# <u> Tamahere reserve – Bat reserve facts:</u>

#### Why are we worried about bats?

Bats are the only native land mammals in New Zealand. There were three species: the long-tailed bat, the lesser short-tailed bat, and greater short-tailed bat.

Greater short-tailed bats are thought to be extinct, while long-tailed bats and short-tailed bats are classed as threatened. They are in danger of extinction in the medium term if nothing is done to reverse their population declines. Therefore, these species are a high priority for conservation.

## What evidence is there for bats?

A number of bat activity surveys have been undertaken to prove bats are found in the Tamahere reserve. The evidence confirms the Tamahere reserve is important habitat for bats.

## Kessels Ecology – Bat survey 1 (Oct 2013)

- confirmed Tamahere reserve 'showed high levels of (bat) activity',
- the site provides significant foraging and possible roosting habitat,
- these results suggest that bats are roosting within, or in very close proximity to, the Tamahere Reserve and that it represents a significant foraging habitat for them.
- Levels of bat activity recorded throughout the survey were very high. An average of 45.4 bat calls per detector per night were recorded during this survey. This compares to levels of averages of 2 to maximum 5 bats calls per night in the nearby Mangaonua and Mangaharakeke gullies.

#### Russell Gibbs, Tamahere Mangaone Restoration Trust, Trustee (Nov 2013):

- Observed between 2 and 13 bat passes in one hour or less over 9 nights in September 2013
- Bat flight paths were often observed to be in a North South direction leaving the gully area

## Kessels ecology - Bat survey 2 (Jan-Feb 2014)

- results from the ABM showed high levels of long-tailed bat activity throughout the survey period
- Recorded bat activity included searching, feeding and social calls. Calls of multiple bats (multi) were also recorded at all locations except ABM K4.
- Moderate levels of feeding and social calling, as well as the frequent occurrence of multiple bats, indicate that the site provides significant foraging and possible roosting habitat.

 Based on the results of this survey, those found by the TMRT January 2014 survey and our first survey (Mueller et al., 2013), it is our opinion any proposal to fell the pine trees in the Tamahere Reserve could result in adverse effects on this bat population.

#### **Russell Gibbs, Tamahere Mangaone Restoration Trust, Trustee (July 2015):**

- Over month of Feb between 700 and 1957 long tailed bats were detected in the Tamahere reserve using the Frequency Compression Bat Recorder supplied by DoC.
- This equates to between 2 and 12 bats per hour of observing.
- General observations ''From the initial analysis and data shown on the attached spreadsheets bat activity is high."

#### Why are the pine trees important?

Activity levels also indicate that the pine trees are likely to provide roost sites for bats and that the pines also provide important foraging habitat.

Habitat for indigenous fauna such as bats is in short supply and maintaining patches of habitat across the landscape is important for ensuring the persistence of bats, even if this habitat is provided by exotic species such as pine trees.

### Why can't we just cut down the pine trees?

Felling any trees in an area identified to be likely to provide habitat to bats without following approved protocols is an offence under the wildlife act.

Prior to any pine tree removal protocols to protect bats are required to be followed and these protocols are decided by DoC.