

# HAUTURU

LITTLE BARRIER ISLAND SUPPORTERS TRUST

PATRON: DON BINNEY OBE  
PO BOX 48-232 BLOCKHOUSE BAY AUCKLAND 0644  
WWW.LITTLEBARRIERISLAND.ORG.NZ

NEWSLETTER  
ISSUE 22 NOVEMBER 2009

## FAREWELL TO STALWART FOUNDING TRUSTEES



To our regret, founding Trustees Nicki van der Meijden and Annie Whittle have stepped down after twelve years' active involvement in the Trust. They are both responding to new pressures on their time, energy and talents. Annie's work on stage and screen is in ever-increasing demand, so we must reluctantly cede to her wider audience. Nicki had retired from art and art history teaching not long before the Trust was formed; now the time is right for full retirement into private life.



We will miss Nicki and Annie enormously. From their specialist fields, they have brought different and enlightening perspectives to discussion and decision-making, as well as their warmth, good sense and good humour. Both have contributed immeasurably to the foundation and growth of the Trust.

Nicki was a driving force in our 'starter group', which in the 1990s set out to establish a Supporters' Trust for the island that had captivated us all from our first visits in 1986. Nicki became the Trust's first secretary and has been involved in a range of 'hands-on' activities. But she is best known for her photographs and the excellent drawings she has provided for *Hauturu* and for our brochures.

Annie answered with a resounding 'Yes!' when approached to become a trustee. She was already a committed conservationist and had admired *Hauturu* from afar. Her first visit in the mid-1990s exceeded expectations, despite a wet, hazardous scramble ashore on the West Landing. Examples of her active involvement include her leading role in establishing our 'Work and Walk' visits to the island, and her willing promotion of important Trust projects such as weed control and tuatara management.

To our delight, both Nicki and Annie wish to keep in close touch with the Trust. We are grateful that we will be able to turn to them for advice and consultation on matters of particular interest. Thank you, Nicki and Annie, we are indebted to you.

*Judy Hanbury, Trustee*

## FROM THE CHAIR

Since the June issue, attention has been applied to the continuing problem of weed control on *Hauturu*. There are serious threats to the island from climbing asparagus fern and pampas in particular. We have raised money to assist in the war against these weeds and I must sincerely thank the Lion Foundation for their generous grant of \$50,000 towards the cost of helicopter spraying of pampas. Better control of this invasive menace on the mainland by local authorities would greatly assist.

Eradicating climbing asparagus, also a bird-borne pest from the mainland, remains a major issue for the island (there is discussion of this in Shane McInnes' news overleaf). The Trust is committed to raising more funds for its eradication and has lodged an application for funds to this end. The Trust is grateful to all those supporters who have made donations expressly for the eradication of climbing asparagus in the magnificent Orau Gorge.

Applications for the translocation of the island's inhabitants continue, and the Trust is anxious to ensure that protection and preservation of the local population is the number one priority above all else.

Unfortunately three of our most valuable contributors, Trustees Annie Whittle and Nicki van der Meijden, and secretary Denise le Noel, have had to relinquish their positions. We are delighted that Annie is able to continue her involvement with the Trust as an Advisory Trustee. We thank them all for their sterling efforts over the past decade or more. We are actively seeking their replacements.

*John Hagen, Chairman*

## EXCITING SEABIRD NEWS

*In 2009 the Trust has again provided funds towards the research of Matt Rayner, NIWA scientist and University of Auckland School of Biological Sciences research associate, into the Cook's petrel. This is his report. The Trust is excited and delighted by his findings.*

By the way the Cook's petrel have been disturbing Shane and Liz's sleep at night, it seems this year stands to be another bumper breeding season on a rat-free *Hauturu*. It has also been a good year for the petrel researchers, as in February we finally retrieved

*Continues overleaf*



**Hooray! The first documented grey-faced petrel chick on Hauturu in over 40 years.**

15 geolocation devices that had been tracking the movements of Cook's petrel for over 400 days during 2007, 2008 and 2009. Attached to the legs of the birds, these little tracking devices provided twice-daily position fixes and gave us insight into the incredible feats of endurance and navigation that are routine for this little seabird.

