



# Wetlands Environmental Education Centre

## Stage 6

### Earth and Environmental Science



Education  
Public Schools

## Inquiry Question

Module 4 – Human Impacts: How do introduced species affect the Australian environment and ecosystems?

## Outcomes

EES 11/12-2, EES11/12-3, EES 11-11

## Content

Students:

Outline the biotic and abiotic effects of introduced species

Conduct an investigation into a local introduced species, including: ⚙️ ⚖️ 📊 📅 📌

- reason for introducing the species
- biotic and abiotic effects of the species
- area affected by the species
- human impacts that favour the introduced species
- control or mitigation methods
- economic impact of the species
- different views about the value of and/or harm caused by the introduced species, including the views of Aboriginal and Torres Strait Islander Peoples 🙌 🌐

Analyse ways in which human activity can upset the balance of ecosystems and favour introduced species (ACSES027) ✨ ⚙️ ⚖️

Describe ways in which introduced species contribute to the decline or extinction of native Australian species (ACSES081) ✨ ⚙️ 🌿 🌱

## Program Description

On the day students complete fieldwork including:

- Introduction and background to the introduced species being studied
- Abiotic factors – comparison to acceptable ranges (water depth, air temperature, humidity, wind speed and direction, water temperature, pH, turbidity)
- Biotic factors – dip netting at two locations to determine biodiversity and the impact of introduced species
- Investigation walk to examine introduced species on site, control or mitigation methods and human impacts that favour the introduced species
- Further examination of introduced species on site and management
- Conclusion to the day and discussion of validity, reliability, impact of one species on another.

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 workbook per student, 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.

The 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.