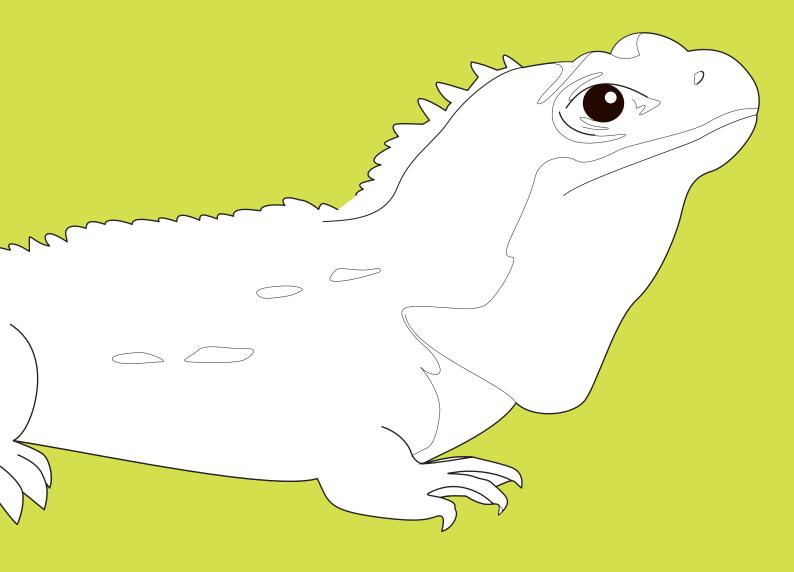
Auckland Zoo Education Pack

Secondary



Theme: New Zealand species



Zoo Lesson plan

Theme:

Secondary (ages 12-17) NEW ZEALAND SPECIES

What will I learn:

Why NZ's wildlife is so unique and what you can do to help endangered species

Inspire

Browse this ZooTales **New Zealand Species playlist** and find out more about our unique animals.

Check out the <u>Bird</u> and <u>Ectotherm</u> pages on Auckland Zoo's website and see if you can work out which of animals listed are special to NZ. What is an ectotherm? Why are we only exploring the Bird and Ectotherm webpages?

Here at Auckland Zoo we are involved in Wild Work. Much of this work happens right here in NZ. Find out more here.

Explore

- **Explore** your backyard in search of NZ species
- Create a tracking tunnel for your backyard.
 Categorise your findings as pests or pals. Create a graph of your results (resource attached).
- Find out more about Predator Free 2050

Act

Become a Kiwi Guardian – discover more by following the link to our partner DOC's website.

Create

Make a lizard home – Watch our video, and read some of our tips and tricks (resource attached).

Make a nectar feeder – to invite more birds into your garden (resource attached).

Make a wētā motel (resource attached).

Write about this topic using the NZ Species Vocab resource attached to help you.

Take a photo of it and post it with the hashtag #createwithaucklandzoo

Reflect

Take a Mindful moment with Cathryn – Papatūānuku

Note down 3 things in NZ nature you are grateful for.

Reflect on any of the ZooTale videos you watched. What inspired you? Would you want to get more involved in NZ Wild Work?

Check out this <u>video from Hohepa</u> – reflect on this idea of Kaitiakitanga and how you can be kaitiaki of the NZ environment.

Curriculum links:

Lessons include a range of aspects from the main strands of the NZ Curriculum - English, The arts, Health and physical education, Learning languages, Mathematics and statistics, Science, Social science and Technology.

They also consider the Key Competencies - Thinking, Using language, Symbols and text, Managing self, Relating to others, Participating and communicating.



New Zealand Species Vocabulary

Essential words

Endemic Unique plants and animals found only in one place

Introduced Species Non-native plants and animals brought to a new habitat by people either accidentally or on purpose. Many can cause problems with endemic species and become invasive

Endangered Species

When a plant or animal is in danger of disappearing forever

Adaptation

A body part, feature, or behaviour that helps an animal or plant succeed in its environment

Habitat

The place where animals and plants live and connect with each other

Extras for experts

Nocturnal Animals who are most active during the night time

Diurnal Animals who are most active during daylight

Camouflage A way of hiding something by colouring or covering it to look like its surroundings.

