

## Our Changing World (Reading): Unit Standard 17363

### Controlling Animal Pests in New Zealand

Adapted from the text 'Controlling Animal Pests in New Zealand' by Dave Galloway and Richard Gribble, in *e-vibe* Environmental Education Newsletter, No 10, May, 2005.

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NCEA LEVEL 3	
Unit Standard	Performance Criteria
Unit standard 17363, version 3 Read independently information texts (ESOL) Range: at least three complete texts, each from a separate context.	1.1 The topic of each text is identified from the layout, headings, and graphics. 1.2 Specific sections of each text are located. 1.3 Any abbreviations used are interpreted to demonstrate understanding of their meaning. 1.4 Main ideas in each text are identified and linked to subordinate ideas. 1.5 Understanding is demonstrated of essential vocabulary within each text. Range: at least ten vocabulary items – meaning, grammatical form. 1.6 The effect on meaning of at least three cohesive devices is demonstrated. Range: cohesive devices may include but are not limited to – conjunctions, personal pronouns, demonstrative pronouns, articles.

## **RESOURCES**

Other assessment activities for unit standard 17363:

- 'Our Changing World' (Reading): The Secret Life of Estuaries
- 'Our Changing World' (Reading): Marine worms: The Weird and the Wonderful

Assessment activities, for other unit standards, that could be used in conjunction with unit standard 17363:

- Listening: 'Our Changing World' (unit standard 15009)
- Speaking: 'Our Changing World' (unit standard 17142)
- Writing: 'Our Changing World' (unit standard 17144)

Teacher sheet: Task 3

**'Controlling Animal Pests in New Zealand'** by *Dave Galloway & Richard Gribble*.

<b>Unit standard 17363, version 3</b>	
<b>Read independently information texts (ESOL)</b>	
<b>Level 3</b>	<b>5 Credits</b>
This unit standard has one element:	
<b>Element 1</b> - Students must show that they can read at least <b>three</b> complete information texts, each from a separate context.	
<b>This is ONE of three reading assessments needed to complete the standard.</b>	
<b>Conditions</b>	
<ul style="list-style-type: none"><li>• Student responses may be oral or written.</li><li>• Written responses need not be grammatically correct, but errors must not interfere with meaning.</li><li>• Assistance may be given to understand the requirements of the task.</li><li>• Students may use an English dictionary but not an electronic translator.</li></ul>	
<b>Learning contexts</b>	
The <i>English Language Intensive Programme</i> (ELIP) Stage 3, has suggested teaching components, strategies, language features and sample texts on information report genre: 'Weta' (2c); The Planets (2d); 'Athens' (13c) and 'The Walrus' (13d).	
<b>Notes for Assessors</b>	
<ul style="list-style-type: none"><li>• It is important to be aware of the special notes in the standard.</li><li>• Each of the three texts should be assessed at a different time as part of a wider area of study.</li><li>• This assessment activity should follow class activities in which the students have had the opportunity to become familiar with the topic through a range of listening, speaking, reading and writing activities. The context and vocabulary should be familiar to the students.</li><li>• The question types should also be familiar to the students and this can be achieved by including similar question types in the formative work.</li><li>• Students should not have seen the text before the assessment activity.</li><li>• If resubmission takes place, the assessor should ensure that the correct answers are not inadvertently indicated when scripts are returned. For example, in a true or false exercise, it would be inappropriate to indicate which ones were correct on the student's script.</li><li>• Question 1 is a prediction exercise that must be completed before the students see the text. It cannot therefore be resubmitted once students have read the complete text.</li></ul>	

Student Sheet: Task 3

**Unit standard 17363, version 3**  
**Read independently information texts (ESOL)**

**Level 2**

**5 Credits**

Element 1: Task 2

Name: \_\_\_\_\_

Date: \_\_\_\_\_

- Do this activity in class.
- You may ask the teacher to explain the instructions.
- You may use an English dictionary **but not** an electronic translator.
- Your spelling and grammar do not need to be perfect but your teacher needs to be able to understand what you mean.

**Student checklist**

In this assessment task you will need to show that you can do the following.

