

## **Pekapeka population found at the Arboretum**

Dr. David Pattemore has discovered that the Sculpture Park at Waitakaruru Arboretum is home to a population of pekapeka, or long-tailed bats. There are only two species of bats found in New Zealand, and the long-tailed bat is critically endangered. Small populations persist in the Waikato, including in and around Hamilton, but it's special to find a population here at the park.

Long-tailed bats weigh just 8-10 grams and fit in the palm of your hand (including wings!). They catch small insects in the air, flying at up to 60kmh, and are active from dusk to dawn. This species of bat doesn't roost in large numbers, unlike some bats overseas, but instead will often roost with just a few other individuals in tiny spaces in bark and tree hollows.

Pattemore completed two weeks of monitoring bats at 10 different sites around the Arboretum, and found consistently high detection rates that are indicative of a small but active population. The timing of detections indicates that they are likely to be roosting in trees within the park during the day, although these bats are known to shift roosts frequently so they may have other roost sites that they use nearby.

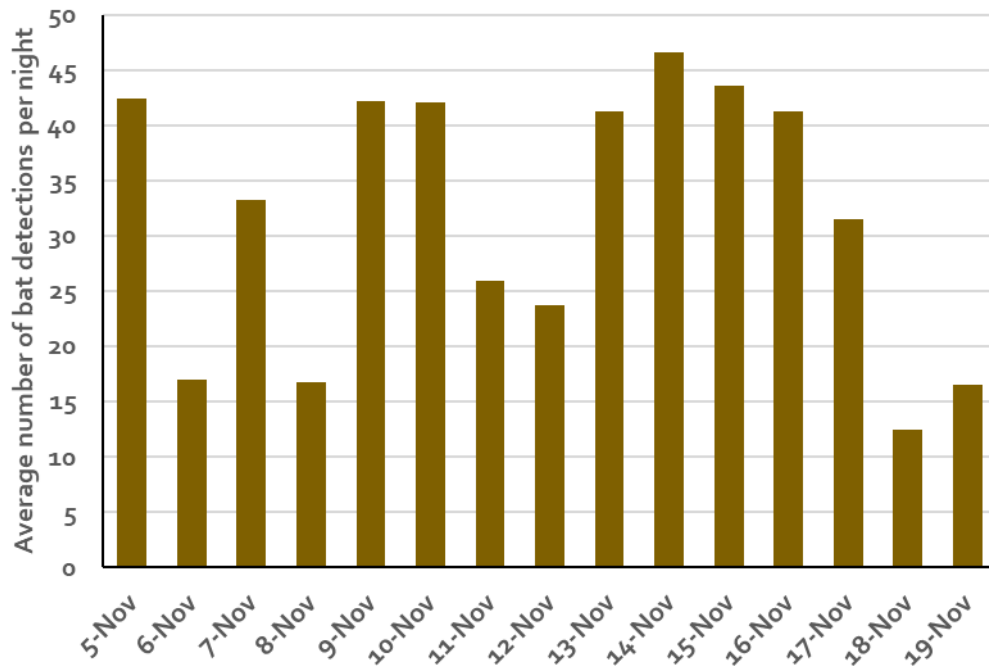
In the course of a night, these bats can fly long distances, so they will be flying all around the wider Tauwhare area at night. We've even spotted one after dawn flying loops over the road just outside the village, so keep your eyes peeled!

