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Kereru observations

Thank you to all the people that sent in their observations of one of our favourite birds. Please keep sending in more observations – it would be great if this could be a regular feature ☺.

Northland

From Ngaire Tyson, Biodiversity Coordinator for the NZ Landcare Trust Northland.

In August 2011, the Mt Tiger Forest (just east of Whangarei town, on private land, across the road from the DOC Maungatika Scenic Reserve), in the Whareora Landcare project area, I saw 6 kukupa fly out of a grove of fruiting taraire as I walked through it to check traps. This is the largest flock I have ever seen in this area – not huge by others standards, but great for us!

Auckland

From Kate Loman-Smith, Auckland

Can't wait to see them in the Kowhai on the front lawn again this spring (photo from last year). About 6 weeks ago I was walking in Totara Park, Manurewa and saw 12 kereru fly into the top of a kahikatea tree and then depart again quite quickly. What a sight, very unusual for the midst of urban Manurewa.



Coromandel

From Jason Roxburgh, Department of Conservation

In late winter 2009 we saw 46 kereru feeding on newly sprouted kowhai leaves at Port Charles, northern Coromandel. This number of kereru is no longer unusual in this area due to a 20000+ ha predator control regime in place since 2001.

Bay of Plenty

From Jared Tomalin, Wellington Zoo

In late November 2010 I was at Tuai (which is below lake Waikarimoana) and saw a flock of around 30-40 Kereru take flight from a row of old pine trees. Was an amazing sight and something that I had not seen before. Also it was early in the morning, around 6:30am.

Wairarapa

From Narena Olliver, New Zealand birds, <http://nzbirds.com>.

The kereru in Greytown in the Wairarapa - I am seeing no more than 2 at a time, although a few weeks back there were perhaps 12 in a large holly tree feeding on the berries. They are now feeding primarily on the blossoms and or small berries of the plum trees and maybe tree lucerne. Greytown still has a good many large trees, which is why they are still here I would think. There is a resident falcon in Greytown which gives them and other birds a bit of a hurry up.

Wellington

From Astrid van Meeuwen-Dijkgraaf, Porirua

A pair of kereru and one other sitting in the still bare poplars about 100m from my office window (9 Sep). I've been seeing single kereru more frequently in the last month, but 3 is a triumph for here. Not as many as the 20 kereru I saw sitting in a big eucalyptus in the Porirua hospital ground last year, but not bad given the dearth of indigenous vegetation around my office.

Nelson

From Chris Dyson, Karamea

Wed 7 sep: 2 Kereru flying over road just south of Karamea

Thurs 8 sep: 2 Kereru flying over Postal river, upstream of swing bridge, Kahurangi

Fri 9 sep: 1 kereru in tree at DOC yard Karamea, 1 Kereru flying over road just north of Karamea.

Canterbury and central South Island

From Eric Spurr, Rangiora.

An observation not very exciting nationally but exciting for me. I saw a kereru in my garden in Rangiora on 26 August, eating the leaves of a large-leaved kowhai (not in flower). This is only the second time in 28 years that I've seen a kereru in my garden (or anywhere in Rangiora). The first time was about 20 years ago, when one was eating plums in a plum tree.

From Chippy Wood, Punakaiki

This is quite an old sighting, but it was about 16 years ago at Mt Cook village. A flock of 16 Kereru flying over Glencoe fan and feeding on the wild cherries growing there. I believe most of the Cherry trees have now been controlled.

From John McIlroy, Akaroa

Largest 'gathering' (rather than group) is 20 birds who have been feeding in a dense patch (50 x 30 m) of tree lucerne and other scattered trees nearby and/or perching in adjacent eucalypts and bare poplars during August/September. Top of Hempleman Drive, Akaroa, edge of urban area. Observed 18 flying 'around area

after harrier flew past. The birds have been spending most of their time feeding on the tagaste with a lot of jostling each other or perched, digesting the food.. The males have been displaying aerially for over 6 weeks now. This year they seem to display far more frequently and hassle each other while feeding in the tagaste. It almost appears to be a case of them establishing their feeding 'territories' and potential nesting sites and waiting for their female partners to arrive back (or maybe the females are part of the 20 feeding hard on the tagaste?). Can anyone advise over this. Do kereru establish feeding/nesting territories, do they mate for life, do males first establish territories and then wait for their female partners to return. I have tried to find some literature on all this but nothing much seems to have written/studied re their behaviour'

[Kereru do establish nesting territories based on key food species within that territory and will defend those key trees from all comers. The trees within the territory may fruit or produce preferred food sources at different times within the breeding season and thus the defence of trees moves within the territory too. It was thought that kereru mate for life but that has since been disproven. More like human beings they hang out with the same bird until somebody else takes their fancy. Females sit on the egg overnight and males during the day from about mid-morning. Only males make display dives within the breeding territory, during breeding season, probably to stimulate sexual receptiveness of his mate and unpaired males will continue to display during the breeding season. To my knowledge males and female birds hang out together although it is very difficult to sex them by size, the nesting behaviour (males on the nest during the day) can help with this.]

