Royal Albatross Centre Education

Conservation Management of Seabirds

A Biology Programme for
Secondary Students
at the **Royal Albatross Centre**

Student Work Sheets

2024

Conservation Management
of the Northern Royal Albatross

Programme Focus
– to look at the 3 main concepts of conservation management.

Protection = aspects that minimize detrimental human effects

Enhancement = aspects that improve on nature

Monitoring = regular checks to monitor bird health and determine long-term trends

What are the threats facing albatross?

Why is Taiaroa Head an important site for the Northern Royal Albatross ?

Monitoring
– regular checks to determine long term trends

Department of Conservation Rangers monitor the Royal Albatross at Taiaroa Head - **LOOK OUT THE WINDOW AND RECORD WHAT YOU SEE.**

Date:	Time:	Observer:

Weather
% cloud cover: _____ Wind direction: _____ Wind Speed: _____
Precipitation: _____ Temperature: _____

Nest number	**Chick age and behaviours observed**	**Adults present (identify colour bands) and behaviours observed**
1.		
2.		
3.		
4.		

Notes (e.g. other wildlife observed, traps for pest species observed):

LOOK AT THE DOC MONITORING CHART ON THE WALL AND ANSWER THE QUESTONS BELOW…

How many pairs returned to this side of the headland to breed this year?

What are the weights of the chicks?

How old is the oldest breeding bird?

How old is the youngest breeding bird?

What animals are being trapped and why?

DOC's main objective is to increase the number of chicks fledging. Good conservation management depends on good baseline data. What are the problems associated with collecting extensive baseline data on Royal Albatross?

Research programmes in combination with the monitoring activity is very important to help the survival of the Albatross. Look around for evidence of a research project that is presently being carried out.

One of the ways that the DOC rangers monitor the health of the chicks is to weigh them - two to three times per day during the guard stage to once a week until fledging (chick permitting).

Weight the chick models to find out what the average weight is for the different stages of growth.

Albatross Growth

Age	**Weight** (grams)
Chick – Newly hatched	
Chick - 2 weeks	
Chick - 5 weeks	
Chick - 3 months	
Adult – feeding a 3 month chick	

Enhancement – aspects that improve on nature

1. Use lines to match up the intervention method with the effect of that technique. **There maybe more than one answer for each method.**

Intervention Methods	*Effect of these Methods*
1. **Dummy Eggs**	A. Used to reduce visual disturbance to nesting birds (evident in long term data showing changes in where juveniles display).
2. Revegetation	B. Weekly monitoring of eggs and chicks to check on their health, parent presence and nesting behaviour.
3. Incubator	C. Hand removal of maggots before they enter the body.
4. Nest Checks	D. Birds that do not succeed in their first flight and are unhurt are returned to the colony for a second try.
5. Fostering	E. Used to control access of humans and canines to the nesting area.
6. Flight Rescue	F. Used to keep a reliable record of bird presence, breeding attempts, family history and immigrants to the population.
7. Supplementary Food	G. Used to hold pairs at nest, after something has happened to their egg, as training tool for birds who break eggs.
8. Trapping	H. Hay bales around nest to protect young chicks from bad weather, shade in hot weather, spray water at nest site.
9. Security Fence	I. Used to control bronchial infections, treat fungal and bacterial infections, and wounds from bites.
10. Window Tinting/Double Glazing	J. Deserted eggs or chicks are placed in the nest of pairs who have lost their offspring or are more reliable parents.
11. Banding	K. Chicks are hatched in an environment where fly strike risk is reduced and placed back in nest 3-5 days later. Parents incubate dummy eggs temporarily.
12. Drug Treatment	L. Used to control or eradicate introduced pests (blowflys) and predators (cats, stoats) that affect survival of eggs and young.
13. Manual Treatment	M. Introduction of native plants to increase moisture in soil, more shade and nesting material available. Removal of introduced plants like thistles, may decrease blowflies.
14. Microhabitat Manipulation	N. Chicks fed by wildlife rangers when parents do not return.
15. Trail Camera	O. Particular nests or chicks that need extra monitoring by use of nest site cameras, perhaps if a parent is suspected missing.

1. Outline any negative aspects to these management techniques?

2. How can the rangers tell if the birds are stressed?

3.Do you think these enhancement techniques should be used to increase the fledging rate of Royal Albatross at Taiaroa Head?

- *Management has increased the fledging rate by ~20%*
- *Of those chicks in managed colonies: 75% of non-managed offspring survive to 5 years, only 60% of those that are managed survive to 5 years but those managed chicks may not have survive without any intervention.*

What would happen if?

Protection = aspects that minimise detrimental human impacts

Method:

1. In groups of 2 or 3 people review the "What would happen if…" scenarios you have been given. Record them in the first column of the table below and the complete.
2. Report you ideas to the class during discussion.

What would happen if…	Impact	Management Techniques	How can YOU help prevent it happening or help with the management of the situation?