Places for Penguins
a Forest & Bird Wellington Branch project

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

Newsletter August–September 2019

IN THIS ISSUE:

LITTLE BLUE PENGUIN RESERVE AT NIWA: A STUDY IN RENEWAL

Three years ago, Places for Penguins (PfP) began a three-stage project to renew the fenced reserve at NIWA (the National Institute of Water and Atmospheric Research) by Greta Point, Wellington. NIWA sits on reclaimed land edged by a public pathway, which is popular with walkers, cyclists and fisher folk. At the southern end there is a fenced reserve equipped with a large concrete pipe that gives kororā (Little Blue Penguins) access through the artificial "rip-rap" rock wall into the area from the sea. Nest boxes had been placed inside for kororā to use for breeding and moulting, but the area had been neglected and had fallen into disrepair.

"Disrepair" is an understatement. Boxes were rotting and lying slumped over. The whole area was covered in head-high weedy growth – old man's beard, wild turnips, and couch grass – and full of rubbish blown and thrown over the fence. In partnership with NIWA, and with their blessing, PfP started a three-year restoration project, instigated by Karin Wiley.

In the first year, teams of volunteers from PfP and NIWA came to regular winter working bees, filling three big skip bins with weeds and rubbish. Surviving natives were marked and cleared of surrounding foliage to protect them from several rounds of weed spraying by NIWA contractors. The toughest, most persistent weeds – particularly Old Man's Beard vines – were marked too, but only to ensure direct application of a systemic gel herbicide to freshly cut stumps.

Later, trays of native coastal plants from the Forest & Bird plant nursery arrived to be planted out in a series of volunteer working bees through the late winter and spring. Plantings created pathways for humans and birds, and were designed to shelter and conceal the nest boxes. Despite all this disruption, a pair of long-time resident penguins showed their approval by settling in for the breeding season and raising a pair of chicks.

Returning at the beginning of the project's second year was rather distressing. All that could be seen were the weeds that had reclaimed the site over the long hot summer and autumn. But, as the ongoing project team of three teased back the foliage, the previous year's plantings were mostly thriving under the protection of the weed canopy. As the weeds came out, carefully, the shape of the paths and gardens re-emerged.

So did *two* active nest boxes. Sadly, that season one pair of kororā chicks died, but the other pair thrived and, as far as we know, fledged. Last season there were another four chicks, and this year one box seems to have breeding underway already. There are signs of interest in others. The 13 boxes, repaired, restored and repositioned on the site, will now be regularly and formally monitored. The observations will form part of PfP's data gathering about nest box usage around the Wellington coast.

The photographs show how well-established the area is now. Nevertheless, it still requires regular weeding and planting to fill in the odd space.

Project leader Karin Wiley says:

"The next steps will be to encourage more of the local Little Blue Penguins, known to hold their 'meet and greet' nights in the vicinity, to check out the fully-landscaped, gated housing development specially set out for them. We hope more will occupy the vacant nest boxes during future breeding seasons, especially the chicks that fledged from here when they reach breeding age."

KEY NATIVE ECOSYSTEMS PART II

In the last newsletter we ran a story about some work that was being completed by Conservation Volunteers New Zealand (CVNZ) to restore the natural coastal ecosystem around Miramar Peninsula. In this article we present some common weeds found around the coast that pose a threat to the habitat restoration that CVNZ and other groups are trying to accomplish. Feel free to help them out by getting rid of any of these species that you find around the coast of Wellington.

If you are planning to pull out these weeds, a fork may be required to extract larger plants. Provided the weeds are not in seed, the pulled plants can be left on the ground to die off. Those in seed should be bagged and deposited in a rubbish bin.

Wild Turnip

Has yellow or white flowers and is a tall, competitive annual weed. If the stem is gripped near the base then it is usually possible to wiggle and pull the plant to extract the root which can be quite large on bigger specimens.

Everlasting Pea

Fast-growing, it shades out low-growing coastal shrubs, and produces many, very long-lived seeds. Forms dense stands, scrambles over and smothers other plants, discouraging the establishment of native species.