In fact, though Cook's petrel are extremely common in the Hauraki Gulf during the summer breeding season, our tracking work has shown that these sheltered waters are the equivalent of an aquatic back-doorstep to this fast-flying species. Cook's petrel who breed on Hauturu spend most of the breeding season foraging in the deep oceanic waters of the Tasman Sea and up to several thousand kilometres east of the North Island. During Tasman Sea-foraging trips birds routinely cross over the North Island under cover of darkness, using a well-known flyover between Warkworth and the Kaipara Harbour.

Even more intriguing was the migration of our Hauturu residents. In early March tracked birds bid farewell to their well-fed chicks and headed east out into the vast Pacific. The chicks grow amazingly fast for another two to three weeks after mum and dad leave, losing weight daily as they grow their main flight feathers in preparation for fledging in late March.

Back to mum and dad... moving at times up to 1000 kilometres a day, the birds flew east and then north, crossing the equator and arriving in oceanic waters off Baja California and further north, around 35 to 40 degrees north of the equator. Travel times for this huge distance averaged around 25 days. Our tracked birds then spent the next three to four months soaking up the northern summer sun before moving west and then, in early September, returning southwards, taking approximately 20 days to make the return journey to New Zealand waters.

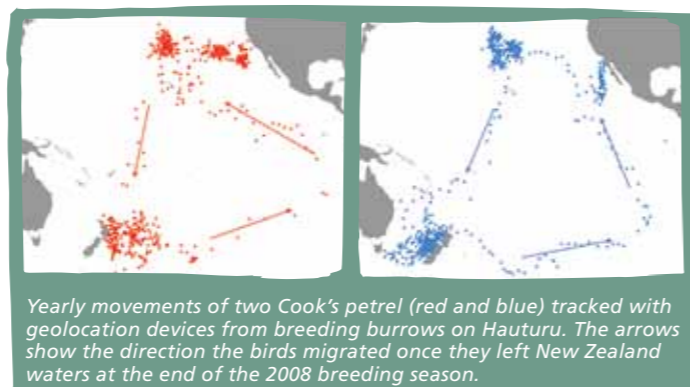
The resulting migration pathway of our tracked birds resembled a large circle (see images opposite), most likely relates to regional wind directions that aid flight efficiency and reduce migration costs. If our tracked birds did return tired they did not let it show. They were back hard at work feeding newly-hatched chicks when we removed the tracking devices from their legs in early 2009, most likely to their great relief. It has been extremely exciting to see this data come in and again thanks must go to

the Little Barrier (Hauturu) Supporters Trust, which helped with essential funding for this research, and to DoC staff, particularly Shane and Liz, who were a huge help and recovered several tracking devices from birds when I was not able to be on the island.

In other seabird news, the search for the New Zealand storm petrel has recently come to Little Barrier Island. This tiny seabird was thought to be extinct until, amazingly, it was sighted at sea in 2003. The breeding ground of the species is still unknown, but currently the search is focussed on the Mokohinau Islands and Hauturu. This season, along with at-sea catching attempts, Chris Gaskin of the NZ storm petrel team has been trying a new approach to finding where the birds are breeding: acoustic monitoring.

Essentially the technique involves finding people stupid enough to climb cliffs and bush-bash through rough terrain, putting in place recording devices that will hopefully record the calls of breeding New Zealand Storm petrels as they fly to and from their burrows at night.

