



Lesson plan 3

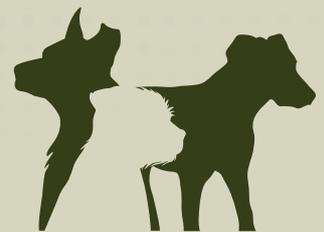
# Paws on Patrol

Flint and Kowhai the rodent and mustelid pest detection dogs



Department of  
Conservation  
*Te Papa Atawhai*

Kiwi  
bank.



CONSERVATION  
**DOGS**  
NEW ZEALAND

## KEY

 = links to videos    = links to websites    = links to pages within this resource

## Learning intentions

This lesson plan has been developed to support learning about the Conservation Dogs Programme and the threats that are posed by rodents and mustelids. It should be completed after viewing  [Paws on Patrol episode 3: Richard, Flint and Kowhai](#) in the *Fanimals* series.

To learn more about Conservation Dogs, Predator Free 2050, biosecurity and how to take conservation action in your local community, visit  [www.doc.govt.nz/education-conservation-dogs](http://www.doc.govt.nz/education-conservation-dogs).

Upon completion of this lesson plan, students will be able to:

- ▶ understand the important role Conservation Dogs play in protecting New Zealand's unique biodiversity
- ▶ understand some of the effects that pests/introduced predators such as rodents and mustelids have on the environment
- ▶ begin to understand the role that ecosanctuaries/mainland islands such as Zealandia and pest-free islands such as Kapiti Island play in protecting our unique biodiversity.



## Curriculum links

### Achievement objectives

LEVELS 1-4 SCIENCE

**Nature of Science:** : Investigating in science, Communicating in science, Understanding about science, Participating and contributing.

**Living World:** Ecology. Recognise (and explain) how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

**Science capabilities:** Engage with science.

LEVELS 1-4 SOCIAL STUDIES

Understand how people make decisions about access to and use of resources.

### Key competencies

- ▶ Thinking.
- ▶ Using language.
- ▶ Relating to others.
- ▶ Participating and contributing.

## Key vocabulary

**Biodiversity:** The variety of living things in a place. The greater the number of living things, the more 'biodiverse' the place is.

**Biosecurity:** Actions to keep New Zealand free of unwanted organisms (introduced predators, weeds and diseases such as kauri dieback and myrtle rust) and to control, manage or remove them if they arrive in the country.

**Ecosanctuary:** A nature reserve where wildlife can be kept safe.

**Environmental action:** A learning process where students plan and implement a project that will address an issue related to the environment/conservation/sustainability. Examples include undertaking predator control, planting trees, weeding and raising awareness about environmental issues in the community.

**Fauna:** The animals of a particular region or habitat.

**Flora:** The plants of a particular region or habitat.

**GPS:** Global Positioning System. This is a radio navigation system that allows users to determine their exact location in all weather conditions and from anywhere in the world.

**Habitat:** The natural home or environment of an animal, plant or other organism.

**Introduced pest/predator:** An animal or plant species that has come from another country and is threatening New Zealand's living things and environment. Introduced predators were brought to New Zealand by people via ships and through the transportation of goods.

**Mainland island:** A defined area that is isolated by fencing, geographical features or, more commonly, the intensive management of introduced predators/pests. Its purpose is to protect and restore habitats on the mainland through the intensive management of introduced predators/pests.

**Mustelids:** A group of carnivorous mammals that are distinguished by their long, thin, furry bodies. Includes stoats, ferrets and weasels.

**Rodents:** A group of mammals that are distinguished by their strong, constantly growing incisors and lack of canine teeth. They constitute the largest order of mammals and include rats and mice.

## Activity ideas

**Activity 1:** Watch  [Paws on Patrol episode 3](#) and have a class discussion to summarise the story. Then watch the video a second time and ask students to think about the three key points in the story. They can then share these points with a buddy and compare ideas.

**Activity 2:** Have you ever seen a rat in your local environment? How about a hedgehog?

- ▶ Share prior experiences of introduced predators (eg rats, mice, hedgehogs or possums) at home or at school.
- ▶ Head outside to look for evidence of introduced predators living in your school grounds. Ask other students, teachers and local people about sightings of introduced predators and investigate these sightings. Use the introduced predator information sheets to help look for signs of introduced predators, which can include droppings, footprints and tracks; burrows; damage to trees, plants, fruit and flowers; and the remains of other animals, their eggs or young.
- ▶ Record any observations. Write recounts, reports or articles about any introduced predator sightings.



Ship rat. Photo: DOC

**Activity 3:** Try to solve the introduced predator mysteries in the  [Who's that introduced predator?](#) presentation, using the introduced predator information sheets to help you. Each case involves a different introduced predator culprit.



Rat footprints on rodent cards. Photo: Anthony Behrens

**Activity 4:** Consider why introduced predators can be hard for people to find and what characteristics/qualities Conservation Dogs have that make them suited to detecting introduced predators.

**Activity 5:** Research any ecosanctuaries, mainland islands and/or pest-free islands that are close to you or research the two that are featured in the video (Zealandia and Kapiti Island). Consider the following questions.

- ▶ Why do we need ecosanctuaries, mainland islands and pest-free islands?
- ▶ What are the benefits of them?
- ▶ If you were to create an ecosanctuary, mainland island or pest-free island near to you, where would it be and why?
- ▶ What actions should people take before visiting a pest-free island or mainland sanctuary?



Kapiti Island as seen from Paekakariki Escarpment. Photo: Leon Berard [www.leonberardphotography.co.nz](http://www.leonberardphotography.co.nz) (CC BY-NC 4.0)

# Supporting resources

## Useful links

### Introduced pests/predators

- ▶ Introduced predator factsheets: [www.doc.govt.nz/education-introducedpredators](https://www.doc.govt.nz/education-introducedpredators)
  - Mice factsheet
  - Rats factsheet
  - Stoats and other mustelids factsheet
  - Hedgehogs factsheet
  - Possums factsheet
  - Cats factsheet
- ▶ *Who's that introduced predator?* slideshow: [www.doc.govt.nz/education-introducedpredators](https://www.doc.govt.nz/education-introducedpredators)
- ▶ *Investigating introduced predators in your green space* resource: [www.doc.govt.nz/education-introducedpredators](https://www.doc.govt.nz/education-introducedpredators)
- ▶ *Investigating weeds in your green space* resource: [www.doc.govt.nz/education-weeds](https://www.doc.govt.nz/education-weeds)

### Ecosanctuaries and mainland islands

- ▶ Mainland islands: [www.doc.govt.nz/mainland-islands](https://www.doc.govt.nz/mainland-islands)
- ▶ Zealandia: [www.visitzealandia.com](https://www.visitzealandia.com)

### Pest-free islands

- ▶ Visiting pest-free islands: [www.doc.govt.nz/pestfree](https://www.doc.govt.nz/pestfree)
- ▶ Nature and conservation: [www.doc.govt.nz/kapiti-island-nature](https://www.doc.govt.nz/kapiti-island-nature)

## Further information

For additional resources to support teaching and learning in nature, visit DOC's conservation education webpage: [www.doc.govt.nz/education](https://www.doc.govt.nz/education).

To learn more about our amazing Conservation Dogs, check out DOC's Conservation Dogs Programme education resource: [www.doc.govt.nz/educationconservation-dogs](https://www.doc.govt.nz/educationconservation-dogs).

For further information on the Conservation Dogs Programme, visit [www.doc.govt.nz/conservation-dogs](https://www.doc.govt.nz/conservation-dogs).