CHIRPINGS

The e-magazine of the Wellington Branch of Forest & Bird

Forest & Bird
TE REO O TE TAIAO | Giving Nature a Voice

Edition 10: May 2019

By Mike Britton, Chair, Wellington Branch

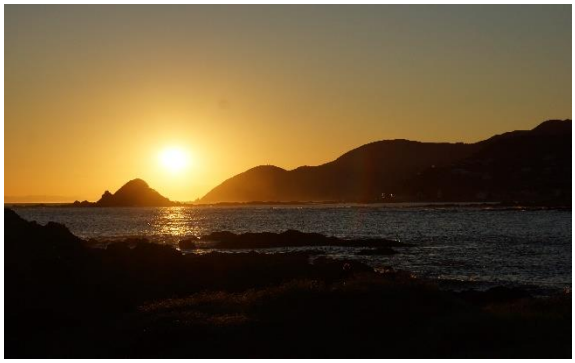
I work as a fundraiser, and one of the truisms of that profession, and there are many, is that people will only give when they feel they can make a difference. So, while they won't necessarily donate to help 200 million starving children, they will give to help one little girl with an empty plate.

For those of you who have been attending the fantastic 'Wild Wednesday' talks (see 'Events' later in this issue) it really does seem like we face the same catastrophes as millions of starving children, but in environmental terms it is plastics destroying the ocean, polluted waterways at home and now a million species on their way to extinction. There is a strong temptation to curl up in the foetal position and let it all wash over! It is too big a problem for me!

But every individual can make a difference. If we focus on some key things that everyone can do.

Treat each piece of plastic as toxic. Reduce our carbon emissions, particularly from vehicle fuel and energy use. Help restore or protect some habitat. Have a rat trap in your back yard. And as a member of Forest & Bird, combine to make your voice heard both in New Zealand and through BirdLife International, across the globe.

Just as giving to one little girl to help save millions, by looking after one little bird at a time, every one of us can make a difference.



Princess Bay – worth preserving?

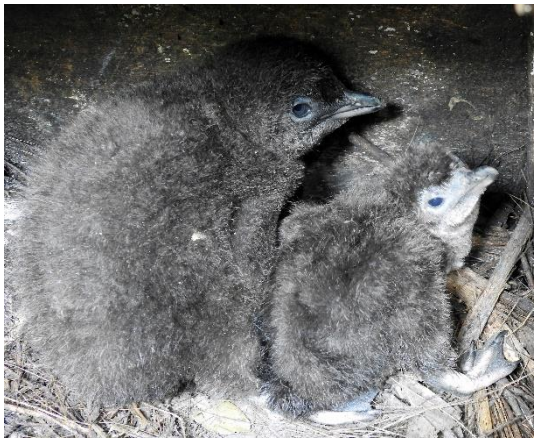
Local news

Places for Penguins breeding results 2018-19 with thanks to Kerry Shaw

The team of volunteer nestbox monitors working for the Places for Penguins programme has completed another season of checking all their nestboxes every two weeks across 11 bays around the city. The last chicks left early in February. Later on, many adults came back to use the nestboxes as a convenient place to hide away to undergo their moult, which takes over two weeks to complete. The table below shows the 2018-19 season Little Penguin (kororā) breeding success results compared to the previous 4 seasons.

	2014-15	2015-16	2016-17	2017-18	2018-19
Hatching success (H)	83%	78%	74%	93%	69%
Fledging success (F)	91%	96%	92%	97%	83%
Breeding success (H x F)	74%	75%	67%	90%	55%

This season was a poor breeding year in terms of the number of chicks fledged, with only 40 chicks successfully leaving the nestbox to fend for themselves. This was perhaps due to the availability of food at a critical time, as the season was quite long. The first egg observed was on 13 August 2018 and the last chick did not leave until February 2019. At one stage there were chicks in some boxes and moulting adults in others — activities usually separated by a couple of months.



Chicks of very different sizes

During the last 5 years, nestbox occupancy has been highly variable and it is difficult to discern any patterns yet. Tapu te Ranga island continues to do well, probably as there are no dogs permitted and there is little human activity. The monitors there reported a couple of boxes with two chicks where one was half the size of the other. In one case the smaller chick did not make it after its larger sibling left the nestbox, but in the other instance it did, much to the monitors' relief.