Long story short: on the 23rd of October I found myself climbing a rope 40 metres above the Orau Gorge with a backpack of acoustic recording devices. Dr Brendon Dunphy (University of Auckland), who thought he was coming out to Hauturu for a pleasant weekend, was behind me grumbling something about a lack of university insurance for fatal falls. After a day's hard work, however, we had the devices in place near cliff tops in



*Yearly movements of two Cook's petrel (red and blue) tracked with geolocation devices from breeding burrows on Hauturu. The arrows show the direction the birds migrated once they left New Zealand waters at the end of the 2008 breeding season.*

the area above the Orau Gorge and Waimaomao Bay and hope to return to retrieve them within the next few weeks. It will be very interesting to see what seabird activity the recorders pick up, and particularly whether New Zealand storm petrel are in the neighbourhood.

Finally our trip to the Hauturu back country also turned up some more seabird good-news for Hauturu in the form of a small grey-faced petrel colony, where we found four chicks in burrows. Historically, grey-faced petrel were present on Hauturu but were likely exterminated by cats prior to the cat eradication in 1980 – cats wreak terrible havoc with seabirds such as grey-faced petrel that breed in winter, ie. when the moggies are really hungry. From consulting with a few older Hauturu experts such as Mike Imber, Dick Veitch, Terry Greene and Chris Smuts-Kennedy, it appears this is the first discovery of grey-faced petrels breeding on Hauturu in over 40 years. Good news indeed, and more evidence for the long-term benefits of pest eradication.

**Matt Rayner**

## NEWS FROM HAUTURU

### Kia ora everyone

Wow, another six months have passed since the last issue! We are now into November and it won't be long before the calorie-challenged guy in the funny red suit tries to fit in through the heat pump vent. I've probably said it before but this is the best time of year on the island. All the plants have decided to show off their colours and the birds are responding by turning up in great numbers to feast on all the pollen and nectar. All the tuis and bellbirds are flying around with their heads all dusted orange from the flax flowers, which are having a great season for flowering.

Having been on the island for over four years now, you start to notice things as they change. I'm sure some species on the island are still becoming more numerous after all their introduced predators were eradicated back in 2004. The kokako that come and spend all winter in the back garden here are still about! Usually they fly (sort of) back off up the hill when spring comes around but perhaps "up the hill" is full and they have to stay down here. We have been hearing loads of them over the last six months so maybe they have been one of the species that have benefited the most from the eradication.

Lots has been written and said in the media about the use of poisons for eradicating pests on conservation estate but whatever your views on the issue, the results out here have been amazing.

### SO WHAT'S BEEN HAPPENING?

#### Translocations Update

**Rifleman** The 31 Rifleman that were taken across the Gulf to Tiritiri Matangi appear to be doing very well and the Supporters of Tiritiri Matangi have said the first chicks were spotted from a natural nest at the beginning of November, which is great news.

**Kiwi** In April, 20 North Island Brown Kiwi left the island and were flown (yes, yes, flying kiwi!) to Wellington, where they have been living happily in the Rimutaka Forest Park. The people down there have informed us that of the nine males and 11 females translocated from LBI, only two of the males have yet to commence incubating, which is a great result. The first chick has hatched and has come out with white eyebrows! I'm sure it's something to do with the cold down that way and not just genetics!

#### Weed Programme

Tom, Mimouk, Mike and Andrew are in their last week of the asparagus programme being ably led by Liz. The weed continues to frustrate as it is turning up in other places on the island and our weed plots seem to be getting bigger not smaller. While there have been no studies done on it, we believe that birds are the main culprits and are bringing seed over from nearby Leigh, where the weed is rampant.

Of the existing plots, most showed a decrease in the number and size of weeds found, which is great news. The abseil team have also come and gone and spent a large amount of time in Orau Gorge where we found a new infestation of asparagus. They have identified lots of work for the coming years and it is right at the top of the "to do" list.

As for our pampas programme, I had a draft of this section all ready to go a couple of weeks ago and it started like this... "Due to lack of resources, the pampas programme has been scaled back this year..." But now, in the middle of November, I can start it! The Hauturu Supporters' Trust have done a magnificent job in securing \$50,000 to help fund pampas work on Little Barrier this summer. Liz and I were feeling a bit despondent about this programme until this news came through so, from staff on the island, a big thank you to all involved for gaining this sponsorship. The money will be spent on aerial control of pampas around the cliffs of the island where ground access would be impossible.

