



**Southern Seabird  
Solutions**

**Lesson plan ideas for the Southern Seabird Solutions Trust  
fact sheet series**

Developed by Ken Hodson

## Table of Contents

Planning for a unit on seabirds	Page 3
Unit outlines	
Seabird ecology	Pages 4-6
Seabirds and people	Pages 6-11
Using poster carousels and dictoglosses in the classroom	Page 12
Activities	
What's in a word?	Pages 13-14
Seabird adaptations	Page 15
Know your nests	Pages 16-17
Dictoglosses	
Big birds	Pages 18-20
World travellers	Pages 21-23
Seabird parents	Pages 24-26
Appendix A - Science Assessment Resource Bank	Pages 27-31



Department of Conservation  
*Te Papa Atawhai*

*This project was funded through the Department of Conservation's Marine Conservation Unit.*

## Planning for a unit on seabirds

Participation in a study based on the Southern Seabird Solutions Trust fact sheets and plans enables teachers to meet the aims of the *Guidelines for Environmental Education in New Zealand Schools* (Ministry of Education, 1999) in the following ways:

### **Students learn *about* the environment, focusing on:**

- A local environmental issue – New Zealand seabirds and their habitats.
- A national environmental issue – endangered and at risk endemic species and the need for their protection.
- A global environmental issue – seabird migration and the impact human activity has on the mortality of seabirds.
- The social, ecological and economic factors that affect decision making about the natural environment.

### **Students learn how to protect (*for*) the environment, focusing on:**

- The exploration of the interaction of humans with seabirds and how human actions can be effective in protecting species of seabirds.

### **Students explore the following environmental education concepts:**

#### Biodiversity

- The impact of people on seabirds and their habitat.
- The vulnerability of endemic species to human impact.
- Interrelations in the biological world of seabirds.

#### Sustainability

- The effects humans have had and do have on the viability of seabird nesting sites.
- Ways that human use of the marine environment can become more sustainable.
- Ways humans can live more sustainably.

#### Interdependence

- The dependence of humans on the marine environment for food, income and leisure.
- The dependence of the well-being of seabird populations on the actions of humans.
- The dependence of NZ forests and agriculture on the nutrients seabirds brought from the sea to land in the past.

#### Personal and social responsibility for action

- Making personal choices and taking positive action to improve the chances of the survival of seabird species.
- Political and community based options for the protection of seabirds and the marine environment in general.

The sequence of activities and learning outcomes outlined in the unit plan can be altered to suit teachers' requirements. The unit plan allows for smaller units of work to be compiled from it. The dictoglosses provide material that includes all strands of the English curriculum and are included to support and reinforce the facts and ideas explored in the scientific activities outlined in the unit.

## Unit outlines

### Seabird ecology

Levels 3 and 4 Curriculum Area	Suggested Learning Outcomes	Suggested activities and reference to relevant fact sheets (#) and curricula links.
<p><i>Science</i> Achievement objectives</p> <p><u>Living world</u> Level 3:1 Distinguish between living things on the basis of differences established by investigating external characteristics.</p>	<p>Students will draw and label a seabird showing characteristics that help it survive at sea.</p> <p>Explain how a particular adaptation helps a seabird survive.</p>	<p>Students will explore the scientific concept of adaptation by first considering what it means to adapt to a situation. See <i>Birds Structure, Function, Adaptation Building Science Concepts</i>, Ministry of Education. This publication has useful information and activities related to adaptation.</p> <p>Students will investigate examples of adaptation in the animal kingdom by researching written material, including fact sheets 3 and 4. The National Aquarium’s website at <a href="http://www.nationalaquarium.co.nz/docs/programme/">www.nationalaquarium.co.nz/docs/programme/</a> has some useful information on adaptation and natural selection.</p> <p>Using a set of cards (refer to fact sheets for examples) each depicting a bird part, students will:</p> <ul style="list-style-type: none"> <li>✍ Make a bird that is capable of flying long distances using a minimum of energy.</li> <li>✍ Make a bird that is capable of swimming and diving under the water to catch fish.</li> <li>✍ Make a bird that is capable of diving from the sky into</li> </ul>