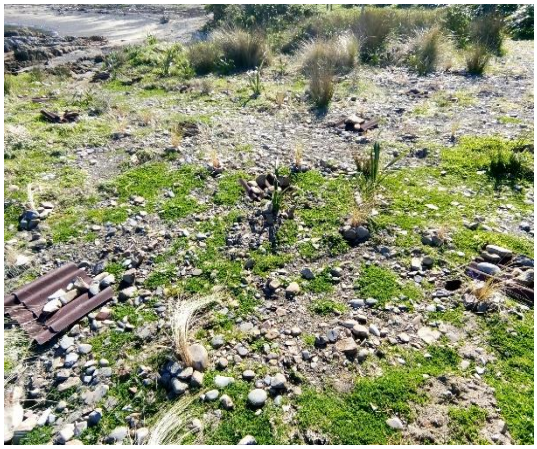
In April and May 2019, adults have been checking out many of the nestboxes while prospecting potential nest sites for later in the year.

The Miramar lizard garden experiment

By Sarah Herbert

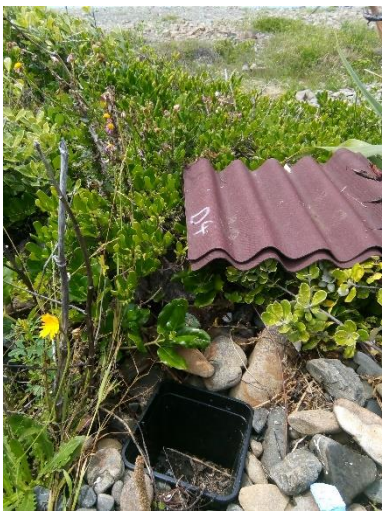
Residents and visitors on the Miramar Peninsula may have noticed a few changes over the past two years.

First, orange flagging tape appeared at seemingly random locations, then somebody dug oversized ice-cream containers into the ground. Later on, a lot of brown corrugated tiles appeared, each bearing a code in white paint. And now, somebody has put in a load of native plants and rock piles at half the sites.



A habitat enhancement site just after planting

What's going on? The answer is that Sarah Herbert, a PhD student at Victoria University of Wellington, has been testing the efficacy of lizard gardens for conserving native lizards. Our mammal-invaded mainland provides tricky conditions for conservation because any change to the habitat will affect all fauna living in the area, exotic as well as native species. For example, what if lizard gardens also provide excellent habitat for mice, which then multiply and compete with, and eat, the lizards that we're trying to conserve?

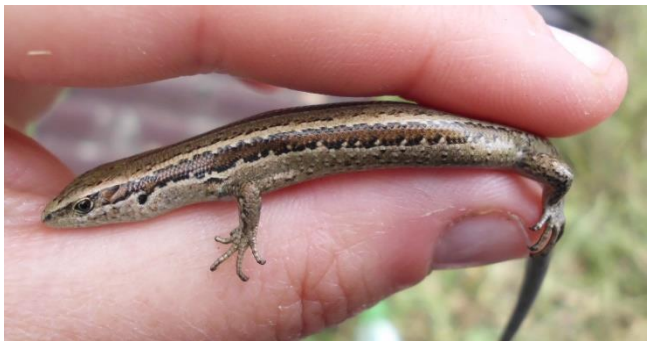


Tools of the trade

New Zealand and other islands around the world have a serious conservation problem: our native flora and fauna evolved in the absence of animals that could not readily disperse across oceans such as terrestrial mammals. Because of this, our native species were often ill-adapted to survive after the introduction of exotic mammals. These mammals have become very effective predators of, and competitors with, the New Zealand fauna. New Zealanders have already achieved some impressive eradications of exotic species from islands and mainland sanctuaries and continue to make great strides through the Predator Free 2050 programme. While this is good news for our

native species that are sensitive to mammals, fulfilment of this goal remains at least 30 years away and it is possible that not all problem mammals (here's looking at you, domestic cats and mice) can be eradicated. Therefore, it is also important to examine complementary strategies for conservation.

One strategy that is becoming popular for mainland conservation is the notion of lizard gardens as refugia: the idea is that if you plant certain native species, and add rocks and logs, then lizards should thrive. While the logic is based on observations of habitats that lizards like to hang out in, the technique has not been scientifically tested. This is concerning because more and more people are creating lizard gardens in schools, parks and backyards. So, is there any tangible benefit for lizards when a lizard garden is built? We don't really know!