Say what you think the topic of the text is by using the layout, headings and graphics to help you predict.	1.1
Find specific parts of the text and know what they will be about.	1.2
Understand what the abbreviations in the text mean.	1.3
Find the main ideas in the text and link them with supporting ideas.	1.4
Understand the meaning and grammatical form of ten important words in the text.	1.5
Understand how cohesive devices (such as conjunctions, pronouns and word chains) affect meaning in the text. Conjunctions e.g. <b>However</b> , <i>it once had a very bad rat problem.</i> Pronouns e.g. <b>It</b> <i>is a very beautiful place.</i> Word chains e.g. <b>Glaciers</b> <i>are found in ... These frozen rivers.</i>	1.6

### Text for question 1a and b

New Zealand has a number of non-native animal, bird and insect species that are now considered pests.



They affect humans and the environment in a number of ways.

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Twelve species or groups of species are declared pests in the Regional Pest Management strategy. They are:

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### An Animal control success story



Rat

### *Fascinating facts*

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Student sheet: Task 3

**Assessment for unit standard 17363, version 3**  
**Read independently information texts (ESOL)**  
**Level 3** **5 credits**

Name ..... Date.....

**1. Identifying the topic of the text (1.1)**

Before you read the text, look at the layout, headings and graphics.

Complete the sentence to show what you think the text will be about.

1a. I think the text will be about \_\_\_\_\_  
\_\_\_\_\_

1b. Identify headings, layout features and graphics that you used to predict the topic:

Headings: \_\_\_\_\_

Layout features: \_\_\_\_\_

Photos: \_\_\_\_\_

When you have finished give this first page to your teacher so that you can receive the rest of the assessment.

## **‘Controlling Animal Pests in New Zealand’**

by Dave Galloway & Richard Gribble (Adapted from *e-vibe* environmental education newsletter, No.10, May, 2005).

- 1 New Zealand has a number of non-native animal, bird and insect species that are now considered pests.



They affect humans and threaten the environment in a number of ways.

- Browsing or grazing on native plants or pasture
- Competing with our native bird species for territory, food, roost sites etc.
- Feeding on our native birds, bats and insects
- Spreading diseases, such as bovine tuberculosis
- Creating a nuisance in recreational areas

Many of these animal pests have been in New Zealand for a long time and their impact is now well known. It is ironic that most were introduced for beneficial reasons.

- 2 Twelve species or groups of species are declared pests in the Regional Pest Management strategy. They are:

- Magpie and Myna
- Mustelids: Ferret, Stoat and Weasel
- Wasps: Common wasp, Asian paper wasp, Australian paper wasp and German wasp
- Wallabies: Darna, Swamp, Brush tailed Rock & Parma
- Rats: Norway, Ship and Kiore

For some other animals, for example Eastern Rosella, Sulphur crested Cockatoo, Spur-winged Plover, feral pigs and Rainbow skinks, we don't know what their impact is, or the most effective means of control. In Auckland, the regional council is carrying out research on these animals.

- 3 The ARC mainly does animal control work in areas of high environmental or conservation value. At present most control work is done to prevent damage caused by possums and goats.

The ARC also provides assistance, advice and information to Community and Care groups who wish to undertake pest control work.

- 4 **Animals declared as pests in the Regional Pest Management Strategy cannot be bred, sold, given away or exhibited.**

### **An Animal control success story**

- 5 Rakino Island in the Hauraki Gulf is a popular holiday destination. It is a very beautiful place with pohutukawa growing along the coastline and cattle grazing the farmland. However, it once had a very bad rat problem. Rats destroy native seedlings, bird's eggs and chicks and cause a nuisance around people's homes.



Rat

- 6 In 2002, the Auckland Regional Council with assistance from the Department of Conservation and local residents decided to remove rats from Rakino island. They wanted to restore the island's native plants and animals.
- 7 Norway rats (*Rattus norvegicus*) have been controlled in the past but programmes have not always been successful. Anti-poison views, poor co-ordination, erratic bait replenishment and poor seasonal timing have been some of the reasons for failure.
- 8 The 2002 programme began in Autumn and continued throughout the winter months. It required setting a total of 750 bait stations across the

whole of the island on a 50x50 m grid. Bait stations were also put around the coastal cliffs and on rocks. The common rat bait called Brodifacoum was used.

