

Measuring Progress in Restoring our Park

Over the past 20 years a lot has been done to restore East Harbour Regional Park through trapping pests and growing and planting trees to assist natural revegetation. Many MIRO and other volunteers from Eastbourne, the Bays and beyond, working with the support of Greater Wellington Regional Council, have been involved in this. But how do we measure how effective we have been?

One measure of success is to monitor how many pest animals are about. The possum population in the Northern Forest has been monitored for the past 20 years and the results show very low levels for the past 15 years. This is great news for our forest, especially trees such as Rata, which are very vulnerable to possum browsing.

The rat population in the Northern Forest has been measured since 2005 using 100 monitoring tunnels permanently located in the forest, with inked cards to record footprints placed in the tunnels for one night, four times a year. The inked cards are actually rebaited and left for a further three nights so as to record stoats, weasels and hedgehogs. The results from the rat monitoring are a bit mixed in that the numbers inside the Mainland Island (a more intensively controlled area within our Park) are consistently lower than in less well-controlled areas, but are still often above a target of 5% of tunnels tracked. In part, this is due to the rat population increasing massively during a beech mast (a time when our beech trees drop a lot of seed). Unfortunately, this means our vulnerable native birds are not protected as well as we would like, so this is a continuing challenge for us.

A different approach is needed for monitoring our birds. This is done using annual 5-minute bird counts, where trained observers wait at specific sites (40 in all) and note down all the birds they can see and hear in that time. Last year, 20 different species were recorded and, in total 32 different species have been recorded across the forest since counts began in 1999. Predominant species are Grey Warbler, Silvereye, Tui and Blackbird. Most of our regionally rare endemic species continue to be recorded including Fantail, Bellbird, Kingfisher, Whitehead, Wood Pigeon, Rifleman and Tomtit, as well as nationally threatened Falcon and Kakariki (yellow and red-crowned). The 5-minute bird counts do not give us very specific information about the overall bird population, but they are good measure of what species are present. However, we have recently been able to purchase 5 acoustic recorders from DOC that we will be using to measure bird calls in the forest and at selected sites in our urban area. We hope that eventually these measurements will show more clearly the changes in bird numbers through analysis of such things as call rate and strength of the dawn chorus.

Now that ERAT (our urban trapping project, supported by Ministry for the Environment and Hutt City Council) is well underway, we have extended the monitoring to our urban area with 100 tracking tunnels on the properties of ERAT participants and a further 70 on parts of the foreshore, where we were assisted by students from both Wellesley College and San Antonio School (see photo). Preliminary results from the first monitor show that there is a large presence of hedgehogs in many areas, but fewer rats than expected, although this might be because the hedgehogs got to the bait first! It will be interesting to see how the monitoring results change as the ERAT Project gets fully-established.

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Interested in helping MIRO? Email: info@miro.org.nz