

## Quality Data

EcoGene® is New Zealand's core provider of wildlife forensic testing for the Wildlife Enforcement Group and also supports the Department of Conservation's species recovery programmes.

Other national clients include MAF, AsureQuality, universities, regional councils and the New Zealand Centre for Conservation Medicine at Auckland Zoo for a variety of DNA services.

EcoGene® services are available to international users. Key projects to date include:

- Genetic analyses of Savannah sparrow island populations (Conservación de Islas - Mexico)
- Genotyping of feral cats in Western Australia (for the Invasive Animals Cooperative Research Centre)
- Chytrid fungus screening of native frogs and genotyping of feral goats (Victoria)
- On-going rat genotyping and rodenticide resistance screening for restoration projects led by Island Conservation (USA)
- Vertebrate pest identification and monitoring (South Pacific Regional Environment Programme)

### Collecting and Sending Samples

EcoGene® can provide protocols for collecting, storing and transporting material from the field to the laboratory, from anywhere in the world

For further Information:

[www.ecogene.co.nz](http://www.ecogene.co.nz)  
[ecogene@landcareresearch.co.nz](mailto:ecogene@landcareresearch.co.nz)

Or call us to discuss your DNA service requirements:

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**Landcare Research**  
**Manaaki Whenua**

# EcoGene®

**EcoGene®**  
DNA-based diagnostics

## Advanced DNA Services

EcoGene® provides DNA-based diagnostic services for ecological applications in biosecurity and biodiversity. From its Auckland laboratory, EcoGene® now provides a cost-effective and fast turnaround service for:

- Species identification
- Vertebrate pest monitoring
- Genotyping
- Disease screening
- DNA sequencing
  - Sanger services
  - 454 next generation sequencing



# Species Identification

Predator detection from forensic samples like saliva swabs of wound sites, hair snags and scat samples

Identification of invertebrate species from samples such as eggs, larvae and fragments using DNA barcoding methods

Microbial species identification from pure cultures

Wildlife forensic analysis of border seizures

## Vertebrate Pest Monitoring

Track movements of individual animals to detect immigrants versus residents

Rodenticide resistance screening

Mark-recapture analysis using non-invasive sampling for density estimation and monitoring of vertebrate pests

Comprehensive design and analysis of pest eradication/monitoring projects

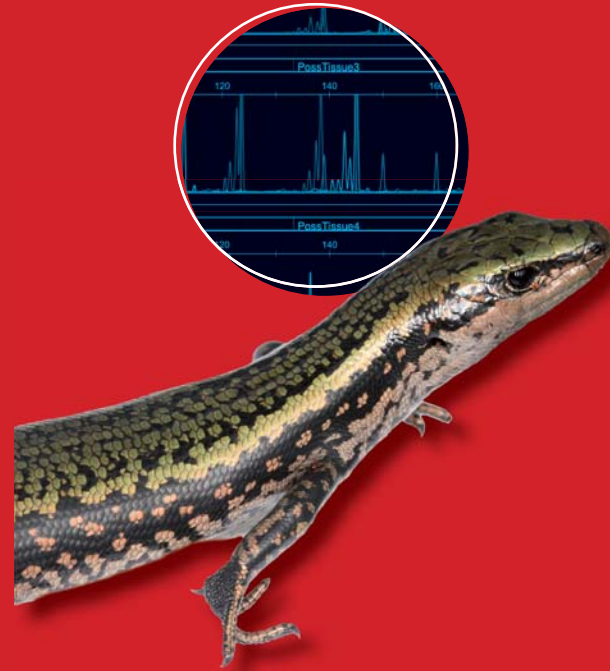


## Genotyping

Determine population genetic structuring and estimate gene flow using existing microsatellites or development of species-specific markers

Identification of pest individuals (eg: mustelids, cats and dogs) that predate on native birds

Gender assignment and parentage analysis



## Disease Screening

EcoGene® is now able to test for:

- Avian malaria
- Chytrid fungus
- Murine typhus
- Whataroa virus

....and testing for specific diseases can be developed on request!