<p>Level 3: 3 Research and describe how some species have become extinct or are endangered.</p>	<p>Identify and discuss the meanings of, and differences between, <i>endangered</i> and <i>extinct</i>.</p>	<p>the water.</p> <p>After reading fact sheet 3, students could glue the parts of birds onto paper, then label and explain how the physical features in each represent an essential adaptation.</p> <p>Students will read fact sheets 3 and 4 on adaptation and use the information to complete an information table (blackline master included).</p> <p>See lesson plan at TKI (<a href="http://www.tki.org.nz/r/environ_ed/primary_units/endangered_e.php">www.tki.org.nz/r/environ_ed/primary_units/endangered_e.php</a>) and play “Guess the Word” game.</p> <p>See the Wellington Zoo website (<a href="http://www.wellingtonzoo.com/learn/teacher/species.html">www.wellingtonzoo.com/learn/teacher/species.html</a>) for definitions of extinct, endangered and vulnerable.</p> <p>Select a species of seabird and classify it according to the definitions found at the Wellington Zoo site. Present information to explain the classification and identify any threats to the species.</p>
<p>Level 3: 4 Explain, using information from personal observation and library research, where and how a range of familiar New Zealand plants and animals live.</p>	<p>Process information by listening to a talk, asking questions and completing a written task.</p> <p>Use library, internet, and other sources to research and present information in different ways.</p>	<p>Explore the concept of migration (fact sheet 6) by listening to a talk or reading facts about the migration of seabirds, then respond by completing a written task (including the dictogloss “World travellers” (pages 26-28 in this booklet). [<i>English</i>]</p> <p>Choose a species of seabird and research its life cycle from egg to breeding adult. Present an illustrated talk to a group or the</p>

<p>Level 4:1 Investigate and classify closely related living things on the basis of easily observable features.</p>	<p>Use similar physical characteristics of two or more seabirds to demonstrate understanding of the importance of those characteristics to the survival of seabirds.</p>	<p>class.</p> <p>Choreograph a small dance or present a short play that explains the life cycle of a particular seabird species. [<i>English</i> visual; oral; written. <i>The Arts</i>]</p> <p>Students will use specific information from the fact sheets and present a poster to other members of the class. (Poster Carousel: groups of students are given a short written description of an aspect of adaptation. See full description.)</p>
---	--	---

## Seabirds and people

<p><b>Science</b> Achievement objectives</p> <p><u>Living world</u> Level 3:3 - Research and describe how some species have become extinct or are endangered.</p> <p><u>Planet earth &amp; beyond</u> Level 3:4 Justify their personal involvements in a</p>	<p>Identify one (or more) species of seabird and explain what has led to it becoming rare or endangered.</p> <p>Possum Picnic was designed to introduce</p>	<p>Research key dates that humans and the predators they introduced arrived in New Zealand. Present findings using a time-line that is displayed in the classroom. Labelled drawings of seabird species can be added to the time-line next to the identified predators and human actions that impact on the birds (pairs or groups - refer to fact sheets 1 and 5).</p> <p>Play Possum Picnic (<a href="http://www.doc.govt.nz/templates/MultipageDocumentPage.aspx?id=40686">http://www.doc.govt.nz/templates/MultipageDocumentPage.aspx?id=40686</a>)</p>
--	---	---

<p>school or class initiated local environment project.</p>	<p>and reinforce ideas about the impact of introduced animal species but could also be used for introduced plant species and to show the relationships between living things in a community.</p> <p>Locate a seabird nesting site/colony near the school.</p> <p>Identify any dangers posed to the nesting of birds by humans or predators.</p>	<p>Use a map of NZ and islands to show the nesting sites of specific seabirds. Make a class map with the sites on it.</p> <p>Identify threats to a nesting site and come up with possible solutions to lessen the threat. Refer to fact sheets for information on threats.</p> <p>Make an action plan for ways that class and community members can preserve the nesting site.</p> <p>Design and make a poster that raises public awareness of the site and also informs viewers about ways of protecting it.</p> <p>Design an effective sign that warns people of the nesting site. [<i>English Visual Language</i>]</p>
<p>Level 4:4 Use simple food chains to explain the feeding relationships of familiar animals and plants, and investigate</p>	<p>Identify the components of the food chain that seabirds are part of.</p>	<p>Show how human generated pollution might affect the life of seabirds (fact sheet 4 - <i>Dangerous Meals</i>).</p> <p>In groups make a wall display.</p>