- 9 Because the paddocks were being grazed, any bait stations used in paddocks were buried so that cattle wouldn't interfere with them. The bait stations were refilled every three weeks until bait take stopped.
- 10 Getting support from local landowners and providing information is critical for any animal control programme. All landowners on Rakino were contacted, an article was put into the local newsletter and advertising signs were placed around the island.
- 11 The programme was monitored by DOC in 2003. This was done by using tracking tunnels at 37 key sites across the island. No rats were found which was a fantastic result.
- 12 ***Fascinating facts***
  - *At least 32 species of introduced mammals are living wild in New Zealand*
  - *Stoats and weasels were introduced in the 1880s to control rabbits (although they quickly spread to forests and became a serious threat to native birds).*
  - *1080 is a chemical that is naturally occurring in many Australian plant species where it acts as a defence against possum browsing.*
  - *There are no possums or mustelids (stoats, weasels or ferrets) on Great Barrier Island.*
  - *Mice mature at 8 weeks old and then produce litters every 20-30 days.*
  - *Both deer and goats have strong food preferences, so that even at low density they can eliminate their most favoured food species from a forest.*

669 words

Student sheet: Task 3

<b>Assessment for unit standard 17363, version 3</b> <b>Read independently information texts (ESOL)</b>	
<b>Level 3</b>	<b>5 credits</b>

Name ..... Date.....

Read the text and answer the following questions:

**2. Locating specific sections of text (1.2).**

Skim the text to find the paragraph that has the following information. Write the paragraph number in the table. One of these has been done for you.

i	The decision by the Auckland Regional Council to remove rats from Rakino Island.	
ii	A list of animals and insects that have been declared as pests.	2
iii	Interesting information about a number of different pests.	
iv	The work of the ARC.	
v	The damage done by pests.	

**3. Interpreting abbreviations in the text (1.3).**

Write the full meaning of these abbreviations in the text.

a) A.R.C. \_\_\_\_\_

b) 50 x 50 m. \_\_\_\_\_

c) D.O.C. \_\_\_\_\_

#### 4. Identifying the main idea and linking to supporting ideas (1.4).

4a. Read the ideas below and tick 5 that are main ideas in the text. One has been done for you.

i. To make sure an animal programme works, it is very important to get support from local landowners by providing them with information.	
ii. There are many non-native animals, birds and insects in New Zealand that are now considered pests.	√
iii. The ARC can also give help groups who are interested in pest control.	
iv. The Auckland Regional Council, the Department of Conservation and local residents decided to remove rats from Rakino island in 2002.	
v. Programmes to remove the Norway rat have not always been successful.	
vi. It has wonderful scenery, with pohutukawas on the coastline as well as farmland.	
vii. The Regional Pest Management strategy has published a list of pests.	

4b. Now put the four main ideas you chose in Question 4a into the correct places in the table below. The first one has been done for you.

Main Idea	Supporting ideas
<p>i) There are many non-native animals, birds and insects in New Zealand that are now considered pests.</p>	<p>These pests can harm humans by spreading diseases and creating a nuisance. They can affect our environment by damaging plants and killing native birds etc.</p> <p>Because these pests were introduced to New Zealand a long time ago, we know the damage that they do.</p>
<p>ii)</p>	<p>They are:</p> <ul style="list-style-type: none"> <li>• Magpie and Myna</li> <li>• Mustelids: Ferret, Stoat and Weasel</li> <li>• Wasps: Common wasp, Asian paper wasp, Australian paper wasp and German wasp</li> <li>• Wallabies: Darma, Swamp, Brush tailed Rock &amp; Parma</li> <li>• Rats: Norway, Ship and Kiore</li> </ul>
<p>iii)</p>	<p>Their wish was to return the island to how it used to be with native plants and animals.</p>
<p>iv)</p>	<p>There are several reasons for past failures. These include residents against the use of poisons, ineffective leadership, and the wrong time of the year.</p>
<p>v)</p>	<p>They did this by making all landowners aware of what was happening through newspaper articles and advertising signs.</p>

## 5. Understanding the vocabulary in the text (1.5).

strategy/strategies

nuisance/nuisances

declaring/declared

monitored/monitoring

grazed/grazing

introduced/introducing

competed/competes

impacting/impact

control/controls

assist/assistance

5a. Choose words from the box above that match the meaning and part of speech of the words in bold in the sentences below (You will not need to use all the words and phrases in the box).