Northern grass skink

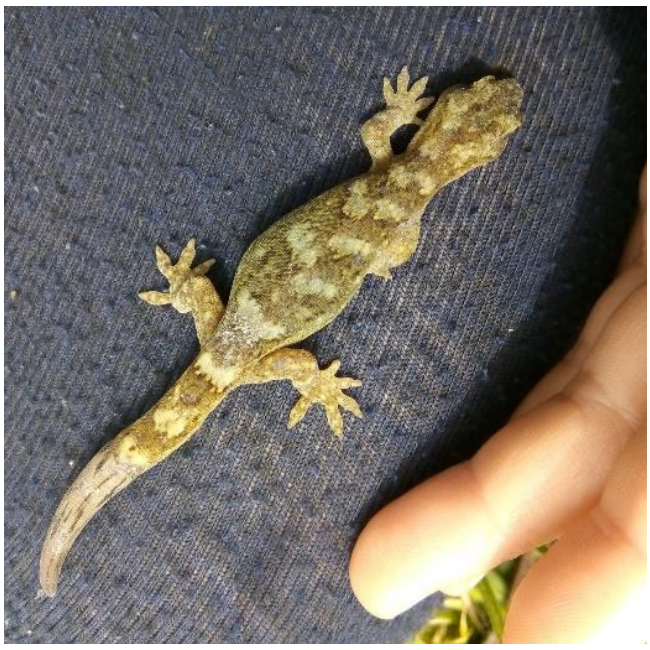
The Miramar lizard gardens represent an experiment that aims to identify just how effective lizard gardens are. This experiment in part of a three-year PhD thesis research programme that contributes towards current understanding of how lizards respond to habitat manipulation.

The first step was to understand what types of 'lizard gardening' have already been tried and whether these attempts were successful. Global literature on the subject was reviewed.

The second step was to understand what habitats lizards need to survive. Lizard species abundance and habitat was surveyed at pest-invaded and pest-free environments around Wellington.

The third step was to understand whether any lizard population could be stable over a long period of time in a pest-invaded area. A population monitoring and modelling programme was put in place at three additional sites around Wellington where lizards appear to be abundant, and where lizard monitoring had previously been carried out.

The fourth step was to do an experiment to understand if lizard gardens affect resident lizard populations. Lizards were monitored at 12 plots on the Miramar Peninsula during 2017/18. Lizard gardens were constructed at half of these plots in 2018, and the remaining six plots were left unchanged. Lizards will be monitored during 2018 and 2019 to examine how they responded.



Raukawa gecko

Half of the lizard garden sites are now 'enhancement' sites, for comparison against the sites where no changes have been made. These enhancement sites have been planted with a mixture of lizard-friendly tussocks (silver tussock/wī – *Poa cita*), coastal flax (whaririki – *Phormium cookianum*), divaricating plants (mingimingi – *Coprosma propinqua*; tātaraheke/sand coprosma – *C. acerosa*; and saltmarsh ribbonwood/makaka – *Plagianthus divaricatus*) or fruit/nectar-bearing shrubs (taupata – *C. repens*, koromiko – *Veronica* [*Hebe*] *stricta*), dense groundcover (pōhuehue – *Muehlenbeckia complexa*), and the native ice plant/ horokaka – *Disphyma australe.*

Five strip-piles of landscaping rock have also been added. The resulting arrangement of strips of native plants interspersed with rock-piles has been designed so that lizards have a lot of 'edge' habitat in which they can move between the safety and warmth of the rock piles into the cover, foraging ground, and relatively cooler habitat provided by the vegetation.

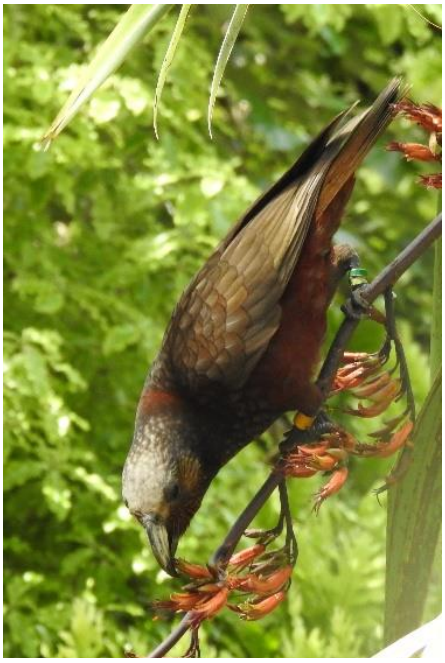
The data is coming in thick and fast, with about 300 lizards of three species (Raukawa gecko – *Woodworthia maculata*; northern grass skink – *Oligosoma polychroma*; and copper skink – *O. aeneum*) being caught across all of the grids during each of the three 'pre-enhancement' monitoring sessions!