Some living things also change their behaviour too

Predator An animal that lives by

hunting and eating other animals

Ecosystem All living and non-living

things in an area

connecting and interacting

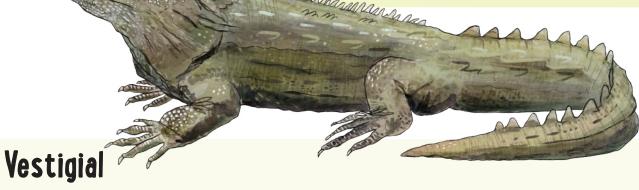
with each other

Kaitiakitanga Guardianship and

protection of the environment

Taonga

A precious treasure



Tuatara have a vestigial third eye on the top of their head, meaning that it doesn't use it for sight anymore.

What might our animals look like in a few million years? How might evolution change their bodies to be more suitable in a different landscape?



Lizard homes's

Your challenge:

Can you create a lizard home in your garden?



Copper skink

Oligosoma aeneum



New Zealand has over 100 species of native lizards and they are all geckos and skinks!

Key Steps:

- Find a warm, sunny, dry spot with some bushes or long grass for hiding
- 2 Gather up some old branches, corrugated tiles, rocks, dead logs or big pieces of bark
- Assemble these materials by stacking them loosely around and on top of each other.

 Make sure there are lots of gaps and crevices for lizards to hide in or find insects
- 4. Put out a little dish of water, especially in the summer
- 5. Enjoy seeing lizards come and use your garden lizard home! Remember to keep watch from a distance, and to keep their area safe from pets or other predators

New Zealand has over 100 species of lizards which are all gecko and skinks. Throughout much of the Auckland region and many other places in the North Island, most of the lizards you see dashing around in the daytime will actually be the introduced Australian rainbow skink – sometimes referred to as the plague skink because they are spreading so fast! When you build your lizard home see if you can identify the skinks that use it and record the species. Use this <u>link</u> to help you!



Make a nectar feeder

Attract native birds like tui to your garden by creating your own nectar feeder.

- Sit a 1L plastic milk container in a shallow dish or saucer.
- 2. Make 2-3 very small holes ½ a centimetre from the bottom of the bottle this will allow sugar solution to come out of the bottle up to the height of the holes.
- 3. To make sugar solution, dissolve ½ a cup of sugar in 1L of warm water.
- Fill the bottle of your automatic feeder and screw the lid back on tightly.
- 5. Place the feeder outside in a spot cats can't reach













Make a weta hotel

Help weta in your garden by making them a safe home to live in.

What you'll need:







A piece of hollow bamboo

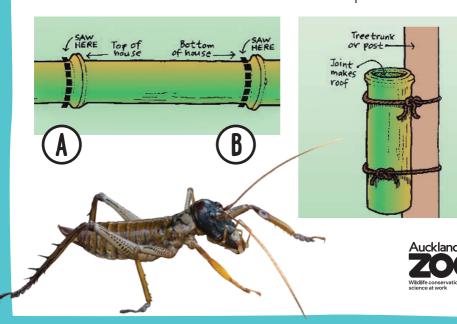
12 - 18mm wide If you don't have bamboo at home,

experiment with other items to see what is the most popular hotel.

What to do:

1. Get an adult to help you saw the bamboo at points A and B.

2. With the hole facing down, tie a bamboo piece to a tree trunk or post with the wire.



Make a tracking tunnel =



Find out if pests or pals live in your garden

you will need:

- A3 size white card
- plastic lid
- stapler
- 1 tissue
- 1 teaspoon of food colouring, mixed with 2 teaspoons water
- 1 teaspoon peanut butter



fold card to width of plastic lid

fold up sides and staple the top





fold tissue to fit in plastic lid then pour food colouring/water mix onto tissue until it's soggy

nut peanut butter in middle of tissue





put your tracking tunnel in a sheltered spot in the garden and leave overnight

check your tunnel the next morning to find out if you have pests or pals



Who left the tracks?















Auckland Zoo is working hard to make the Zoo pest free