<p>effects of human intervention on these relationships.</p> <p><u>Planet earth &amp; beyond</u></p> <p>Level 4:4 Investigate a local community issue and explain the reasons for the community's involvement.</p> <p><i>Social Studies</i> Achievement Objectives</p>	<p>List the types of human interactions that might have an influence on the food chain of seabirds.</p> <p>Explain the importance and effectiveness of community involvement in environmental protection.</p> <p>Identify an issue and make an action plan for dealing with it.</p>	<p>Plastic Food (fact sheet 4) - Students write down the section <i>Plastic Food</i> as a dictation exercise. Students identify the sources of plastic that affect seabirds and suggest ways in which the plastic threat might be lessened.</p> <p>Collingwood (fact sheet 4) - Students are given a card with the information about the Golden Bay community of Collingwood on it.</p> <p>Students consider the size of the population of Collingwood (pop.250) and come up with a ratio (or write as a fraction) for bags per person.</p> <p>Students then choose cities/towns in New Zealand and suggest how many plastic bags per person are used in that place. (use Web search or atlas for pop. numbers)</p> <p>A card can be made to show how many bags each city/town produces annually. [<i>Mathematics Number</i>]</p> <p>Students identify an environmental issue in their own community and come up with an action plan that provides solutions for addressing it. [<i>Social Studies</i>]</p>
--	---	---

<p><u>Place and environment</u> Level 3 How different groups view and use places and the environment.</p>	<p>Identify and discuss the ways in which the sea is used by people.</p>	<p>Students think of different ways that people use the sea. They think/pair and share ideas with the class.</p> <p>Students listen to, share and independently read articles and books about the sea and the way people use it now and the ways they've used it in the past (fact sheets 9 and 10). <i>[English]</i></p> <p>Ask the question, "What occupations or jobs do people perform at sea?" The teacher can encourage students to think about fishers and scientists. Write an advertisement for a job related to the sea (fishing industry, conservation etc.)</p>
<p><u>Resources and economic activities</u>  Level 3 – Social organisation How and why people make and implement laws.</p>	<p>Understand that modern laws can incorporate the traditions of the past. Students will show an awareness of the use of symbols in Maori culture.</p>	<p>Students study fact sheet 10 and choose an area of interest for further research and study. <i>[English, #10]</i></p>
<p>Level 4 - How and why people exercise their rights and meet their responsibilities.</p>	<p>Show understanding of ways in which people mitigate, or lessen, the impact of their use of the sea as a resource.</p>	<p>Students draw and label all the methods of fishing they know about. Students then use research methods to find out about the types of fishing currently used and those used in the past. A class or group display is made of findings.</p> <p>Students list and explain, using diagrams, methods that lessen the chance of seabirds being caught on hooks or in nets.</p>