Dunedin

From Nik, Project Kereru, Dunedin

Largest flock (10 birds) spotted lately was at Taieri Mouth just south of Dunedin – they were decimating a tree lucerne!

Project Kereru has released 10 rehabilitated kereru in the past month, with two more likely to go within the next week.

News stories

Stoat finds on Kapiti Island a threat to kiwi

<http://www.stuff.co.nz/dominion-post/news/5515781/Stoat-finds-on-Kapiti-Island-a-threat-to-kiwi>

Last updated 05:00 27/08/2011 – not kereru specific – but a worry none-the-less

Three stoats found on Kapiti Island are a particular threat to endangered little spotted kiwi on the nature reserve.

There are only about 1500 little spotted kiwi remaining in the country and about 1200 live on Kapiti Island.

A stoat was spotted on the island in November 2010, prompting the setup of an intensive island-wide trapping system, which caught a male stoat in February.

A second stoat was caught last month – a pregnant female carrying four babies – and another stoat caught about a fortnight ago was confirmed this week to be a female carrying five babies.

It is not clear how the stoats arrived on the island but it is believed they could not have swum the 5km distance from the mainland.

A kakariki found near stoat droppings in December is the only animal so far identified to have been killed by a stoat.

Forest & Bird advocacy manager Kevin Hackwell said staff were very concerned about the threat to little spotted kiwi.

"The little spotted kiwi is so small, the adult bird is susceptible to being predated by stoats.

"So far we are not aware of any, but Kapiti Island is a big place," Mr Hackwell said.

As soon as the second and third stoats were found on the island, they knew there was a population rather than just a lone animal.

"Chances are the first one we saw is still alive," he said.

The Conservation Department had spent \$100,000 on a stoat eradication programme by June, and planned to spend another \$100,000 before the end of the year.

Stoats have never been seen on the pest-free island before.

Other endangered species were also at risk, he said.

"Saddlebacks, takahe, kokako, all sorts of wonderful endangered animals live on the island because it is pest free," Mr Hackwell said.

Rats were eradicated in 1996.

Department biodiversity threats manager Colin Giddy said little spotted kiwi males were especially small.

"That is a major concern."

Rare birds that were not "good fliers" – such as kereru – and not used to predators would be vulnerable, Mr Giddy said, as well as small creatures such as skinks.

Birds starting to nest next month would also be extremely vulnerable.

Another search dog is being sent to the island next month and a survey of little spotted kiwi will be carried out in January once nesting is completed.

DoC will continue to check 190 traps set with rabbit meat, and bedding material impregnated with female stoat odour will be placed in some traps.

Teeth from the captured female stoats are being sent to the United States for DNA testing.

Biodiversity - Kereru Discovery Project

<http://www.wellington.govt.nz/services/environment/biodiversity/kereru.html>



Produced as part of Branch Out newsletter - Spring 2011

In Wellington we get used to seeing kereru, New Zealand's native pigeon, in ones and twos. But they prefer to hang out in crowds.

A project to boost the numbers of kereru in Wellington - and help our native forest at the same time - has been given a hand up with a \$5,000 environmental grant from Wellington City Council.

The Kereru Discovery project is supported by the WWF-New Zealand. Project coordinator Monica Awasthy says the kereru is our only remaining native bird capable of swallowing the large fruit and berries of native trees and dispersing their seed. This is essential so that the region's native forest can regenerate.

Monica says kereru have large, almost 'rubbery' beaks that can swallow the fruit whole and, unlike other birds that grind up the fruit or seeds, the kereru pass them whole and undamaged.

Trees, such as miro, puriri, tawa and tairare, are reliant on kereru to naturally regenerate, but kereru numbers are falling because of the combined effects of loss of habitat and food, and predators, including possums, ferrets and stoats.

"If you go to Belmont Regional Park, you will see flocks of kereru," Monica says. But in Wellington "we usually just see them in ones and twos".