Tree Mallow
Invades seabird nesting habitats by growing in tall, dense clumps that can out-compete native species. The stands die back in summer exposing the soil to erosion by strong sea breezes, increasing vulnerability to invasion by annual weeds, making habitat less suitable for nesting birds. Larger plants and their roots are difficult to remove without a fork.

Lupin
Decreases light levels in open habitats, allowing invasion by other weeds. Causes sand and gravel to build up, altering the shape of coastlines or rivers, resulting in erosion elsewhere. Increased cover prevents some birds (e.g. dotterels, wrybills) nesting and increases predation of birds that do nest by cats and mustelids.

Lotus
Forms dense, matted patches similar to clover, scrambling through other vegetation, with yellow, pea-like, flowers and fibrous roots. Lotus is a genus that contains many species. They were introduced as a forage plant for livestock but have spread into other environments.

Purple Groundsel
Invades sand dunes and rocky foreshores, spreading rapidly and outcompeting native plants by producing large amounts of wind-spread seeds. Has soft, succulent, leaves and purple (sometimes pink) flowers. Fairly easy to remove but can have long and thin spidery roots.

We suggest that you do some more research on these plants so you are confident in your ability to recognise them. We don't want any native plants accidentally pulled out instead! There will be more pest plants shown in future newsletters.

THE BEACH LITTER MONITORING PROJECT AT TARAKENA BAY

On the 12th of May a team of five PfP volunteers kicked off the first of a series of beach clean-ups at Tarakena Bay. This litter project is a three-year programme led by Sustainable Coastlines and aims to create a grass roots solution to beach litter in New Zealand.
Working in collaboration with the Ministry for the Environment, Statistics New Zealand and the Department of Conservation, Sustainable Coastlines has developed a national beach litter monitoring programme, based on the United Nations Environment Programme marine debris survey methodology, which will enable them to build an accurate picture of the beach litter problem in New Zealand. By working to a United Nations Environment Programme methodology,

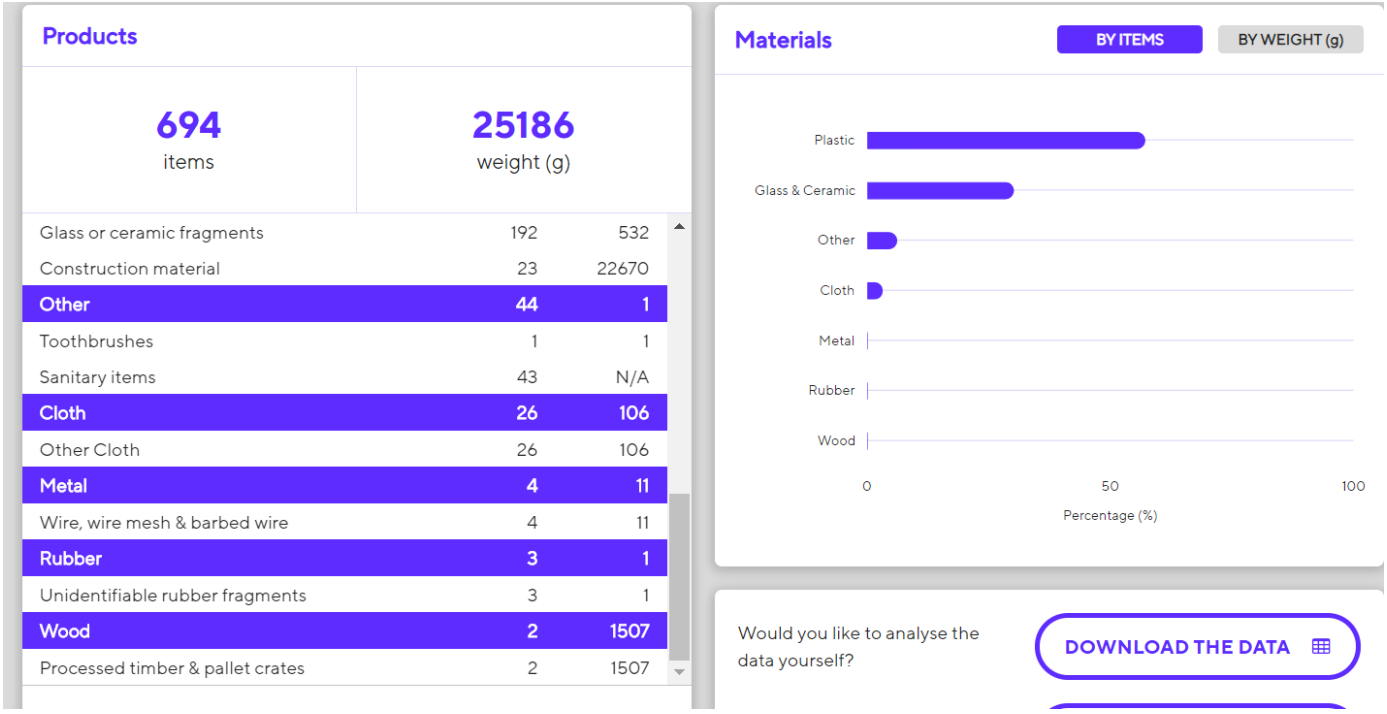
the data will be collected at the highest standard of scientific rigour, allowing it to be used for national, regional and international reporting, including progress against United Nations Sustainable Development Goals.