<p><b>Technology Capability</b> Level 3 - With reference to identified needs and opportunities, students will explore possible solutions and strategies, and select appropriate options, justifying their decisions.</p>	<p>Recognise that laws are made to protect the environment.</p> <p>Understand that scientists play an important role in the preservation of marine species.</p> <p>Understand that people can have an input into the law making process.</p> <p>Identify reasons why hooks might pose a danger to seabirds.</p>	<p>Students find out about New Zealand fisherman Chris Carey’s invention (fact sheet #9) the ‘flying bottlebrush’ or ‘carefree’s cunning contraption’ to scare seabirds away from fishing boat cables that could injure or kill them.</p> <p>Research how the law protects seabirds and present findings using a flow chart or other visual aid.</p> <p>Students pose questions about how scientists assist in the protection and preservation of species. Find answers to the questions using fact sheets, books, school journals, and the internet.</p> <p>Contact the Department of Conservation, Ministry of Fisheries, the New Zealand Seafood Industry Council, WWF-NZ and other organisations to find out how personnel contribute to the making of laws that help protect wildlife.</p> <p>Students investigate fishing methods at <a href="http://www.starfish.govt.nz">www.starfish.govt.nz</a>. In groups, or as a class, make a visual display about longline or trawl fishing (fact sheets 4 and 9).</p> <p>Students think about ways in which fishing boats accidentally catching seabirds can be lessened. Students design an apparatus that might protect birds from cables, longlines or other fishing apparatus that pose a threat to seabirds. (fact sheet 9 and <i>School Journal</i> 2:3:98 article Can it be a Gannet?) [Technology]</p>
--	---	--

		Design and make a 2 or 3 dimensional decoys that would be able to be used to try and attract a species of seabird to a site. (fact sheet 2) [ <i>Visual art</i> ]
--	--	---

## **Using poster carousels and dictoglosses in the classroom**

### **Poster Carousel**

Each group of students (4 or 5) is given a piece of written information about an aspect of a topic (e.g. some facts about the adaptation of seabirds).

Each group has 15-20 minutes to make a visual presentation (drawings and words) based only on the piece of writing they have been given.

Two students stay with each group's poster, while the others go to another group's site.

The students who stay with the poster give their 'visitors' an oral presentation using the poster they have made as a visual aid. The visitors should be encouraged to ask questions of the speakers.

After an allotted time the 'visitors' move to another group's site and the process is repeated. The session is finished when all sites have been visited.

The students who remain with the poster to deliver the talk stay in place and thus become better at their presentation each time.

As a reflective activity, students can be asked to record new knowledge they have gained. The students who gave the talks can record what went well and what could be done better next time.

### **Dictogloss**

These activities encourage learners to present information after listening to a short text (in this case a set of facts) based on a specific topic. Dictoglosses work well with groups of five or six students.

One person has the reading text, while the others in the group have a set of pages with gap filling and other written tasks to complete (the task sheets could be written onto the whiteboard for students to copy). The reader reads the text once while the students take mental or written notes. The reader then reads the text in its entirety once more. Students then complete the written tasks. They should be encouraged to ask the reader to re-read pertinent parts of the text, but not be shown the text to read themselves. In this way the group of students practise questioning as well as listening skills and hopefully discussion will be generated about the topic of the exercise within the group.

When students have completed the task it may be a good idea for teachers to go over any interesting points raised by the class and to clarify and reinforce the main points of each dictogloss.

## What's in a word?

Students complete the information transfer table. Information can be found in the introduction of the Southern Seabird Solutions Trust fact sheet series.

Fill in the gaps with the correct Maori, English/common, or scientific name as well as one interesting fact about the manu moana/seabird. You may choose three species to complete the empty boxes.

Scientific name	Maori name	English/common name	Interesting fact
	titi		
		northern royal albatross	
	toroa		
<i>Eudyptula minor</i>			Likes nest boxes people make for them.

Students consider and come up with answers to the question, “***In what ways do some manu moana/seabirds match their names?***” (e.g. sooty shearwater, little blue penguin). Why might this species have been given these names? Does this name have another meaning in Maori?

In all presentation of findings students should be encouraged to present data using the Maori as well as the English and/or scientific name for each species. This requirement could be included in the success criteria for tasks.

Students (in pairs) make a card/board game based on the names of manu moana/seabirds.

Students could make a set of cards (5 or 6) that have a question and a list of multiple choice answers on them. They could then get together with another pair and ask each other the questions.

A class set of cards could be made and a snakes and ladders board used to play an extended version. The cards could be put in a pile and each person/pair is asked a question. Correctly answering the question gives players the right to throw a die and move on the board appropriately.