Monica says a new phase of the Kereru Discovery Project is about to be launched letting people know about the things they can do to help boost kereru numbers.

She says they are simple things that anyone can do, as individuals at home, or as community groups. "A big part of the project is giving Wellingtonians the support they need to do these things. Doing this is not just good for kereru, but good for us as well.

"We are challenging Wellingtonians to choose three things from the list to do this year," she says.

A new and improved Kereru Discovery website, to be launched at the end of September, will describe the ways people can help - by planting kereru-friendly native plants or getting involved in pest control.

There will be information about which species to plant, and people can be directed to organisations involved in controlling predators.

Read more about the Kereru Discovery Project and look for the revamped website at the end of September.

Wood pigeon euthanased after being shot

<http://www.stuff.co.nz/southland-times/news/5658555/Wood-pigeon-euthanased-after-being-shot>

An Invercargill vet euthanased a kereru, or native wood pigeon, this week after it was shot in Otatara. Bush Haven Native Bird Rehabilitation Trust members May and Russell Evans cared for it after it was found in Robert St.

Initially it was treated for shock and bruising but after a couple of weeks they noticed a thickening on the bird's shoulder, Mrs Evans said.

The couple took the bird to Vetco's Kennington clinic on Monday and an X-ray showed an air rifle pellet wedged in its wing, which had shattered the radius bone.

"We were horrified when we found the pellet and so was the vet," Mrs Evans said.

Not only was it illegal to shoot native birds, but other birds may have been affected as a result.

It was the breeding season so it was possible the bird may have had chicks on the nest. Wood pigeons could produce three or four chicks each season, she said.

Vetco veterinarian Dr Kristen Baxter removed the pellet, but the wing was too badly damaged. The bird would never fly again, so it was decided to put the bird down.

Dr Baxter said she had seen cases of cats being shot with pellets, but never a native bird.

"I was not particularly impressed. It's supposed to be a protected species."

Invercargill police are investigating in conjunction with the Department of Conservation.

Constable Quinn McLeod said there had been similar incidents in the past but they had not seen any for a long time.

The bird was shot two to three weeks ago and police suspected it was by a child with an air rifle.

"They [native birds] are protected for a reason," he said.

Department of Conservation principle compliance officer Alan Christie said the incident was of serious concern.

Kereru were considered an absolutely protected species under the Wildlife Act. The species was not only of cultural importance but it also played a vital role in "seed spreading" in the bush, he said.

The maximum penalty was six months imprisonment or \$100,000 fine for the death of one bird and \$5000 for each additional bird killed, Mr Christie said.

It would appear that the incident might have been the result of someone skylarking but they had to be aware of the serious consequences of their actions, Mr Christie said.

New virus detected in Australian hobby pigeon flocks

http://www.getfarming.com.au/pages/farming/news_view.php?nid=11090047

Virus detected in pigeon flocks in Victoria

The Avian Paramyxovirus has been detected in a number of pigeon flocks in Victoria. The virus is a type not previously found in Australia.

This incursion has resulted in the deaths of a number of hobby pigeon flocks in Victoria.

Australian Chief Veterinary Officer, Dr Mark Schipp, said the birds that have been affected have died suddenly in large numbers, have sometimes appeared tired or have shown neurological signs such as circling or head flicking before death.

"Anyone concerned about their pigeons or birds should contact an experienced poultry veterinarian, their local department of agriculture, or the Emergency Animal Disease Watch hotline," Dr Schipp said.

"Human infection with this virus is extremely rare and usually occurs only in people who have close direct contact with infected birds. The virus causes only mild, short-term conjunctivitis or influenza-like symptoms.

"State veterinary authorities have been asked to review the health of their pigeon and poultry flocks.

"At this stage, there are no reports of this virus causing disease in wild birds, but we have asked the Australian Wildlife Health Network to be alert to this possibility.

"The Victorian Chief Veterinary Officer is managing the incident with close cooperation from industry and other veterinary authorities. A national Consultative Committee on Emergency Animal Disease (CCEAD) has met twice on this issue."

The CCEAD has agreed to a series of measures involving priority investigation of pigeon and other bird holdings where disease is suspected and to quarantine affected properties.

