



# Bat Detectors

Become a bat-spotter!

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## Are there bats in your backyard, parks or school?

Bats use echolocation sounds to find food, but they are too high pitched for humans to hear. A bat detector converts these sounds in to something we can hear.

Bat detectors are available to borrow thanks to funding by the Waitakere Ranges Local Board. To use one, you can enquire with the Weed Free Trust. You can use it to search your local neighbourhood for bats. Remember bats like hang out near big old trees, open areas and waterways.

► **Contact the biodiversity team** at Auckland Council to report bat sightings, borrow a bat detector or to get assistance with potential bat habitats.

**Find out more:** phone 09 301 0101, email [biodiversity@aucklandcouncil.govt.nz](mailto:biodiversity@aucklandcouncil.govt.nz) or visit [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)



## Tips for bat detecting

### Plan your bat detection outing

You won't always see a bat, but you will increase your chances of seeing or hearing them if you follow these helpful tips.

- Bats are more active in spring and summer (October to February) than they are in the winter.
- You are more likely to see or hear bats on fine warm nights.
- Bats roost in old or large trees and live mainly in areas with established vegetation. At night they look for food along bush or road edges, and in gaps through the bush, so start your search in these places.
- Bats emerge from their roosts after sunset. Some of them come out as soon as the sun goes down while others can take 30 minutes to emerge.
- To get the best view, stand underneath tall old trees and look up at a patch of clear sky. This makes it easier to see the bat's silhouette against the sky.
- Areas with a lot of light or road noise are less likely to have bat activity. Generally, there are no issues visiting public reserves in the evening. However, these areas often back on to private residential properties, so please be considerate of neighbours and other people around.

### Minimising bat disturbance

Bats are sensitive to high levels of light and noise. To increase your chance of seeing a bat:

- keep noise levels to a minimum
- avoid shining your torch too much, especially in roost sites
- use a red lens torch or place red cellophane over your torch
- leave your dog at home.

### Using a bat detector

All of our bat detectors come with batteries, but it's still a good idea to take spare batteries with you. Ask our staff about the type of battery you will need when you pick up the detector. Bat detectors are directional, so the nearer a bat is to the detector, the louder it sounds. They generally have a range of 20 metres to 30 metres.

- In addition to helping us locate bats, detectors also help us study bat behaviour. For example, when a bat closes in on a flying insect it wants to eat, it 'calls' become more rapid. The number of calls per second can be so rapid, the individual calls merge into a buzz this is known as a 'feeding buzz'. See if you can pick up a feeding buzz.

### To use a bat detector:

- switch it on
- check the frequency dial is set to 40kHz
- turn up the volume to ensure you don't miss any bats to start with, once you know what you are listening for you can turn it down
- sit or stand quietly so that you can hear the bats, sometimes it can take a few moments to recognise them
- point the microphone forwards and upwards at a slight angle.

### Health and safety

- Some of the most popular areas for bat detecting outings are close to streams or gullies. It's important everyone in your group is aware of the terrain and knows to keep to tracks and stay together.
- If you are unfamiliar with the site you are visiting, take a look during the day to orientate yourself. It's also a good idea to take a friend with you, especially if it's your first time in the area.
- Ensure you are well equipped with a first aid kit, warm and waterproof clothing, appropriate footwear and a torch.
- Where there are bats there are often mosquitoes, so be prepared by wearing suitable clothing and insect repellent.



Bat detector