Sample cards for word game:

Question: The common English name for parara is:

- a) Hutton's shearwater
- b) little blue penguin
- c) broad-billed prion
- d) wandering albatross

Question:

- a)
- b)
- c)
- d)

## Seabird adaptations

Use fact sheets 3 and 4 to fill in the table. Check the information carefully.

<b>Adapted body part</b>	<b>What it is adapted for</b>

## Know your nests

Use the table below to write information about the nests of seabirds. Use the fact sheets (particularly 1 and 2) to find the information. Check the facts carefully.

	<b>Features</b>	<b>Dangers</b>	<b>Location</b>	<b>How people can help</b>
<b>Colonial nesting</b>	Birds breed in the same place as others of their species. They often return to the same site and nest each breeding season.			
<b>Burrow nesting</b>		Predators such as dogs and cats might dig up the burrow to get at the chicks.		
<b>Camouflage</b>			In the sand at beaches.	
<b>Cliffs</b>				Stay away from places where birds are nesting.

Student copy

## Know your nests

	<b>Features</b>	<b>Dangers</b>	<b>Location</b>	<b>How people can help</b>
<b>Colonial nesting</b>	Birds breed in the same place as others of their species. They often return to the same site and nest each breeding season.	Predators and humans might affect many birds at the same site.	New Zealand's remote islands and coastal bluffs.	Reduce the numbers of predators. Scientists and conservationists are sometimes involved in trying to establish new colonies.
<b>Burrow nesting</b>	The nests are under the ground. Some burrows have tunnels that lead to a dry nest chamber. Some birds burrow under houses.	Predators such as dogs and cats might dig up the burrow to get at the chicks.	New Zealand islands and mainland.	Build and look after nesting boxes for little blue penguins. Stay away from known nesting sites. Keep dogs away from nesting sites.
<b>Camouflage</b>	Eggs can be the same colour as the sand they are laid in. Sometimes camouflage is all that protects the eggs and chicks.	Humans can easily trample on eggs or drive over the nests. Predators can easily access the nests. Big storms can destroy nests.	In the sand at beaches.	Be careful when walking on beaches. Stay away from places where birds are nesting. Don't drive on beaches. Keep dogs on leads at the beach.
<b>Cliffs</b>	Some seabirds lay their eggs on the edge of a steep cliff. Some birds can easily begin flying from a cliff.	Can be hazardous for chicks and fledglings that haven't learned to fly.	At the edge of steep cliffs.	Stay away from places where birds are nesting.

Teachers copy/markings sheet. Answers will vary.

## Big birds dictogloss

### Card A

#### Instructions

Listen to the talk about the wandering albatross. You may want to listen to the talk again as you answer the questions and fill in the gaps on the pages.

#### Big birds

##### Do you know?

1. The wandering albatross is more than a metre long. It uses dynamic soaring and slope soaring to cover great distances with little exertion. This means it can fly a long way without using lots of energy.
2. Wandering albatrosses hunt squid and fish, but they also eat whatever else is available, including other seabirds. Sometimes they will eat refuse thrown from boats.
3. Most wandering albatrosses are more than eight years old before they start breeding. They find a mate that they stay with for the rest of their lives.
4. Nests are made on flat ground that is near a ridge or cliff. This means that the birds can walk to a place that they can take off from into the air. The nests are a hollow cone of peat and grass that the birds make.
5. Breeding takes place every second year, and the pairs of birds return to the same place each year to breed. Only one egg is laid. The parents take turns looking after the egg and chick. The chicks fly away from their nest when they are about 278 days old.
6. One threat to these birds is surface longline fishing. The wandering albatrosses try to feed on the bait on the hooks. Once caught on the hooks they can drown. New Zealand fishermen and other fishermen around the world are using techniques to reduce the number of birds that are killed this way. One technique is to scare the birds away from the longlines by flying streamers above the lines. Called "tori lines" the streamers act like a scarecrow at sea.

## Big birds dictogloss

### Card B

#### Instructions

Listen to the talk. Fill in the information table.