#### Tuatara

It's pretty slow going for this programme; however we should be starting to see some eggs show up soon as the females have started exploratory digging. All the animals are healthy and in good condition so hopefully it's a good "harvest".

#### Working Weekends

Both working weekends went ahead as planned this spring, with lots of work in the tuatarium and a beach clean-up getting done. The weather for the first group didn't really play the game and I'm sure people will still be telling stories about their graceful exit from the DOC boat to the *Norma Jean* for the trip home. The second group had near perfect weather and we even managed a BBQ. It's great to continually see new faces out here who are passionate about conservation, especially about Hauturu. If you haven't yet put your name down for a trip, get in touch with the right people (found at the end of this newsletter) and get on board. You won't regret it.

#### Coming Up

We don't have a terribly busy summer of translocations ahead of us but there are a few at different stages of permit application. I hope to bring you more about that in the next issue.

#### Hauturu Online

As well as the supporters' website [www.littlebarrierisland.org.nz](http://www.littlebarrierisland.org.nz) the island has gone online via a couple of other means. The first is an Island Diary written by the island rangers that is a bit more frequent than the Hauturu Supporters' newsletter. It has only just started and will contain heaps of information about what's happened, what's going to happen, who's doing it and why and, most of all, how all the flora and fauna are doing. You can ask questions or leave comments too! The diary can be found at <http://blog.doc.govt.nz/category/hauturulittle-barrier-island-diary/>

The other site for your Little Barrier fix is social networking site **Facebook**. We have set up a special page dedicated to Hauturu, where people can share stories, look at other people's photos or video, post questions or even start discussions. It has only just really started, so if you are a Facebook member, search for "Little Barrier Island" and it should lead you there.

That's about all from the island. It feels strange to say this in November, but everyone have a great summer, Merry Christmas and safe holidays.

Take care,  
**Shane McInnes and Liz Whitwell**  
Rangers, Hauturu Little Barrier Island

## RUUD'S RAVINGS NO 10 HONORARY MAMMALS

Islands are strange beasts. By nature, they tend to be isolated from nearby land masses and the greater the distance, the more this will be reflected in the differences in the composition of fauna and flora. Sometimes islands are so isolated that certain life forms, common in other parts of the world, are absent.

One of my favourite examples can be found (or rather not be found) in Hawaii. Preying mantids do not occur in that Pacific island group; they never evolved there (reminding ourselves that the island group is still young and still forming through volcanism) and they never made it, assisted or non-assisted, to Waikiki beach.

This means that the ecological niche of small "invertebrate predator" has been vacant all along. As you can expect with Mother Nature, that status quo usually doesn't last very long; somebody or some critter will step up to the plate to do that job.

And that's exactly what happened in Hawaii. But the incumbent's identity is rather surprising: a caterpillar! Not just one caterpillar species but half-a-dozen or so different types evolved as carnivorous ambush predators, just like the mantid.

Their modus operandi is quite remarkable: they sit still like little twigs (they are looper caterpillars that mimic twigs) and as soon as a suitable fly touches the caterpillar's legs, it bends over backwards – quick as a flash – grabs the fly and shoots back into the "twig position". We are talking perhaps a tenth of a second!

Of course, the prey is manipulated in the front legs of the caterpillar, so the mandibles have perfect access. The crazy thing is that here we have a caterpillar that has changed diet from plant materials (usually leaves and green stuff) to live invertebrate protein. And on top of that, it has worked out a way to catch a fast-moving fly via a lightning back-flip. This caterpillar is really an honorary mantis.

Another crazy discovery from Hawaii is a small case-moth caterpillar that specialises in chasing and catching small snails at night. Just imagine: little snails doing burn-outs on leaves, pursued by caterpillars in sleeping bags... well... you know...

