

Approach: One to one

Year: 4 & 8

Focus: Ecosystems

Resources: Computer program on laptop computer

Questions / instructions:

This activity uses the computer.

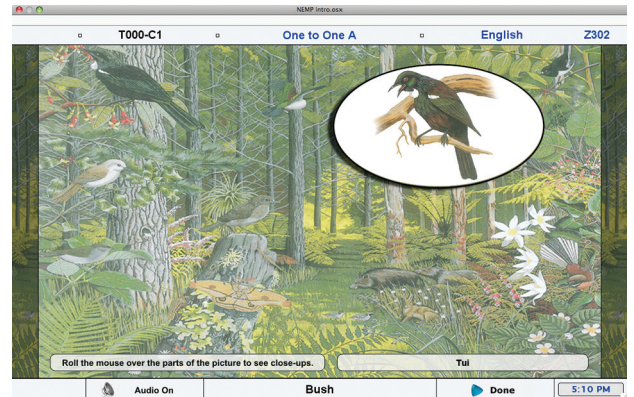
In this activity you will be thinking about how plants and animals live together in the bush and why plants are important to people.

In the bush there are lots of different animals and plants. You can click on the different parts of the bush picture to see some of the animals and plants.

Try doing that now.

Click the **Bush** button.

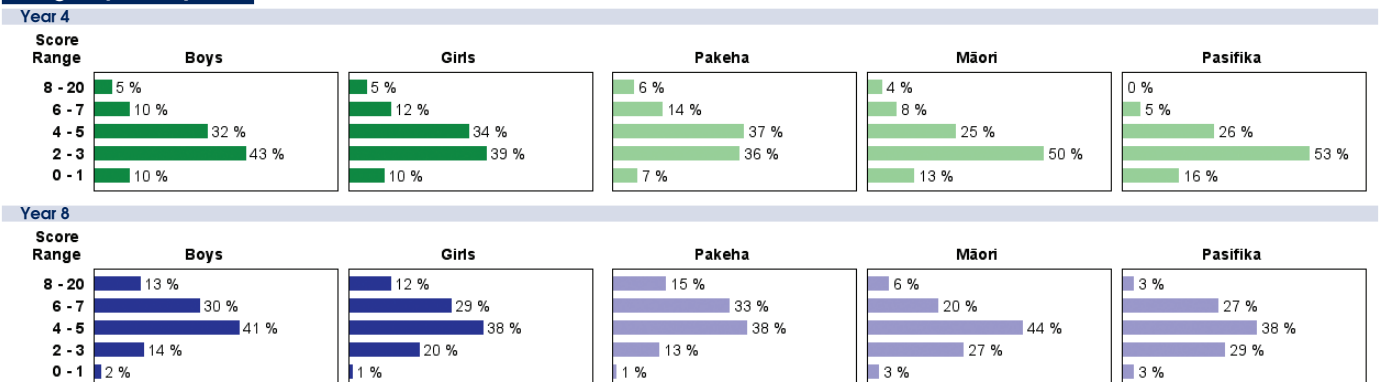
[No voiceover; audio of bird song and bush sounds only. Plants and animals enlarge as mouse is rolled over.]



[Illustrations: Forestry Insights, (resource pack for teachers), (1992). Plants and Animals in Plantation Forests. Auckland: FITEC. Illustrations now online at: <http://www.insights.co.nz>. Sighted 27 May 2008.]

	% response 2007 ('03)			% response 2007 ('03)	
	year 4	year 8		year 4	year 8
1. What are some of the ways that plants help the animals? <i>PROMPT: Can you think of any more ways?</i>			3. Try to explain to me why plants are important to people.		
<i>food</i>	80 (79)	91 (94)	<i>food</i>	43 (58)	55 (56)
<i>shelter (from cold, rain) / provide homes</i>	50 (45)	71 (65)	<i>shade</i>	7 (2)	6 (8)
<i>camouflage/hiding from predators</i>	30 (22)	41 (32)	<i>beauty</i>	39 (40)	37 (46)
<i>shade (from sun)</i>	3 (7)	3 (10)	<i>building materials</i>	12 (5)	17 (20)
<i>oxygen (through photosynthesis)</i>	17 (16)	21 (22)	<i>fuel</i>	5 (1)	7 (6)
2. What are some of the ways that animals help the plants? <i>PROMPT: Can you think of any more ways?</i>			<i>prevent erosion</i>	1 (0)	1 (0)
<i>seed dispersion</i>	6 (9)	19 (22)	<i>shelter</i>	2 (6)	11 (9)
<i>pollination</i>	7 (5)	11 (22)	<i>medicines</i>	7 (3)	18 (10)
<i>fertilise the ground</i>	9 (8)	23 (17)	<i>oxygen</i>	36 (42)	61 (58)
<i>reduce competing plants</i>	2 (3)	6 (2)	<i>ingredients in human-made products other than medicines (e.g. paper)</i>	10 (7)	17 (18)
<i>eat pests</i>	5 (8)	13 (11)	Total score:	8–20	5 (1)
			6–7	11 (9)	29 (36)
			4–5	33 (39)	39 (35)
			2–3	41 (44)	17 (15)
			0–1	10 (7)	2 (2)

Subgroup Analyses:



Commentary:

Students were much more aware of ways that plants help animals than vice versa. Performance patterns on this task were typical of the patterns for many other science tasks: boys and girls performed similarly, while Pakeha students performed moderately better, on average, than Māori students and substantially better, on average, than Pasifika students. There was a wide range of performance for all subgroups.