Big birds	Wandering _____ are over ____ _____.
Awesome in the air	They are able to _____ a long way but don't _____ to use _____.
Where wandering albatrosses find their food	The main foods are _____. They _____.
The places that wandering albatrosses nest	
About breeding and chicks	
Other interesting information	

Students could compare their information with other students if they are doing the dictogloss as a class exercise.

## Big birds dictogloss

### Card C

Now write four interesting facts about wandering albatrosses. Use the answers that you wrote on Card B or talk to people in your group. Don't forget to write a title.

---

Today, I heard four interesting facts about the wandering albatross.

First, \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

Second, \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## World travellers dictogloss

### Card A

#### Instructions

Listen to the talk about the migration of seabirds. You may want to listen to the talk again as you answer the questions and fill in the gaps on the pages.

#### World travellers

##### Do you know?

1. The majority of New Zealand's birds are seabirds, waders or freshwater birds. Many of them are long-distance migrants – each year they fly away from New Zealand to other places in the world. Most return in time for the breeding season when they make nests and raise chicks that will also become migratory seabirds.
2. Animals usually migrate seasonally following food sources and weather patterns. New Zealand has 85 species of seabirds that nest on the mainland and offshore islands. Some of these seabirds stay in New Zealand waters year-round, others migrate and only return to New Zealand to breed.
3. There are some seabird species that we know very little about. But electronic tracking tags are helping scientists learn more about some seabirds and other migrating animals. By attaching tracking tags to certain species of seabirds, scientists have confirmed that many oceanic seabirds spend up to 90 per cent of their lives at sea.
4. Satellite tracking devices attach to a seabird's feathers between its wings. The device is attached so that it can shed off when the bird moults. The tracking device allows people to learn about a seabird's movement via satellite transmission.
5. Scientists recently used tracking tags to track 19 titi (sooty shearwaters) from two different breeding colonies in New Zealand. The birds each travelled an average of 64,000 kilometres in less than a year--the longest recorded migration of any animal ever tracked! The tracked sooty shearwaters flew across the entire Pacific Ocean, from Antarctic waters to the Bering Sea and from Japan to Chile.
6. Even though scientists know where many seabirds migrate to, the movements of all of them are not exactly known. Seabirds can be helped to survive their long migrations when scientists know exactly where they go, as they can check to see if predators and human activities are a problem at places the birds visit.

## World travellers dictogloss

### Card B

#### Instructions

Listen to the talk. Fill in the information table.

Going to different places	When animals _____ to a different _____ to follow food or _____ they are m_____.
The return	Many _____ that migrate to other _____ of the _____ only return to New Zealand to _____ and raise their _____.
The longest migration	Nineteen sooty _____ each flew more than _____ kms in a _____. This is the _____ recorded _____ of any animal.
All about satellite tagging	
How tagging helps	
Other interesting information	

Students could compare their information with other students if they are doing the dictogloss as a class exercise.

## World travellers dictogloss

### Card C

Now write four interesting facts about seabird migration. Use the answers that you wrote on Card B or talk to people in your group. Don't forget to write a title and fully explain your ideas.

---

Today, I heard four interesting facts about seabird migration.

First, \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Second, \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Seabird parents dictogloss

### Card A

#### Instructions

Listen to the talk about how seabirds breed. You may want to listen to the talk again as you answer the questions and fill in the gaps on the pages.

#### Seabird parents

##### Do you know?

1. Many seabird parents share the responsibility of raising their young. They take turns foraging at sea and staying at the nest to incubate the eggs and guard the young chicks.
2. Shag, gull and tern parents take short trips in search of food and relieve each other of nest duty on at least a daily basis. Other seabirds may go out to sea in search of food for up to two weeks before they return to take over guarding the nest.
3. Albatrosses, shearwaters and petrels all belong to the Procellariiforme (Pro-cell-ar-ii-forme) family. The long-lived seabirds in this family are often slow breeders. Some do not breed until they are at least four years old and some like the giant petrel and several albatrosses may not breed until they are about 10 years old. That isn't old for humans, but compared to other birds that's ancient!
4. Procellariiformes only lay one egg. The parents take turns incubating the egg. When it hatches the parents continue taking turns guarding the chick until it's old enough to be left alone. As the chick gets older it needs more and more food so both parents need to leave the nest for extended periods of time to search for enough food to feed themselves and their growing chick.
5. If something happens to one of the parents during the breeding season it can mean that both the chick and even the other parent could die. It takes so much energy to raise a chick that both parents need to be involved the whole time.