For more information on these special bats, click on the link below:

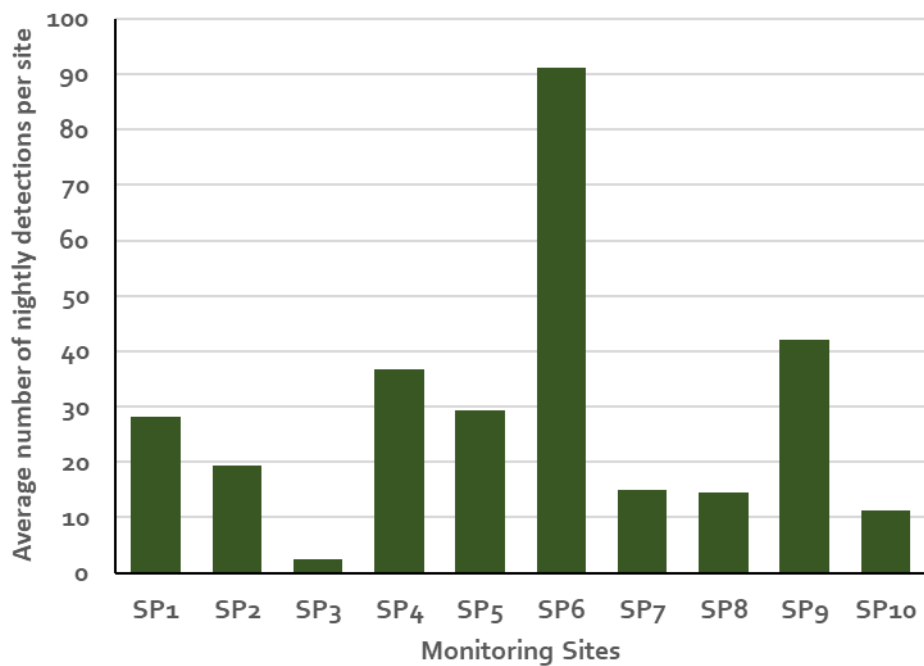
<https://www.doc.govt.nz/nature/native-animals/bats-pekapeka/long-tailed-bat/>



**Image caption:** The critically-endangered long-tailed bat is one of two species of native bats that can be found in Aotearoa New Zealand. Photo credit: DOC – link in main post.



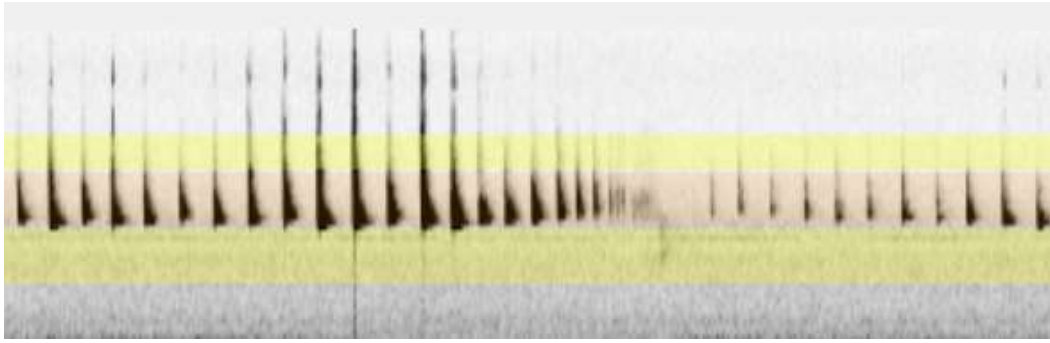
**Image caption:** Bat activity was consistently high across most of the sites within the Arboretum, with the lower activity nights coinciding with bad weather, including the torrential rain on the 18<sup>th</sup> and 19<sup>th</sup> of November.



**Image caption:** Bats were monitored for two weeks at 10 different locations in the Arboretum. Bats were detected at all sites, but some sites had much higher numbers of detection, especially along the eastern track among the pine trees, and in the centre of the park.



**Image Caption:** Ten bat monitoring devices were placed around the Arboretum for two weeks in November.



**Image Caption:** The bat monitors record the ultrasonic (very high pitch) echolocation calls that bats make and turn them into pictures that represent the sounds. This picture shows an example, recorded beside the lake near the coffee cart, of a bat echolocating to find an insect snack using discrete pulses of sound. When it detects prey, the calls change and end up in a blurry “feeding buzz” as they hone in on the insect.