

Te Pourewa Site Visit Activity - Think like an ecologist

Lesson Aim: To learn about what an ecologist does and have a lived experience of being an ecologist

Today I am learning to: be an ecologist.

Success Criteria:

To be successful I will be able to

- Talk about the relationship between the weather or position of a tree I can see
- Explain some of the relationships between the tree and things that live in the tree
- Offer my ideas about how I can help the tree to thrive

Possible curriculum links for science

Strand: Biological Science

Substrand: Ecosystems

- Habitats (yr 2)
- Food Chains (yr 3)
- Relationships in an ecosystem (yr 4)
- Ecosystem interactions (Yr 7)

Substrand: Organism diversity

- Discovering life (yr 1)



Possible curriculum links for social science

Strand: Geography

Substrand: Weather features and local weather hazards

- Weather conditions (yr 2)
- Factors affecting climate (yr3)

Substrand: Temperate and tropical rainforest biomes

- Plants in a rainforest (yr 5)



Pre-site visit lesson

Watch [this video](#) that talks about what an ecologist does. Discuss the vocabulary in the video in more simple terms that your class understands.

Create a word bank or word wall with the simple terms and specific scientific vocabulary to support learners in their use of these new words.

Using the information from the video brainstorm all the places you think an ecologist could work. Discuss the trip you are going on to Te Pourewa and how you will be working as ecologists for the day.



Te Pourewa lesson

Invite the learners to sit (or stand) facing the tree that you are going to use as your focus for the lesson. Spend some time touching the bark and looking at the way the tree grows. Encourage the learners to talk quietly about what they are seeing.

The Te Pourewa educator reminds learners of the learning focus and success criteria. They engage learners' prior knowledge by prompting them to think about a time they have looked at a tree. Ask them if they saw insects, birds, skinks etc when they looked at the tree. The educator then activates the learner's prior knowledge about the conditions for tree growth (light, soil, water).

The Te Pourewa education then guides the learners to use their observation skills in relation to the position of the tree.

1. We look carefully at the tree asking 'What do I see?' (is it by itself, in a collection of trees, low on the rise, or higher up the hill?)
2. Have learners talk about the position of the focus tree (talk with a buddy)
3. Share back as a whole group what the key things you noticed
4. Ask, what did that make you think?

Break the class into small groups and have them focus on different pre-selected trees.

The Te Pourewa educator will move around the groups prompting through asking open questions to encourage the groups to make connections to their prior knowledge.

- Where does the sun rise? And set?
- What difference does this make to a tree?
- Do you think that this tree likes to be in the shade or light to grow best?
- Does this tree prefer a certain sort of soil?
- What things rely on this tree? (foodchain, habitat, people etc)

See notes below (support for teachers) to guide and enrich discussion on these questions.

The educator will bring the groups back together and facilitate a sharing circle where everyone gets to hear everyone else's ideas and discoveries. The educator prompts the class teacher and learners to note the learning (recording, note take note make, in photographs etc).

The educator brings the discussion back to the learning focus and success criteria asking learners to reflect on whether they have done each of the things in the success criteria.

It could be helpful to use school devices to record/capture key parts for follow up back at school. When reviewing ideas at school you could use the map of Te Pourewa, noting where north is, where the sun rises and sets etc.



Supports for teachers

- Where does the sun rise and set?

The sun rises in the east and sets in the west.

This means different parts of the forest get sunshine at different times of the day.

- What difference does this make to a tree?

Trees use sunlight to grow strong and healthy.

Parts of a tree that get more sun often grow more leaves, while parts in shade grow more slowly.

The sun also helps trees make food through their leaves (photosynthesis) .

- Do you think this tree likes shade or light best?

Many trees like a mix of sunlight and shade.

Some trees grow best in full sun, while others prefer shady forest areas, especially when they are young. Forests work well because trees help protect each other.

- Does this tree prefer a certain sort of soil?

Yes! Trees like soil that:

1. holds water but isn't too wet
2. has leaves and worms in it
3. is full of nutrients

Forest soil is usually great for trees because old leaves break down and feed the soil.

- What things rely on this tree?

Lots of living things depend on trees!

- Birds may use it for homes or food
 - Insects live on the bark, leaves, or roots
 - Animals such as bats may eat its fruit or seeds
 - People rely on trees for clean air, shade, shelter, and wellbeing
 - Trees are part of a food chain, helping many living things survive
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- Trees are taonga – they care for the forest, and the forest cares for us.
Kia tiaki i te ngahere!

Science Learning Hub

- [Whakapapa as a knowledge system](#)
- [What is ecology?](#)
- [What is an ecologist?](#)
- [Working as an ecologist](#)

If focussing on one tree (such as a kauri) you could find specific information [like this guide](#) to assist you in using the correct terminology and vocabulary.

[Kauri - vital guardians of New Zealand's ecosystem](#)