

## This is the whole story

"We are using Vodafone's NB-IoT technology to help save native species, support our hard-working volunteers and work towards achieving a predator free Punakaiki."

#### **Grant Parrett**

Predator Free Punakaiki

While visiting Pancake Rocks, Grant Parrett noticed something quite disturbing: an absence of birdlife. Worryingly, in a place that 20 different species called home, the entire population was under threat from an increasing predator population. Action was needed to avoid the entire population being wiped out.

Though traps were laid, checking them was timeconsuming, with volunteers patrolling arduous terrain for up to four weeks at a time in search of activated traps.

To eradicate predators and help create a native bird sanctuary, Predator Free Punakaiki turned to Vodafone's NB-IoT and a well-regarded trapping system from Europe, MinkPolice.

## Local problems, global solutions

An innovative IoT pest control solution with a proven track record of success in Europe, MinkPolice, was employed. Each trap contains a SIM that connects via Vodafone's NB-IoT network to the MinkPolice smart phone application.

## The improvements are far-reaching

- Instead of spending weeks checking the area, volunteers receive a notification to their smartphone when a trap is activated with its exact location, saving valuable time
- The increased efficiency provided by NB-IoT technology means more predators can be captured
- NB-IoT technology allows volunteers to set traps in more remote areas, safe in the knowledge that connectivity will be reliable
- Maintenance of traps is reduced through NB-IoT technology as it helps extend the battery life of sensors



## Improvements now and into the future

"Checking traps used to be laborious and timeconsuming, now it's not. The MinkPolice technology saves heaps of time and provides our volunteers with accurate and valuable data.

To reach our goal of becoming predator free by 2050, we have to embrace technology and connectivity. We are fortunate to have Vodafone working alongside us to help make this vision a reality. With their help, we'll move towards 5G applications in the future, which will open up even more opportunities," says Grant.

# If you would like more information about how Vodafone can transform your organisation, talk to your Vodafone Account Manager or visit vodafone.co.nz/business

## **Benefits summary**

As a result of Vodafone's NB-IoT technology and the MinkPolice solution, Predator Free Punakaiki is seeing improvements in the following areas:

### **Increased efficiency**

Rather than spend up to four weeks checking the area, a smartphone notification alerts volunteers to an activated trap's location

## **Increased engagement**

An unexpected benefit of the system has been the increased engagement and satisfaction for volunteers. Using the technology is actually fun and helps attract younger people to the cause

### Improved knowledge of the traps

Instead of receiving individual status reports for each trap, MinkPolice summarises every trap into a single application to give a complete overview

#### More volunteer time on other projects

Now that less time is spent checking traps, volunteers are free to focus on other beneficial activities like education programmes

Customer issues	Solutions
➤ Patchy connectivity meant volunteers were unable to embrace existing technology and use MinkPolice traps across a wide area of Punakaiki	✓ Using Vodafone's IoT network, volunteers will be able to set traps in more remote areas to reduce the number of predators
To ensure the survival of native bird life, Predator Free Punakaiki volunteers spent up to 4 weeks hiking arduous terrain to check if traps had been activated	✓ The MinkPolice smartphone application sends volunteers an immediate notification when a trap is activated, showing the precise location and saving a huge amount of time
Rats, stoats, and possums kill approximately 25 million native birds every year — Predator Free Punakaiki are aiming for a predator free New Zealand by 2050	✓ Vodafone's connectivity and coverage are crucial to ensuring Predator Free Punakaiki can continue to aid the survival of New Zealand's native birdlife
➤ Batteries on the trap sensors need to be changed frequently, which increases the time volunteers spend overseeing the traps	✓ Vodafone's new NB-IoT network will provide extended battery life of the sensors, so volunteers won't have to change them as often