- i) It had a strong \_\_\_\_\_ (**effect**) on the situation.
- ii) It was \_\_\_\_\_ (**announced**) that the ARC would control the list of pests.
- iii) The pasture and native plants were being \_\_\_\_\_ (**eaten**) by pests.
- iv) Many \_\_\_\_\_ (**plans**) have been thought up by councils to get rid of pests.
- v) Councils want to \_\_\_\_\_ (**help**) other organisations in the fight against pests.
- vi) \_\_\_\_\_ (**Bringing**) opossums into New Zealand from Australia was a very bad idea.
- vii) DOC was \_\_\_\_\_ (**checking**) how effective the programme was.

5b. Use your dictionary to find another word or phrase with the same meaning and the same grammatical form as the bolded words in brackets below. You may need to change the grammatical form of the word or phrases to fit the sentence.

- i) We don't know what their impact is, or the most (**effective**) \_\_\_\_\_ means of control.
- ii) Rats (**destroy**) \_\_\_\_\_ birds' eggs and chicks.
- iii) They wanted to (**restore**) \_\_\_\_\_ the island's native plants and animals.
- iv) Providing information is (**critical**) \_\_\_\_\_ for any animal control programme
- v) Stoats and weasels were introduced in the 1880s and quickly became a serious (**threat**) \_\_\_\_\_ to native birds.

## 6. Understanding the effect on meaning of cohesive links in the text (1.6)

1	Rakino Island in the Hauraki Gulf is a popular holiday destination. <b>It</b> is a
2	very beautiful place with pohutukawa growing along the coastline and
3	cattle grazing the farmland. <u>However</u> , it once had a very bad rat problem.
4	Rats destroy native seedlings, bird's eggs and chicks and cause a
5	nuisance around people's homes.
6	Norway rats ( <i>Rattus norvegicus</i> ) have been controlled in the past <u>but</u>
7	programmes have not always been successful. Anti-poison views, poor
8	co-ordination, erratic bait replenishment and poor seasonal timing have
9	been some of the reasons for failure.
10	The 2002 programme began in Autumn and continued throughout the
11	winter months. <b>It</b> required setting a total of 750 bait stations across the
12	whole of the island on a 50x50 m grid. <u>Also</u> , bait stations were put
13	around the coastal cliffs and on rocks.
14	<u>Because</u> of the paddocks being grazed, any bait stations used in
15	paddocks were buried so that cattle wouldn't interfere with <b>them</b> .
16	The programme was monitored by DOC in 2003. <b>This</b> was done by
17	using tracking tunnels at 37 key sites across the island. No rats were
18	found which was a fantastic result.

**6a) Grammatical cohesion: Pronouns**

Find the pronouns in bold in the text above and write the noun or phrase they refer to.

i) It (line 1) \_\_\_\_\_

ii) It (line 11) \_\_\_\_\_

ii) them (line 15) \_\_\_\_\_

iii) this (line 16) \_\_\_\_\_

**6b) Grammatical cohesion: Linking words**

The linking words underlined in the text above join pieces of information together.

Giving a reason	Adding more information	Giving a contrasting idea
as a result	as well	whereas
as a consequence	in addition	in spite of this
consequently	another	but
		although

Replace the linking words in the text with a suitable one from the box above. You must make sure it can fit into the sentence in the text.

i) however (line 3) \_\_\_\_\_

ii) but (line 6) \_\_\_\_\_

iii) also (line 12) \_\_\_\_\_

iv) because (line 14) \_\_\_\_\_

**6c) Lexical cohesion: Word chains**

Word chains are groups of words in a text that are linked in meaning. These word chains give cohesion to text.