Funny

Pigeon-guided missiles

http://www.nzherald.co.nz/science/news/article.cfm?c_id=82&objectid=10753112&ref=rss

[Editors note: Not strictly related to our New Zealand feathered friend – but it tickled my funny-bone]

In 1941, the American scientist B F Skinner believed pigeons were the answer to defeating Adolf Hitler. He showed that our feathered friends could steer a missile towards a model ship by pecking at a target on a screen which moved its rudders. His pigeons continued to peck accurately even in rapid descent and with explosions going on, often making more than 10,000 pecks in 45 minutes. He planned to load three inside missile cones, but mass production was cancelled in 1944 because officials didn't want to put weapons in the hands - or claws - of birds.

Research

These abstracts are from the recent Ecological Society Conference held in Rotorua from 28 August to 1 September 2011.

Is Maungatautari Ecological Island restoring pollination and dispersal services to native plants?

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Many restoration projects aim to restore populations of native fauna and flora, but benefits to the ecological interactions between species are unknown. The restoration of bird services to native plants was examined at Maungatautari Ecological Island, in the Waikato Region. At Maungatautari, a pest-proof fence encloses ~3300 ha of native forest, and mammalian pests have been eradicated from within. In December 2010, 140 five-minute bird counts at Maungatautari and a non-treatment site, Pirongia Forest Park, indicated that key pollinating and seed dispersing bird species: tui, bellbirds and kereru, were significantly more abundant at Maungatautari than Pirongia. To determine whether greater bird numbers at Maungatautari translate into enhanced bird services, the pollination and seed dispersal service to tree fuchsia (*Fuchsia excorticata*) and the seed dispersal service to tawa (*Beilschmiedia tawa*) were examined. Pollination and dispersal service to tree fuchsia was greater at Maungatautari, indicated by higher pollen loads on the stigmas of both female and hermaphrodite flowers and faster rates of fuchsia fruit removal at Maungatautari than Pirongia. Observations of bird visitors to fuchsia flowers and fruit support these findings. There was no significant site effect on tawa dispersal service (percent of fruit consumed by birds), but there was a significant site effect on the total fruit crop per m² with more fruit at Maungatautari than Pirongia. This study indicates that mammalian pest eradication at Maungatautari benefits both bird numbers, and bird services provided to native flora.

Using spatially-explicit individual-based models to reconstruct seed dispersal by kereru in northern New Zealand forests

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A suite of New Zealand's large-fruited tree species rely on birds for long-distance seed dispersal. Although not their sole disperser, kererū (*Hemiphaga novaeseelandiae*) are believed to be a keystone agent of dispersal for these species. Because kererū have declined in abundance, there is concern over the flow-on implications for seed dispersal. Measuring long-distance dispersal is notoriously difficult, and so it is often inferred via genetically and non-genetically based inverse modelling. Increasingly, however, spatially-explicit

individual-based models (SEIBM) are being used to couple disperser movement and seed dispersal to explore the long-distance component of seed dispersal kernels. Here we present a SEIBM of kererū movement and seed dispersal. We use the model to explore how the nature of the seed dispersal kernel may respond to changes in: (i) disperser population density and (ii) the spatial pattern of fruiting trees – as may occur if the dispersal kernel shifts due to dispersal failure. Changes in disperser density affect the amount of seed dispersed but only subtly alter the *shape* of the dispersal kernel. On the other hand, changes in the spatial pattern of fruiting trees have dramatic effects on the shape of the dispersal kernel. While, at this stage, our model only considers a single season in the future there is the potential to couple it to demographic models and hence explore the implications of disperser decline on the long-term population dynamics of the tree species of interest.

Satellite tracking reveals kereru occupy large home ranges at landscape scale

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Kereru (New Zealand pigeon, *Hemiphaga novaeseelandiae*) are major dispersers of fleshy-fruited plants in New Zealand. However, there are few reliable measurements of kereru home ranges. Using satellite transmitters, we recorded the locations of four kereru (one male and three females) in Invercargill, Southland, during 2005–06 for between 42–305 days. Fifty-four percent of locations recorded were accurate to within 1 km, and these locations (603 in total) were used to determine the birds' movements and home ranges. Three kereru crossed Foveaux Strait (a minimum distance of 33 km) to Stewart Island during December to March, coinciding with the breeding season. The fourth kereru remained around Invercargill. One individual flew more than 480 km during a 100-day period, crossing Foveaux Strait at least four times. The maximum distance between successive locations and between locations overall ranged from 8.6–98.6 km and 11.4–101.9 km, respectively. Kereru home ranges, as determined by cluster analysis, ranged from 619 ha to 31,732 ha, 100–1000 times greater than estimated in previous studies. Such large home ranges may be due partly to the fragmented nature of Southland forests and lower density of fleshy-fruited plants compared to northern regions. Given the long-distance movements kereru make, often to locations far from roads and tracks, satellite telemetry is probably the most reliable and cost-effective method of determining their locations. As long-distance seed dispersers, kereru may play a critical role in maintaining the diversity of fleshy-fruited species in fragmented forests.

