



Wetlands Environmental Education Centre



Stage 5

Science: Living Wetlands

Science outcomes

SC5-14LW analyses interactions between components and processes within biological systems,
SC5-1VA appreciates the importance of science in their lives and the role of scientific inquiry in increasing understanding of the world around them,
SC5-2VA shows a willingness to engage in finding solutions to science-related personal, social and global issues, including shaping sustainable futures,
SC5-6WS undertakes first-hand investigations to collect valid and reliable data and information, individually and collaboratively,
SC5-7WS processes, analyses and evaluates data from first-hand investigations and secondary sources to develop evidence-based arguments and conclusions

Content

LW2 Conserving and maintaining the quality and sustainability of the environment requires scientific understanding of interactions within, the cycling of matter and the flow of energy through ecosystems.

Students:

- recall that ecosystems consist of communities of interdependent organisms and abiotic components of the environment
- describe how energy flows through ecosystems, including input and output through food webs
- analyse how changes in some biotic and abiotic components of an ecosystem affect populations and/or communities ⚙️
- assess ways that Aboriginal and Torres Strait Islander peoples' cultural practices and knowledge of the environment contribute to the conservation and management of sustainable ecosystems 🤝🌱
- evaluate some examples in ecosystems, of strategies used to balance conserving, protecting and maintaining the quality and sustainability of the environment with human activities and needs ⚙️👥⚖️🌱

Learning across the curriculum: ⚙️ Critical and creative thinking 🇦🇺 Civics and citizenship, 🌱 Sustainability

Program Description

Students will investigate a wetland ecosystem and calculate some of the factors which affect plant and animal life, and how these can be managed, classify wetland species, construct food webs, and identify species and their adaptations.

Power Point Introduction

Activities:

- Pond animal identification, distribution and adaptations
- Species classification and food web construction
- Water quality testing
- GPS Wetland plant hunt

Students will be using specialised equipment for various activities.

This program is delivered over 4 hrs.

The basic program will be changed to suit larger groups or weather conditions.

Location

Wetlands Environmental Education Centre (WEEC) located at
Hunter Wetlands Centre, 412 Sandgate Rd, Shortland, Newcastle
Please use School entry.

Site Description

Wetlands EEC is located at the Hunter Wetlands Centre, which is a managed wetland reserve with natural and artificial water features accessed by decks and established walking tracks. The site is classified as part of the Hunter Estuary Ramsar Site under the International Convention on Wetlands (Ramsar).

Wetlands EEC have a purpose built education centre including theatre, wet room and classroom.

Excursion information

What to bring: Printed student workbooks, clipboard and pencils, recess and lunch, refillable water bottle, hat, sunscreen, comfortable, covered walking shoes plus any special requirements of the group. (Wet weather gear when necessary). Non-aerosol insect repellent is advisable.

WEEC is a NSW Department school and staff are trained DoE teachers specialising in Environmental Education.

WEEC teachers rely on the participation of visiting teachers to meet recommended supervision levels. Visiting teachers are ultimately responsible for behaviour of students, students with existing medical conditions or special needs.