

# Long-tailed bats found in north Hamilton

16 April 2020



Photo: Wiea van der Zwan

Photo credit:

Wiea van der Zwan.

***A summer research student from the University of Waikato has found evidence of long-tailed bats, a critically endangered endemic species, in the northern areas of Hamilton.***

Hamilton is one of the only cities in New Zealand with an urban population of bats, with southern Hamilton a known hotspot for them, where they tend to roost in the semi-rural habitats on the edge of the city and have large home ranges across the area.

Waikato University student Olivia Dixon has just completed a summer research project on the long-tailed bats, with support from Project Echo and the Waikato Regional Council, to discover what bat activity is occurring in north Hamilton.

“The project was a really invaluable experience for me, as it allowed me to develop a different set of skills compared to typical papers. It was great to spend the summer working in a field I’m interested in, learning more about this endangered species,” says Dixon.

Historically, bats have been known to be in the Gordonton area, as well as the Hakarimata Ranges and Pukemokemoke, but no comprehensive surveys have been previously undertaken across the whole northern area.

Dixon initially surveyed around the northern edge of the city, within a 5km buffer, but then expanded to include the Hakarimata Ranges and kahikatea patches around Gordonton.



Through the survey, Dixon found bats present in the north and west of the city, albeit in lower numbers compared to the south of the city. Some particular hotspots included the kahikatea patches around Taylor/Sainsbury Road area and Barrett's Bush, as well as confirming their presence in the Hakarimata Ranges.

"it was exciting to see patterns in bat activity arising the more sites I surveyed – there was never a dull moment," says Dixon.

To survey the bats, Dixon spent a few weeks using a recorder that detects the bat's echo location calls, giving a good sense of the bat activity in that any area during the study period.

According to Kate Richardson, a Community Restoration Advisor with the Regional Council, there's still a lot we don't know about urban bats as most existing research has been done in native forests, so it's great to get projects like this one underway.

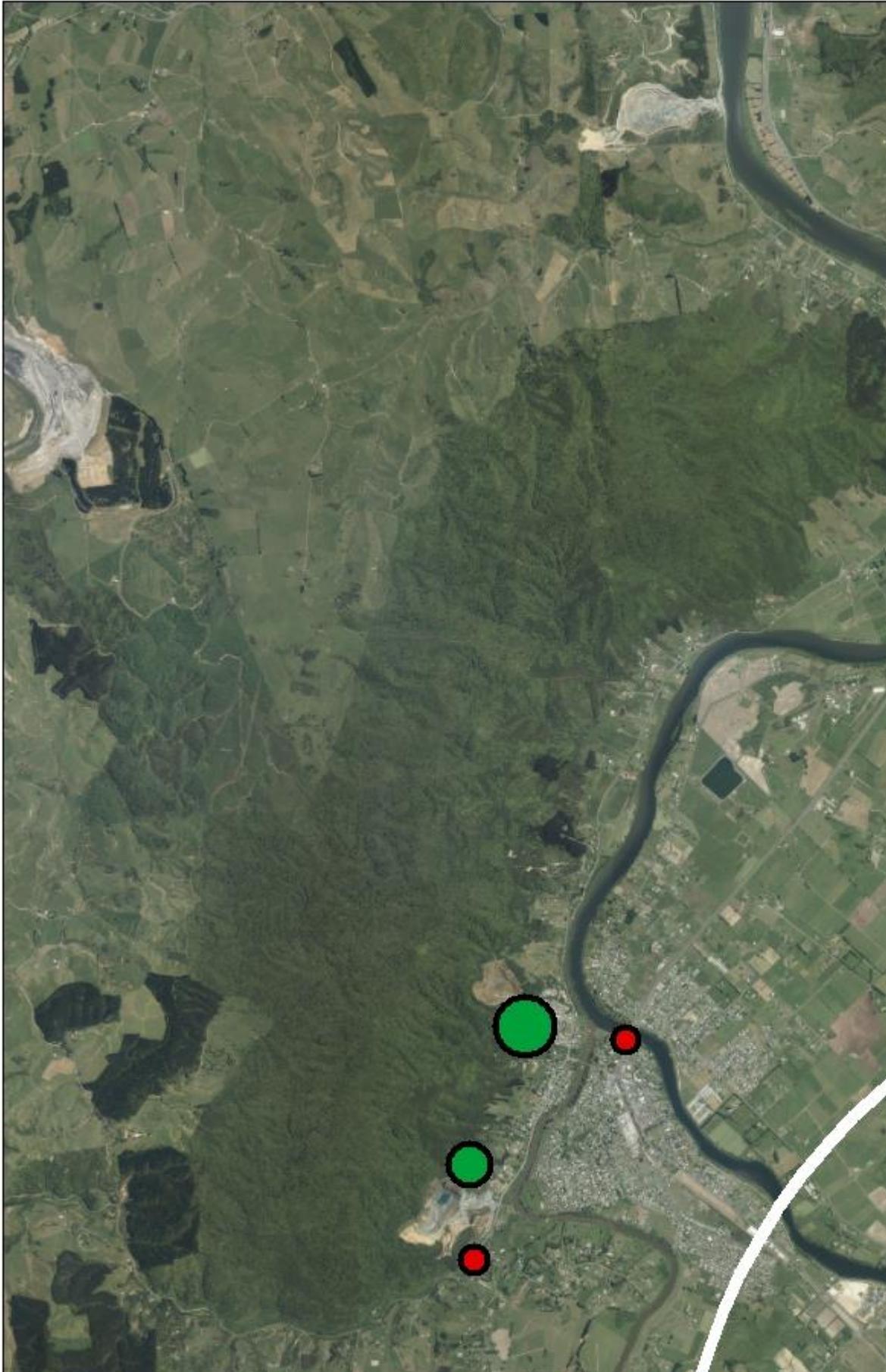
"Project Echo was set up about 10 years ago by Waikato Regional Council and the University of Waikato, in collaboration with a number of other partners, to advocate for more awareness of long-tailed bats.

"They're really threatened by habitat loss, as they like to roost in both native and exotic trees which people sometimes chop down without realising they're impacting the bats. Bats are also preyed upon by rats and stoats," says Richardson.

Summer is a great time to research bats as they tend to be more active, emerging at dusk and returning to their roosts at dawn.

"One thing we've found out about Hamilton bats is that they tend to stay in their roosts longer, whereas in other locations like Fiordland they might change every

night. This is probably because there are less roosts available to them in Hamilton compared with places like Fiordland,” says Richardson.



The university is planning further bat research projects, with an upcoming PhD student looking into lighting and its effects on bat behaviour, including roading developments, in terms of how they feed and roost.

“As our cities expand, we’re only going to come into more conflict with wildlife, so it’s important we understand the interactions and support those remaining populations like the long-tailed bats,” says Dr Clare Browne from the University, whose research field is animal behaviour.

For landowners who would like to take action to protect any bats that might be on their property, it’s important to focus on predator control (rats, mustelids, feral cats) and habitat protection.

Bats are known to roost in both native and exotic trees including kahikatea, black locust/false acacia, Tasmanian blackwood, oak, eucalyptus, grey and crack willow, London plane, pine, birch, casuarina and macrocarpa, so protecting current roost trees are vital.

Waikato Regional Council provides a fund which landowners can apply to support this work; more information is available [here](#).

More information about Project Echo can be found [here](#).