



Lesson plan 7

# Paws on Patrol

Neo and Beau the ōi/grey-faced petrel  
detection dogs



Kiwi  
bank.



## 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 our native ōi/grey-faced petrel. It should be completed after viewing  [Paws on Patrol episode 7: Andy, Neo and Beau](#) 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
- ▶ that seabirds such as the ōi/grey-faced petrel are unique to New Zealand and have special features, behaviours and adaptations
- ▶ some of the threats our seabirds face and what we can do to protect them.



## 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 view and use places differently

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

### Key competencies

- ▶ Thinking.
- ▶ Use of language.
- ▶ Relating to others.
- ▶ Participation and contribution.

## 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.

**Burrow:** A hole or tunnel that is dug by a small animal to serve as a dwelling.

**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.

**Headland:** A narrow piece of land that projects from a coastline into the sea.

**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.

**Muttonbird:** A member of the petrel family of seabirds. These birds have dark brown plumage with silvery-white markings under the wings.

**Prospecting:** Searching for or seeking.

**Sanctuary:** A protected area that is isolated by fencing, geographical features or, more commonly, the intensive management of introduced predators/pests to keep wildlife safe.

## Activity ideas

**Activity 1:** Watch  [Paws on Patrol episode 7](#) 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. You could ask students the following questions to support the discussion.

- ▶ What characteristics or qualities do Neo and Beau have that make them suited to detecting protected species?
- ▶ How do trained Conservation Dogs benefit the environment and conservation?
- ▶ What can you do at school or in your own backyard to protect and restore nature?

**Activity 2:** Discuss prior knowledge and experiences of seabirds. This could be through a group discussion or paired conversations.

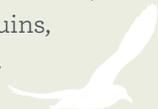
- ▶ Play  'Seabird bingo' to encourage further discussion. Students can have brief conversations with others to find people who have had the experiences listed. They can then record their names and tick the appropriate squares until they have completed the grid.
- ▶ Use the  'Recording knowledge' activity sheet to record prior knowledge and any questions. (If students are having difficulty thinking of what they already know, ask them which pictures and words come to mind and where this knowledge came from, eg a person/place/experience.)  
NB: The drawings are about recording knowledge, not demonstrating artistic skills.



Ōi/grey-faced petrel. Photo: Terry C. Greene

### Fun fact

Did you know that New Zealand is known as the 'seabird capital of the world'? We have the most diverse seabird community in the world, comprising albatrosses, petrels, penguins, shags, gannets, gulls, terns and skuas.



**Activity 3:** Conduct your own research into how grey-faced petrels are the same as or different from other seabirds (in particular, consider their breeding habitat). The links listed in the 'Supporting resources' section below could help with your research. See Activity 4 in the  [Tāiko/black petrel and other seabirds](#) education resource (pages 24–28) for ideas on how to record and share your research findings.

**Activity 4:** Identify some of the major threats to seabirds by considering the following questions.

- ▶ What is a threat? Encourage students to have a quick chat about what they understand a threat to be and then share ideas.
- ▶ Will threats be the same for every species of seabird? The main threats to a particular species will depend on a variety of factors, such as its behaviours, habitat and life cycle.
- ▶ What kinds of threats did people bring to New Zealand? Ask students to consider this and then share ideas through 'think-pair-share', 'walk-pair-share' or a  talking doughnut activity.

Once you have investigated a variety of threats, create a mind-map of the threats that affect seabirds using a digital tool such as [popplet.com](http://popplet.com) or [coggle.it](http://coggle.it).

**Activity 5:** Brainstorm and record ideas about what a safe habitat for seabirds would look like.

- ▶ Students could begin to record their ideas about safe seabird habitat by creating a wall mural, artwork or a digital presentation. The artwork could reflect an example of seabird habitat in a protected environment or reserve (eg Ōhiwa Headland Sanctuary).
- ▶ Students could continue to add ideas to their display/presentation about why sanctuaries or managed areas are often necessary for seabird survival and how different people have been involved in establishing them. Use various sources of information and include both text and images to represent these ideas.
- ▶ Students can find information about how groups around New Zealand are restoring seabird habitats by following the links in the  'Supporting resources' section below.

### Activity 6: It's time to take action for seabirds!

- ▶ An action should make a difference for a focus issue and contribute to the best future you can imagine. Issues could include plastics in the ocean, climate change, introduced predators in island sanctuaries (eg Ōhiwa Headland Sanctuary) or another issue that is relevant to your local community.
- ▶ See the 'Supporting resources' section below for action ideas.
- ▶ See  *Activity 11: Action for marine environments* from DOC's *Protecting our marine world* education resource for guidance on planning, carrying out and monitoring your chosen actions.