Our PfP team will be one of many community groups & organisations across 108 monitoring sites in Aotearoa to conduct beach litter surveys, at least four times per year for the next three years. In May we received training to learn about the aims and methodology. As “Citizen Scientists” we will be conducting regular litter surveys at Tarakena Bay and will be loading the litter data into a nationwide database.

After our training on the 12th of May in Breaker Bay Hall we headed out to the beach. After doing a site risk assessment, we set out an area of 100m long by 20m wide with posts, mallets and a tape measure. Within this area we picked up litter of all sorts, provided that it was not organic, bigger than 5mm, and not too large or dangerous. A visual assessment was included for microplastics and plastic resin pallets.

After finishing our clean up, we headed to Breaker Bay Hall for categorisation, counting, weighing and measuring of our litter. Most items we found were familiar but there were a few mysterious items. There were some plastic pins that seemed very specific for Tarakena Bay, which turned out to be hair-curling pins. The source is yet unknown but Sustainable Coastlines will look into this further. This is an example of the effectiveness of the programme.

This chart shows the results for the first survey:



As you can see, plastic is the most common material on beaches, followed by glass and ceramics.

For more information, check out the results for our surveys on
https://litterintelligence.org/data/survey?id=135
All the litter data will be freely available to the groups involved as well as to the wider public and decision makers.

With many thanks to our beach litter monitoring team Pippa, Lisa, Sam, Michael and Ben Knight from Sustainable Coastlines.

-Corinne Goedbloed
PfP Nestbox monitoring volunteer

NEXT WORKING BEE

Our next working bee will be a beach clean-up as part of the annual South Coast Clean-Up. This year it is on this Saturday 21st of September starting at 10:30am. There are 12 locations where different community groups and organisations will be located to assist with this event. PfP will be located at Tarakena Bay (site 11) alongside Forest & Bird Youth. Please come and help out! Make sure you join us for our briefing first, so we can teach you how to use the specific methodology of Sustainable Coastline audits.

1: Project Jonah
2: VUW Coastal Ecology Lab, Victoria Rescue
3: Island Bay Community Centre & Mountains to Sea Wellington Trust
4: Friends of Taputeranga MR
5: Houghton Valley School
6: Ghost Fishing
7: Wellington Underwater Club
8. Lyall Bay Coast Care
9: NIWA
10: Moa Point residents, Wellington Lions' Clubs
11: F&B Places for Penguins & F&B Youth Wellington
12: Breaker Bay residents & Plastic Free Peninsula

Text and photos by members of the PfP management team, except where otherwise credited.

Thanks to all our partners and supporters: Wellington City Council, Greater Wellington Regional Council, the Department of Conservation, the Society for Conservation Biology group at Victoria University, Conservation Volunteers of New Zealand, Weta Digital, Tumbleweed Tees, Sue Dasler Pottery, and the Henderson Trust via the Nikau Foundation.