## Seabird parents dictogloss

### Card B

#### Instructions

Listen to the talk. Fill in the information table.

Foragers	Both seabird _____ raise the _____ birds. While one goes to find _____, the other _____ at the _____ to look after the _____.
See you later!	Some seabirds go _____ to _____ for up to _____ days, while others return to the _____ at least _____ a _____.
Many seabirds in the Procellariiforme family are slow breeders	Some of these _____ wait until they are _____ old before they _____. Then they only _____ one _____.
Why older chicks are left home alone	
Two parents are important for chicks	
Other interesting information	

Students could compare their information with other students if they are doing the dictogloss as a class exercise.

## Seabird parents dictogloss

### Card C

Now write four interesting facts about seabird parents. Use the answers that you wrote on Card B or talk to people in your group. Don't forget to write a title and fully explain your ideas.

---

Today, I heard four interesting facts about seabird parents.

First, \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

Second, \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Appendix A

### Science Assessment Resource Bank

#### Adaptation

Strand	Objective	Level	Int. strand	Resource type	Diag. Info.	Description/Key words
--------	-----------	-------	-------------	---------------	-------------	-----------------------

#### LW 0630

LW	OB2	3	Prac	No	<p>This practical task assesses students' understanding of adaptation and why birds have different structures that help them to survive in the wild. Students are asked to explain what problems four different birds would have when in a different environment.</p> <p><i>Keywords</i> (native birds; adaptation; habitat)</p> <p><i>Publication date</i> (12/06/03)</p>
----	-----	---	------	----	--

#### LW 0624

LW	OB2	4	bcr	No	<p>Students are given some information about the habitat and adaptations of a mythical animal. They are required to draw a diagram of what this animal might look like.</p> <p><i>Keywords</i> (animals; adaptation)</p> <p><i>Publication date</i> (03/02/03)</p>
----	-----	---	-----	----	--

#### LW0616

LW	OB2	4	bcr	No	<p>Pictures are given of the life cycles of three different animals (hawk, turtle and deer). Students identify which stage the animal's survival is most in danger and give explanation of why it is not safe. Students also give one special feature that helps this animal survive at this time.</p> <p><i>Keywords</i> (survival; adaptation; life cycle)</p> <p><i>Publication date</i> (15/11/01)</p>
----	-----	---	-----	----	--

**LW 0615**

LW	OB2	4	PI	lcr	No	<p>Students are provided with a description of an animal and are asked to draw a diagram labelling five body parts giving an explanation of how each body part fits the description of the animal. An example has been done to show students how to approach this task.</p> <p><i>Keywords</i> (animals; adaptation)</p> <p><i>Publication date</i> (14/11/01)</p>
----	-----	---	----	-----	----	--

**LW 0576**

LW	OB2	4	PI	lcr	No	<p>Students are given a description of an animal and some of its adaptations. Using this description they are required to draw, label, and explain what such an animal could be like.</p> <p><i>Keywords</i> (animals; adaptation)</p> <p><i>Publication date</i> (12/10/99)</p>
----	-----	---	----	-----	----	--

**LW 0501**

LW	OB2	3	PI	bcr	No	<i>Keywords</i> (adaptation; classification; birds; native birds)
----	-----	---	----	-----	----	---

**LW 0537**

LW	OB2	4	PI	sr	No	<i>Keywords</i> (adaptation; birds; beaks; scientific observations)
----	-----	---	----	----	----	---

**LW 0524**

LW	OB2	3	PI	bcr	No	<p>Task: students explain links between a bird's feet and its lifestyle.</p> <p><i>Keywords</i> (adaptation; birds; feet)</p> <p><i>Publication date</i> (05/02/98)</p>
----	-----	---	----	-----	----	---

