a few additional traps on the rat and possum lines making a total of 1040 stoat traps being serviced 12 times a year.

GET INVOLVED - VOLUNTEER WITH THE TRUST - *Erica Whyte*

What does it mean to be a volunteer?

"A volunteer is someone who contributes time, effort and talent to meet a need or further a mission without going on the payroll."

" Volunteers do not necessarily have the time, they just have the heart"

Both definitions apply to the the many people we have helping restore Puketi Forest and these volunteers play an integral role in the work undertaken by the Trust. The continuing restoration of Puketi would not be progressing as well as it is without all the volunteer hours spent (5007 volunteer hours from August 2014 to July 2015) and the commitment is ongoing. If we relax for even a moment, we risk going backwards with our pest control efforts, and we always need more volunteers to keep up.

If you are keen to get involved, there are many ways you could actively contribute to the Trust's work, including:

- Signing up for annual bird surveys and kiwi listening.
- Adopting a trap line (there are options to suit different levels of fitness and capability).
- Helping us install or maintain our traps, including making up boxes to house the traps.
- Clearing and maintaining our ever expanding trap line network.
- Supporting our proposal to re-introduce native frogs, including helping us survey for suitable habitat.
- Participating in the upcoming bat survey (see above).
- Helping out with Trust events (e.g. the Waimate Show and the Kauri Challenge 2016 - see below).
- Contributing your stories, photos or ideas to our newsletter or Facebook page.
- Raising publicity for the Trust's work by writing articles for newspapers and magazines.
- Helping get kids involved (we currently have a proposed school project we need help with).
- Sharing our newsletter with friends and relatives who might like to contribute.
- Learning more about Puketi Forest and sharing your knowledge and enthusiasm with others.

We believe everyone has a talent and something valuable to offer and try to match people to activities that best suit their interest and capabilities. Volunteering with us is a great way to meet likeminded people and contribute to something really worthwhile.

We encourage you to make contact and let us know what interests you and how you would like to contribute.

WAIMATE SHOW - 14 NOVEMBER 2015

We are looking forward to being at the Waimate Show again this year. It is always a great opportunity for us to engage with our current supporters and to raise awareness of the work of the Trust and the significance of the Puketi Forest. This year, our stand will have several new features to enjoy, including a walk through forest grove, interactive displays for the kids and a kauri dieback wash station. Please come along and support us on the day. We look forward to seeing you there.

KAURI FOREST CHALLENGE 2016

Following last years resounding success, we are organising another Kauri Forest Challenge to be held on Saturday, 23 January 2016. The Challenge follows the same route as last year and comprises either a 12km or 21km tramp through a diverse range of forest types followed by a picnic reception at Forest Pools. As the name suggests, the tramp is intended to be a physical challenge and includes some steep terrain and walking through the shallows of the Pukatea Stream. Those not keen or confident tramping through rough terrain but still wanting to be part of the day are encouraged to bring friends and family and join us for the picnic at Forest Pools.

We will circulate further details closer to the time but please get in touch now if you would like to help organise the event or help out on the day.

REPORT FROM THE DEPARTMENT OF CONSERVATION

- The Te Araroa season has begun and a steady stream of walkers from all over the world are now passing through Puketi on their way south from Cape Reinga to Bluff. This walk is becoming more popular every year. Te Araroa walkers, tourists and locals are keeping the Puketi Recreation Area campground off Waiare Road (old forest headquarters) increasingly busy and almost continuously occupied. Cessation of camping at Forest Pools has probably also contributed to increased use of this camp ground.

- A new toilet block has been installed to support the re-designated picnic area at Forest Pools. Some landscaping work is now being carried out and the picnic area will be opened with a whanau day organised by Te Mauri o Waihou later this year.

- Of the three blocks of possum control carried out by contract in North Puketi this year, two have successfully met their targets and the third will receive follow up work in the autumn.

- A successful kiwi aversion training day for dogs was held at Puketi Headquarters on October the 10th. More than 50 dogs registered for training, mostly hunting and farm dogs. Priority in kiwi aversion training is given to hunting and working dogs that have a need to be in kiwi areas. Aversion training can be less effective for companion dogs. Kiwi aversion training does not make the dog 'kiwi proof', we all need to keep kiwi safe by keeping dogs contained at night and keeping them under control and in sight at other times.

- Following a nation-wide survey of public tracks through kauri forest conservation areas administered by the department, a programme of upgrading work to protect kauri against kauri dieback infection has been developed. Details of the proposals will be circulated when available.

- King fern (*Ptisana salicina*) in Puketi-Omahuta is currently limited to a small population in a single gully in Omahuta Forest. Young plantlets were recently rescued from unstable ground in this gully and will be grown on in the Kerikeri Shadehouse. When large enough, they will be returned to another nearby gully to hopefully establish a second population.

- Kauri snail predation will be monitored again in January with help from PFT volunteers. This involves walking along designated sections of track, collecting and counting all the shells found and identifying the type of predation (rat, possum, pig or bird). The shells are left in the forest unless there is difficulty identifying the predator.

- Department staff and Puketi Forest Trust volunteers will put out specialised bat recorders in Puketi and Omahuta during February and March to check the distribution of both long tailed and short tailed bats. The recorders will be left out over periods of one or two weeks and then analysed for the distinctive high frequency calls which indicate bat presence.

Puketi Forest Trust
Sponsorship Form

There are several ways you can donate to support the restoration of Puketi Forest.
Please choose the method most convenient for you.

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 Direct Credit**: Puketi Forest Trust, Account No 03-0351-0165464-00 (Westpac, Kerikeri)
   Donations by direct credit incur the smallest processing fees and result in lower charges to the Trust.
   Please identify your direct credit using your surname and initials and advise payment details by posting this form to the address above or email to info@puketi.org.nz.
3. **By credit card or PayPal account through the web site**: www.puketi.org.nz/donate.html
   (payments are processed through the secure PayPal system).

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	$_____
Donate	_____	rat traps @ $10 each	$_____
Donate	_____	stoat traps @ $20 each	$_____
Donate	_____	feral cat traps @ $25 each	$_____
Contribute to the Capital Fund (minimum of $1000)			$_____
		Total Donation	**$_____**

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

or: **Credit Card**. (*Visa, MasterCard, American Express or Discover*)

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

Name on card: _____ Card verification No (CSC): _____

or: **Direct Credit** payment date: _____ payer account name: _____

If this is a gift for a friend, please enter their details below. Your friend will receive a certificate and Puketi Forest Trust newsletters. (The receipt will be sent to you at the above address).

Name. .....

Address. .....

.....

Message to appear on their certificate: .....

.....

Puketi Forest Trust is a registered charity. Your donation will qualify for a tax credit.

Thank you for your support