So, watch this space, and hopefully we will have a much better understanding of lizard gardens by December 2019! To follow the progress of the research, or to get involved, have a look at the project blog: www.scritterblog.wordpress.com.

Photos: Sarah Herbert

Beaking about the bush **with thanks to Myfanwy Emeny at Wellington City Council**

Over the last 16 years, as we saw from the eBird sightings maps in the last issue, kākā have gone from non-existent in Wellington to becoming an everyday sight. They were first introduced to Zealandia in 2002 and have been particularly successful in adapting to local conditions and breeding. About a thousand birds have been banded, and they have reached outside the reserve and are now seen all over Wellington. Kākā have also started to be seen in the Hutt Valley, north to Porirua and recently in the Wainui and Orongorongo catchments, which is great news as these areas have sufficient habitat and natural food sources to make them capable of supporting a breeding population.



Plant flax as a food source

Their harsh calls are a common sound overheard, even sometimes at night, and in flight their somewhat turnip-headed silhouette makes them instantly recognisable. They give visitors to Zealandia some great photo opportunities and to the fortunate, maybe the chance to snap a shot showing the beautiful red underwing. Their swaggering walk, clownish appearance and bold behaviour makes them favourites with many.

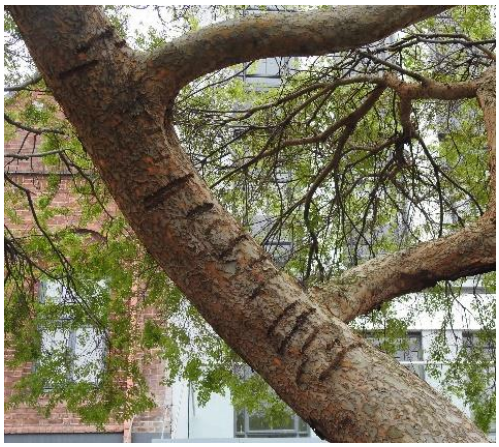
The freedom of the city, a reliable food source by way of specially formulated pellets at Zealandia if required, and lots of other kākā to interact with would, you'd think, offer an idyllic lifestyle. But there are problems. One is caused by well-meaning humans.

The natural diet of kākā is entirely native fruit, nectar and insects. It's been found that if fed certain other foods they can develop a metabolic bone disease. This most often manifests as deformed beaks and bones in the chicks of adult birds that have been fed nuts. Most nuts contain substances that the kākā cannot metabolise and which have this strange effect on their progeny. Some chicks have had beaks so deformed they would not be able to feed themselves sufficiently to live a normal life and they have been euthanised rather than allowing them to slowly starve.

So, do not feed kākā nuts, even though they love them. The best way to help them is not to feed them anything but to plant species such as kōwhai, rātā and flax that produce their natural foods that will sustain them in a healthy way.

Their powerful beaks lead to another thing that some people see as a problem — tree damage. Their natural food sources until recent times were all derived from native species. Kākā are inquisitive and intelligent and they have found that introduced plant species also offer a source of food – the sap flowing within trees. This has led to a phenomenon where kākā gouge a channel round the trunk or branch of a tree, or strip off large patches of bark to make the tree 'bleed'. The sap accumulates and the bird can feast on a rich source of plant sugars. The sweetness of this fluid is evident from maple syrup, which is just tree sap reduced and thickened only by evaporating off most of the water.

This habit has become quite widespread around the city and in many parks, reserves and garden, trees of certain species bear the scars. Some gardeners and plant enthusiasts complain about this as it spoils the appearance of the tree. However, the trees can scar over and survive the attack, even in severe cases. However, unlike our native trees, most exotics aren't used to this sort of damage and it can cause them serious problems. Such is the enthusiasm for this food source that kākā have taken to coming into the city centre at night when there are few people about to feast on tree sap right through the main commercial area.



In Courtenay Place

As native trees are more used to the ways of kākā, once again an answer is to stick with native species when planting trees. The kākā were here first and it is we who have put before them this new and enticing source of sugar, so we are not really in a position to complain about it.