Differential roles of fleshy-fruited trees as attractors and/or sources of bird-mediated seed dispersal in lowland-temperate mixed forests of New Zealand

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New Zealand podocarp-broadleaf forests have a large proportion of fleshy fruited plants dispersed by birds. Birds have the potential to modify the seed dispersal pattern expected from seed fall from trees. Bird foraging across the forest canopy is nonrandom. This generates functional differences between tree species, given by the process of seed transfer among heterospecific canopies. Tree species may function as “attractors” (i.e. concentrating many seeds of many species under their canopies) and as “sources” (i.e. transferring many seeds to heterospecific canopies) in the forest landscape. We evaluated the functional roles of different tree species in two lowland temperate mixed forests of the South Island. We compared tree canopy composition to bird generated seed rain captured in seed traps. We identified attractors and sources by, first, estimating an index of seed-transfer for each of the canopy species, based on the proportion of seed crop received from heterospecific canopies. Second, we compared the interaction network describing the frequency of species-species matches in the canopy with that describing the arrival of seeds to the different canopies. Seed rain of *Dacrydium cupressinum* was more frequently associated to heterospecific canopies, and few heterospecific seeds were collected under its canopy. This suggests that *D. cupressinum* functions as a source in the

forest. In contrast, a large proportion of *Beilschmiedia tawa* seeds was found under heterospecific canopies, and large proportions of other species seeds were found below its canopy. Thus, *B. tawa* would act simultaneously as an attractor and a source. Inequalities in seed transfer between species may ultimately drive community composition within the forest.

Experimental sowing of large-seeded, fleshy-fruited native tree species for urban forest restoration in Hamilton City, New Zealand

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Restoration of native urban forest patches often occurs in isolation from tracts of intact mature forest. This may limit occupancy, use and recolonisation by native forest flora and fauna. We investigated direct seed-sowing as a method for introducing large-seeded, fleshy-fruited native tree species into early successional forest restoration plantings in Hamilton City to address the limited local abundance of these species and their avian seed dispersers. Results are presented from experimental trials in urban and rural lowland forests using three seed treatments, on three tree species, to assess germination rates and seedling survival: 1) caged vs. uncaged seeds to exclude mammalian seed predators; 2) fruit flesh removal to simulate scarification and deinhibition effects of bird gut passage; and 3) placing seeds in nutritionally enriched clay balls both to simulate fertilisation effects of bird deposition and possibly also to protect seeds from detection by predators. Results for *Beilschmiedia tawa* show that introduced mammalian seed predators caused a significant reduction in germination rates and seedling survival. Removal of fruit flesh significantly increased germination rates of *B. tawa*. The clay ball treatment had no significant effect on *B. tawa* germination rates; however, seedling survival at one year was significantly increased. Seeds of *Elaeocarpus dentatus* and *Litsea calicaris* also had predation losses and very low germination rates. Seed-sowing was found to be a viable method for restoration enrichment with large-seeded tree species and the use of additional seed treatments significantly increased germination and seedling survival. Without concurrent control of introduced mammalian seed predators however seedling establishment will be limited.

Connecting fragmented forest ecosystems at the landscape scale in the Wellington Region

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Regional councils are responsible for the maintenance of biodiversity within their regions. This is reinforced by the recently proposed NPS on Biodiversity. Regulatory tools can provide baseline protection for habitat loss, but these alone will not achieve biodiversity maintenance. Active protection and intervention by managing threats is essential. The key threats are proven to be invasive pests, stock grazing, contaminants, harvest, and loss of native species from ecosystems. A case study is presented from the Wellington Region examining lowland terrestrial habitat fragments, minimum habitat area for species and connections between habitat areas that are essential for biodiversity maintenance. At a landscape scale, pest animal management has been shown to increase bird numbers, but how this can be coupled with biodiversity restoration throughout our varied landscapes is not clearly understood or applied. Healthy populations of avian pollinators and seed dispersers are essential to enable functional ecosystem processes to operate in heavily reduced and fragmented lowland ecosystems. Modelling how the habitats of pollinators and dispersers are spatially aggregated and connected across the landscape is now possible using new research on habitat preferences of key pollinators and seed dispersers. We can spatially represent how the forests in our landscape are connected by interrogating existing land cover data and applying new research on native bird use of native forest to model habitat requirements. This information can then be used to prioritise pest management which can restore functional natural processes to our diverse landscapes.

