



Program Overview

The Ku-ring-gai Chase National Park is home to the Powerful Owl, Australia's largest owl and a current member of the threatened species list.

During the full day program, the students will work as scientists to learn about the features of the Powerful Owl, its habitat and its role in the natural environment. They will explore three different forest types and use a range of scientific tools to investigate the physical environment and how adaptations of living things, including the owl, help them to survive there.

Syllabus Inquiry Questions

1. How do physical conditions affect the survival of living things?
2. How do the structural and behavioural features of living things support survival?

Guided Questions

- What are some of the physical features of the local bushland environment where Powerful Owls live?
- What adaptations do these plants have to?
- What are the features of the Powerful Owl and how do these features help them to survive?
- How can these animals and their habitat be protected?

Learning Experiences

Map Study

The day commences with the students orientating themselves using a compass and topographic map. Students will be required to locate grid coordinates, estimate distance and describe the topography of the days journey.

Habitat Walk

During the habitat walk, students will locate and identify a range of different habitats for animals, including the Powerful Owl, that live in the National Park. The students will use this time to search for and identify suitable habitat for the bird, including nesting sites and also look for evidence of Powerful Owl prey.

Aboriginal bush resources and language will be explored during the walk with students able to learn about some traditional uses of plants from the area.

Habitat Investigation

Students will use their senses to describe the features of plants of the dry eucalyptus forest and ID books and charts to identify the dominant trees and shrubs of the Powerful Owl habitat.

The students will also use field equipment to measure and record some of the physical features of the environment including temperature, light and pH.

They will then present ideas and explanations about how the structural features of the plants help them to survive.

Rainforest Exploration

In the rainforest, the students will look for signs of Powerful Owl activity. This will include doing a nature spot to listen for the different sounds of the rainforest.

Key Syllabus Outcomes and Content

Science and Technology K-6

Living World

A student:

> examines how the environment affects the growth, survival and adaptations of living things
ST3-4LW-S

Students:

- Describe how changing physical conditions in the environment affect the growth and survival
- describe adaptations of existing structures or behaviours that enable living(ACSSU043)
- Describe the structural and behaviour features of some native Australian animals and plants