This Polhill tree lives on

EVENTS

FOREST & BIRD WELLINGTON'S WILD WEDNESDAYS

Conservation in cities: why it is hard and why we do it — Dr Danielle Shanahan
Venue: Zealandia, Pateke room
12 June 2019, 6.30pm Doors open at 6.15pm, seminar starts at 6.30pm
RSVP via eventbrite.co.nz. Limited spaces.

Conservation in cities is hard. The impacts of urbanisation on native ecosystems are extremely high and hard to overcome, and the remaining patches of habitat are often highly disturbed, weedy and small. So why do we do conservation in these landscapes? What does it mean for biodiversity, and for people? Are there special opportunities that we have in cities? Join Danielle Shanahan, Director of Zealandia's Centre for People and Nature, as she explores these questions, drawing on examples from across the Oceania region. Participants will have the opportunity to add their views during a facilitated discussion on what biodiversity means for Wellingtonians.

ZEALANDIA
TE MĀRA A TĀNE

In partnership with ZEALANDIA

Plastic Free Waterways — what can you do? —Dr Amanda Valois, NIWA
Venue: ZEALANDIA
Saturday 20th July — 1.30pm–3.30pm Doors open at 1.15pm, seminar starts at 1.30pm

Get hands on as we investigate the plastic getting into our waterways, where it comes from and how to reduce it.

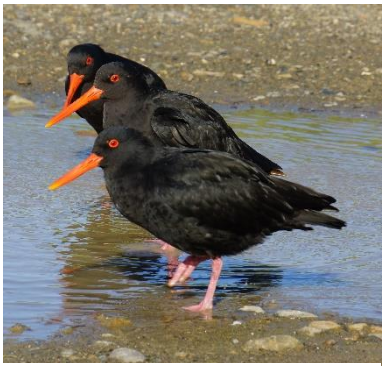
A workshop for all ages led by NIWA Freshwater Ecologist Dr Amanda Valois.

Bookings essential via visitzealandia.com/events

In partnership with ZEALANDIA and NIWA

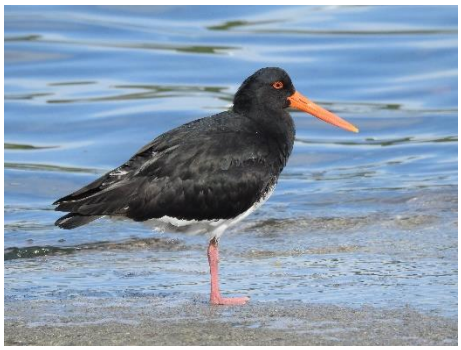
Wellybird – a personal view

Variable oystercatcher



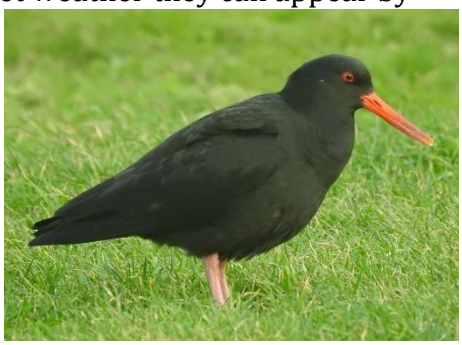
Three handsome VOCs

Their plumage can vary with anything from pure black to some that have so much white on they could be confused with their cousin the South Island pied oystercatcher. Around Wellington the large majority are all black. In bright sunlight, the blackest ones glisten with a midnight hue that is the blackest of blacks. Setting this off are the bright orange bill and eye ring. The ensemble is finished off with a pair of sturdy legs in a shade of pink fashionable among ladies in the 1950s.



This bird has a white belly

There are no oysters in Wellington but VOCs as they are known are to be seen on rocks feasting on mussels and have developed special techniques to open their shells. A truly marine bird you'd think, but no – they are quite often seen in numbers on grass. In wet weather they can appear by the dozen on sports fields close to the sea such as those near Evans Bay. Like all waders they are ground nesters. They make no nest as such, laying one to four eggs usually on pebbles and typically just above the highest tide mark. The eggs are extremely well camouflaged and you can be a metre away and still not see them. If you're being screamed at by oystercatchers in November or December, you're at risk of treading on their eggs. Look carefully where you place your feet and leave the area.



On a sportsfield, maybe for worms

A clutch laid on pebbles and leaves

E-newsletter

Do you have any ideas for subject matter or things you'd be interested in hearing about in this newsletter? Please let us know by email to wellington.branch@forestandbird.org.nz. Any photos submitted must include photographer's credit and permission to be used.

Photos by the editor unless otherwise credited