There's also a twist in this story: as soon as a caterpillar has located a snail, it uses its silk to tie it onto the leaf, so it won't go anywhere in a hurry. Of course, the snail withdraws into its shell, thinking it's safe in there. However, the slender caterpillar gets out of its sleeping bag and enters the shell to drag the hapless escargot out of its home. Consumption is the next step. You could label this caterpillar an honorary mammal (namely: a Frenchman).

The reason I mention these examples from insular Hawaii is to draw a nice little parallel with our insular Hauturu, where some creatures also masquerade as something totally different, just like in Hawaii. Take the good old brown kiwi. This beast is classified as a bird, but when you take a closer look you'll find it is not a bird at all.

For starters, it has a mammalian body temperature of around 38° C. Birds are usually in the vicinity of 41° to 42° C. The kiwi feathers are really more like hair or fur. The feathers themselves are not very feather-like and have no "barbs" to keep them together. This fur, by the way, keeps them perfectly dry in wet weather.

Our kiwi tend to live in burrows; often these are underground and dug out or modified and adapted by the owner. Day-time shelter sites may not be elaborate structures, but breeding burrows are certainly "permanent" accommodation. Maybe a badger's den is a good comparison, here.

The kiwi's sense of smell is remarkable; in the class of birds olfactory prowess is not a great trait (apart from, perhaps, some sea birds such as the snowy petrel). Kiwi can smell food in soil strata and the positioning of their nostrils supports the importance of their sense of smell.

Their hearing is brilliant too; again, this is not very bird-like, but more in the realm of the alert mammal. I have evidence that kiwi can tell the difference between the engine noise of a Nissan and an Isuzu pick-up truck!

And then there are their bones (not hollow, but filled with marrow), poor eyesight (nocturnal adaptation may have something to do with that), incredibly sensitive tip of the bill for touching objects and beautiful tactile hairs at the base of the bill. Those hairs are used to "feel" their way around the undergrowth and can be compared to the facial hairs of felines.

So, kiwi can be regarded as honorary small mammals and their diet appears to confirm this too: there is a remarkable similarity between the invertebrate food consumed by kiwi and hedgehogs.

In a land that knew no terrestrial mammals (apart from a few bats) this bird carved out a nice little niche. But there were other members of the tangata fauna that decided to jump into a vacant slot: weta!

The members of this group of Orthoptera vary enormously, as we saw in the last issue of *Hauturu*, but if we just single out the tree weta and the giant boys and girls, you'll find that their ecological activities are reminiscent of mice and small rats. Tree weta live in holes and shelter sites, and the giants will do so too, given half a chance. The nocturnal behaviour is beautifully rodent-like, as is their ability to make sounds and hear those sounds with ear-like structures (on their front legs, remember?)

Just like mice, weta will consume seeds and fruits, as well as various green parts of plants and storage organs, such as stems and roots. To make the diet as varied and healthy as possible, they'll even clean up dead insects and other bits of animal protein. Oh yes – weta are often referred to as invertebrate mice... another honorary mammal!

That's a pity really, especially seeing we are all really happy to have eradicated the exotic rodent mammals from "our" island, a few years ago... Maybe it's time to look at this whole "honorary" issue differently; why not call these rodents "wannabe wetae"?

*Ruud Kleinpaste, Trustee*

## DATES FOR WORKING WEEKENDS 2010

There are two weekends planned for the summer of 2010. All participants need to be reasonably fit and agile and to be prepared to cope, if necessary, with a difficult wet landing over large slippery boulders, and with a variety of tasks. There will be time for walking, bird-watching and botanising.

Target dates (weather dependent)

**February 20-21 (Back-up 27-28)**

**March 13-14 (Back-up 20-21)**

For further details, and to register your interest in either of these weekends, please ring Judy Hanbury (09) 817 7604 or email her on [jhanbury@actrix.co.nz](mailto:jhanbury@actrix.co.nz), indicating your preferred dates and giving your full name, home address and phone numbers.

Closing date for enquiries: **January 16, 2010**