## Supporting resources

### Useful links

#### Ōi/grey-faced petrel and other seabirds

- ▶ New Zealand birds online:  <http://nzbirdsonline.org.nz/species/grey-faced-petrel>
- ▶ Tāiko/black petrel and other seabirds education resource:  [www.doc.govt.nz/education-taiko](http://www.doc.govt.nz/education-taiko)  
*This inquiry unit introduces students to the tāiko/black petrel and then extends their learning inquiry to investigate and research tākapu/gannets, kororā/little blue penguins and tarāpunga/red-billed gulls.*
- ▶ Observing a royal albatross/toroa resource:  [www.doc.govt.nz/observing-a-royal-albatross](http://www.doc.govt.nz/observing-a-royal-albatross)  
*This resource outlines activities to support students in viewing the 'royal cam' (a camera set up at a toroa/royal albatross nest at Taiaroa Head near Dunedin.*
- ▶ Seabirds factsheets:  [www.doc.govt.nz/conservation-education/seabirds](http://www.doc.govt.nz/conservation-education/seabirds)

#### Marine conservation and environmental actions to protect seabirds

- ▶ Ōhiwa Headland Sanctuary:  [www.facebook.com/OhiwaHeadlandSanctuary](http://www.facebook.com/OhiwaHeadlandSanctuary)
- ▶ Protecting our marine world education resource:  [www.doc.govt.nz/protecting-our-marine-world](http://www.doc.govt.nz/protecting-our-marine-world)  
*Use this inquiry unit to learn about, experience and protect a local marine environment.*

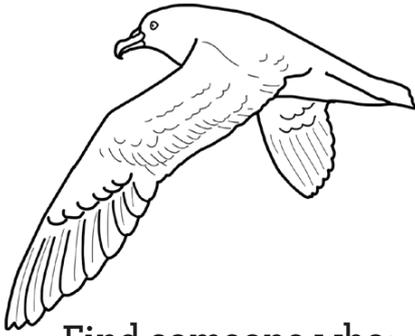
- ▶ Learn about how students at Wainui Beach School made nesting boxes to help protect their local little blue penguins.  <https://predatorfreenz.org/wainui-beach-school>
- ▶ Learn about how students on Great Barrier Island (Aotea Island) have been cleaning up their beaches, analysing the rubbish they find and creating art from it.  [www.curiousminds.nz/stories/can-litter-art-help-keep-our-islands-clean](http://www.curiousminds.nz/stories/can-litter-art-help-keep-our-islands-clean)
- ▶ Blue the film:  <https://bluethemovie.org/take-action>  
*Provides ideas on how to take action to protect your local marine environment.*
- ▶ Love your coast website:  [www.loveyourcoast.org.nz/learn](http://www.loveyourcoast.org.nz/learn)  
*Provides information about the impact of rubbish on our marine environments and support for planning your own clean up event.*
- ▶ Experiencing Marine Reserves programme:  [www.emr.org.nz/index.php/education/kaitiaki-action-projects](http://www.emr.org.nz/index.php/education/kaitiaki-action-projects)  
*Learn about the action projects that are being undertaken by schools taking part in the Experiencing Marine Reserves programme.*

### Further information

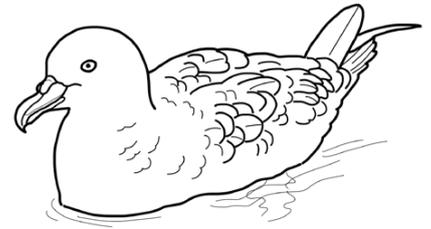
For additional resources to support teaching and learning in nature, visit DOC's conservation education webpage:  [www.doc.govt.nz/education](http://www.doc.govt.nz/education).

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

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



# Sea bird bingo



Find someone who:

<input type="checkbox"/> Has heard of ōi/grey-faced petrels  Name: .....	<input type="checkbox"/> Has seen a bird diving into the sea  Name: .....	<input type="checkbox"/> Can spell 'petrel'  Name: .....	<input type="checkbox"/> Can tell you something about ōi/grey-faced petrels  Name: .....
<input type="checkbox"/> Can explain what a seabird is  Name: .....	<input type="checkbox"/> Has visited an island where seabirds live  Name: .....	<input type="checkbox"/> Can name another seabird  Name: .....	<input type="checkbox"/> Has seen an ōi/ grey-faced petrel or a similar bird  Name: .....
<input type="checkbox"/> Has been in a forest  Name: .....	<input type="checkbox"/> Can tell you where you might see an ōi/grey- faced petres  Name: .....	<input type="checkbox"/> Can tell you the Māori name for grey-faced petrel  Name: .....	<input type="checkbox"/> Has seen a bird's burrow (or nest)  Name: .....



# Recording knowledge

Name: ..... Date: .....

What I already know about  
ōi/grey-faced petrels:

- 
- 
- 
- 

What would I like to find out  
about ōi/grey-faced petrels?

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- 
- 
- 

My picture of an ōi/grey-faced petrel (with labels)