Which words in the text are closely linked to 'Rakino Island' and which link to 'The rat problem'? Examples have been given.

<b>Rakino Island</b>	<b>The rat problem</b>
e.g. coastline	e.g. nuisance
i) .....	iii) .....
ii) .....	iv) .....

## Assessment schedule: Task 3 - Controlling Animal Pests in New Zealand

Unit standard 17363, version 3 Read independently information texts (ESOL)			
Level 3		5 credits	
<b>Element 1:</b> This task assesses one of three texts.			
PC	Question	Evidence	Judgement
1.1	1	<p>1a) Answers similar to:</p> <p>Information about pests in New Zealand / How rats were successfully controlled</p> <p>1b) <u>Headings</u>: p.1. The word pests is in 3 headings p.2: The words 'Good news' and success'</p> <p><u>Layout features</u>: p.1. Bullet points mean there are lists. These could be pests. <u>Photos</u>: p1. The photos are probably pests. p.2: The large photo is of a rat so the success story must be about that.</p>	<p>The topic of the text is identified from the layout, headings and graphics.</p> <p>1a: One correct 1b: At least two correct</p>
1.2	2	<p>Answers the same as the following:</p> <p>i) 6 iii) 12 iv) 3 v) 1</p>	<p>Specific sections of the text are located.</p> <p>3 out of 4 correct (No. 2 is given).</p>
1.3	3	<p>a) Auckland Regional Council b) fifty by (or times) fifty metres c) Department of Conservation.</p>	<p>Abbreviations used in the text are interpreted to demonstrate understanding of meaning. 2 out of 3 correct.</p>
1.4	4	<p>4a) Main points are identified. Correct answers are: i iv v vii</p> <p>4b) ii. The Regional Pest Management strategy has published a list of pests.</p> <p>iii. The Auckland Regional Council, the Department of Conservation and local residents decided to remove rats from Rakino island in 2002.</p> <p>iv. Programmes to remove the Norway rat have not always been successful</p> <p>v. To make sure an animal programme works, it is very important to get support from local landowners by providing them with information.</p>	<p>4a) Main ideas are identified. 3 out of 4 correct (No. 2 is given)</p> <p>4b) Main ideas are linked to subordinate ideas. 3 out of 4 correct</p>

1.5	5	<p>5a) Meanings given relate to the meaning and grammatical form of the words as in the sentence.</p> <ul style="list-style-type: none"> <li>i) impact</li> <li>ii) declared</li> <li>iii) grazed</li> <li>iv) strategies</li> <li>v) assist</li> <li>vi) introducing</li> <li>vii) monitoring</li> </ul> <p>5b) Meaning and grammatical form fit the word as in the sentence. Meanings similar to:</p> <ul style="list-style-type: none"> <li>i) successful</li> <li>ii) kill</li> <li>iii) return or re-establish</li> <li>iv) very or extremely important</li> <li>v) danger</li> </ul>	<p>Understanding of the meaning and grammatical form of ten items of essential vocabulary is demonstrated.</p> <p>5a) &amp; 5b): 10 out of 12 correct</p>
1.6	6	<p>6a) Pronouns</p> <ul style="list-style-type: none"> <li>i) Rakino Island</li> <li>ii) The programme</li> <li>iii) The bait stations</li> <li>iv) (The) monitoring (of the programme)</li> </ul> <p>6b) Linking words</p> <ul style="list-style-type: none"> <li>i) in spite of this or but</li> <li>ii) although</li> <li>iii) as well or in addition</li> <li>iv) as a result or as a consequence</li> </ul> <p>6c) Lexical cohesion Any four of the following in the correct columns.</p> <p>i) &amp; ii) <u>Rakino Island</u> popular, destination, beautiful coastal cliffs, farmland</p> <p>iii &amp; iv) <u>The rat problem</u> problem, destroy, Norway rats, Rattus norvegicus</p>	<p>The effect on meaning of at least three different cohesive devices is demonstrated.</p> <p>6a) Pronouns: 3 out of 4 correct</p> <p>6b) Linking words: 3 out of 4 correct.</p> <p>6c) Lexical cohesion</p> <p>4 correct with at least one in each column.</p>