**LW 0559**

OB2	3	NoS	lcr	Yes		Task: Complete chart to show how birds' feet and beaks are suitably adapted for their particular food and environment.
-----	---	-----	-----	-----	--	--

					<p>Assessment focus: inference.</p> <p><i>Keywords</i> (adaptations; birds; feet; beaks)</p> <p><i>Publication date</i> (13/03/06)</p>
--	--	--	--	--	--

**LW 2016**

OB4	4	PI	bcr	Yes	<p>Task: Match descriptions of kingfishers to their likely diet, and answer questions about food chains. Assessment focus: interpretation of text and pie graphs; conventions <b>of food chains</b>.</p> <p><i>Keywords</i> (birds; kingfishers; diet; food chains; graph interpretation)</p> <p><i>Publication date</i> (07/06/06)</p>
-----	---	----	-----	-----	---

**Endangered Species**

**LW 2042**

OB4	3	IG/RPT	Prac	No	<p>For this assessment task students are required to complete a chart by summarising information on the hoiho (yellow-eyed penguin) from different sources.</p> <p><i>Keywords</i> (hoiho; native birds; endangered species; website; penguins)</p> <p><i>Publication date</i> (08/08/01)</p>
-----	---	--------	------	----	---

**NB** The KCC (Kiwi Conservation Club) website has fact sheets and activities on other birds including albatross.

**LW 2005**

OB4	4		bcr	No	<p>Students explain six things that would be needed to set up and maintain an offshore island habitat for endangered birds.</p> <p><i>Keywords</i> (species; endangered species; native birds)</p> <p><i>Publication date</i> (12/02/98)</p>
-----	---	--	-----	----	--

**LW1052**

OB3	3		bcr	No	<p>Students design and draw a postage stamp to illustrate an endangered New Zealand bird. Then they write a paragraph about why this bird is</p>
-----	---	--	-----	----	--

					<p>endangered.</p> <p><i>Keywords</i> (endangered species; native birds)</p> <p><i>Publication date</i> (16/05/02)</p>
--	--	--	--	--	--

**LW 1051**

OB3	3	bcr	No	<p>This resource assesses students' ability to understand an article on animal pests and their effect on native birds. Students read the newspaper article and then answer questions about this.</p> <p><i>Keywords</i> (endangered species; native birds; animal pests)</p> <p><i>Publication date</i> (16/05/02)</p>
-----	---	-----	----	--

**LW1023**

OB3	3	bcr	Yes	<p>Students give two pieces of information a scientist could learn from placing bands on the legs of birds.</p> <p><i>Keywords</i> (birds; endangered species; banding)</p> <p><i>Publication date</i> (12/08/99)</p>
-----	---	-----	-----	---

**LW 1018**

OB3	3	PI	bcr	No	<p>Students are provided with a graph of lizard numbers on an island. They answer three questions about this graph.</p> <p><i>Keywords</i> (endangered species; graph interpretation; lizards; rats)</p> <p><i>Publication date</i> (21/07/99)</p>
-----	---	----	-----	----	--

**LW 1017**

OB3	3	bcr	No	<p>Students give reasons for and against saving endangered animals or plants.</p> <p><i>Keywords</i> (endangered species)</p> <p><i>Publication date</i> (21/07/99)</p>
-----	---	-----	----	---

**LW 1013**

OB3	3	-	bcr	Yes	Students explain the terms endangered and extinct. Students give two examples of animals that are endangered and give reasons for why these animal numbers have declined.  <i>Keywords</i> (endangered species; extinction)  <i>Publication date</i> (30/11/98)
-----	---	---	-----	-----	---

**LW 1019**

OB3	3	PI	bcr	No	Students answer three questions about data contained in pie graphs about the food wild cats eat.  <i>Keywords</i> (graph interpretation; wild cats; conservation)  <i>Publication date</i> (21/07/99)
-----	---	----	-----	----	---