Do small-seeded species disperse further than large-seeded species?

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It is often assumed that there is a trade-off between maternal provisioning and dispersal capacity, leading small-seeded species to disperse further than largeseeded species. However, this relationship has only been quantified for species from particular sites, or with particular dispersal syndromes. We present the first global quantification of the cross-species relationships between dispersal distance and two important plant traits; seed mass and maximum plant height. We found that seed mass was positively related to mean dispersal distance, with a 100-fold increase in seed mass being associated with a 4.5-fold increase in mean dispersal distance across 210 plant species. Interestingly, we found that plant height had substantially stronger explanatory power than seed mass, and that a 5-fold increase in height was associated with a 4.6-fold increase in mean dispersal distance (across 211 species). Once plant height was accounted for, we found small-seeded species dispersed further than did large-seeded species, although seed mass accounted for only a small amount of the variation in the final model. Within dispersal syndromes, tall species dispersed further than did short species, while seed mass had little influence on dispersal distance. Our results show the key role plant height can play on the mean and maximum distances that plant species disperse.

Flowers, fruits and frugivores: How do they inter-relate?

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The New Zealand flora is characterized by a high percentage of bird dispersed trees (72%) with 33% of them dispersed through ingestion by vertebrates, mainly birds and reptiles. New Zealand's birds are largely non-migratory, which is unusual for temperate latitudes. Instead of migrating, many New Zealand birds switch among different types of food, most notably nectar (August-January) and fruit (February-July). Phenological and physiological adaptations such as alterations in gut length and changes in digestive enzymes have been shown for some bird species in other parts of the world. However, questions remain regarding the temporal pattern involved with these adaptations. My study aims to research if physiological changes are induced by a change in food availability or do changes in physiology determine food preferences in birds? Are these changes genetically defined or environmentally induced? This study takes place within the Wellington region, where research on temporal adaptations in bird digestion is facilitated by distinctive seasonal fruiting and flowering patterns. To answer the research questions, I will be working closely with the Karori Sanctuary and we are anticipating direct conservation recommendations from our research outcomes such as choice of plants to support endemic bird species of conservation concern as well as enhancement of scientific knowledge on the mutualistic relationship of bird-dispersed plants and their respective frugivores.

Websites

[Editor's note: I thought it might be a useful resource to list websites with a focus on kereru- kukupa-kukuparea. Let me know if you agree and if you know of other websites.]

Project Kereru

<http://www.projectkereru.org.nz/>

Dedicated to the Rehabilitation and Release of the New Zealand Native Pigeon"

Kereru Discovery

<http://www.kererudiscovery.org.nz/>

In these pages you'll find ways you can help the kererū, New Zealand's native pigeon, right in your own backyard. A revamped website is due at the end of September 2011.

Editors Note: Download and get any kids you know to play the Urban Jungle Game – it is awesome.

The Kereru Awhina Project

<http://www.kereru.org.nz/>

In late 2003 an Auckland based, not-for-profit group Kaipatiki Project formerly called Kaipatiki Ecological Restoration Project (KERP) recognised the plight of local Kereru (New Zealand's native wood pigeon) on Auckland's North Shore.

The small community group were determined to reverse this plight and developed The Kereru Awhina (Care) Project hoping to enrich the pigeon's food supply and habitat by encouraging the planting of fruiting native trees such as puriri, nikau, pigeonwood and kowhai. In addition to this they also began developing education programmes on Kereru for local schools and community groups.

Banks Peninsula, Kaupapa Kereru

<http://www.ngaitahu.iwi.nz/Ngai-Tahu-Whanui/Natural-Environment/Environmental-Research/>

Kaupapa Kereru is an iwi-lead, community based, multi-agency project that was set up in 2000 to increase the numbers and range of kereru on Te Pataka o Rakaihautu/Banks Peninsula, Canterbury. Kereru have been an important food resource for Ngai Tahu on Banks Peninsula.

Eastern Otago, Project Kereru

<http://www.facebook.com/pages/Project-Kereru/127259537311782>

Is a voluntary community based Conservation Project that is changing the fate of sick and injured native pigeons in Otago and surrounding areas.

Awesome photo by Jeffrey Schofield

<http://natgeotv.com.au/natgeosnap/8181-kereru-chase.aspx>

