

Overview

Freshwater Studies: Year 7



Toohey Forest Environmental Education Centre



Curriculum Intent

Science Understanding

- ▶ Classification helps organise the diverse group of organisms (ACSSU111)
- ▶ Interactions between organisms, including the effects of human activities can be represented by food chains and food webs (ACSSU112)

Science Inquiry Skills

- ▶ Measure and control variables, select equipment appropriate to the task and collect data with accuracy (ACSIS126)
- ▶ Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence (ACSIS130)

Science as a Human Endeavour

- ▶ Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE120)

Overview

Freshwater Studies is a whole day program in which students take on the role of an Environmental Scientist. In this role, students will investigate an aquatic environment in order to assess the impact of cane toads on the biodiversity.

The program commences with a review of levels of classification, and applying this to species found in Toohey Forest.

Students collect aquatic animals using sampling nets and then classify a range of macro and micro-invertebrates to class and order using microscopes and classification keys. Students are challenged to identify species that are most closely related by applying their knowledge of the levels of classification.

Using the aquatic animals classified during the day, students construct food chains to enhance their understanding of feeding relationships and how these relationships are impacted by changes in species numbers. Students interpret food webs to assess the extent of impact of introduced species.

Students analyse the data and apply their knowledge of food chains to predict why removing introduced species from a freshwater ecosystem can have a positive impact on native species.

The program concludes with students getting up close and personal with live animals and discussing factors that influence their health and distribution.

Freshwater Studies has been assessed as medium risk. A Curriculum Activity Risk Assessment is available on request. A student field booklet will be provided upon confirmation of your booking.

