

Overview

Year 6 Program

Life on Earth

An engaging Biology program that takes learners beyond the capacity of the classroom to discover the physical conditions of many different environments.

Students are called to action to determine the best environment to plant a certain species of tree. A short barge ride to the northern end of Facing Island in the Gladstone harbour is the setting for this program or alternatively, this program can be offered at Canoe Point, Tannum Sands. Both settings provide a rich variety of ecosystems to study including salt marsh, coastal sand dunes, rocky shore and coastal Casuarina forest. Taking on the role of Bio Explorers, students set upon their self-guided journey to investigate the physical conditions of different ecosystems that support our living things and are challenged to collect data on abiotic and biotic conditions at each area using scientific tools from their adventure pack. They also adopt the role of Citizen Scientists and collect marine debris.

Facing Island walk is approx 10km loop around the northern end of the island. Students are required to wear shoes that may get wet depending on tides and conditions.

Please note about this program:

- This program can only run on a Wednesday due to suitable ferry times
- This program has an early start time and later finish due to travel into Gladstone and barge times
- This program involves approximately a 10km loop walk around the Northern end of the island
- This program has an additional fee to cover the transport cost of the ferry for each student

Curriculum Intent

Science

Science Understanding

Biological sciences

• The growth and survival of living things are affected by physical conditions of their environment (ACSSU094)

Science as a Human Endeavour

Nature and development of science

- Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions (ACSHE098)
- Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE100)_

Science Inquiry Skills

- With guidance, pose clarifying questions and make predictions about scientific investigations (ACSIS232)
- Compare data with predictions and use as evidence in developing explanations (ACSIS221)

General capabilities

- Literacy
- Numeracy
- Critical and Creative Thinking
- Information and Communication Technology (ICT) Capability

Cross-curriculum priorities

Aboriginal and Torres Strait Islander Histories and Cultures

Country/Place

- **OI.2** Aboriginal and Torres Strait Islander communities maintain a special connection to and responsibility for Country/Place.
- **OI.5** World views are formed by experiences at personal, local, national and global levels, and are linked to individual and community actions for sustainability.

Culture

• **OI.5** Aboriginal and Torres Strait Islander Peoples' ways of life are uniquely expressed through ways of being, knowing, thinking and doing.

Itinerary

Learning Intentions:

WHAT... are we learning?

• *Explore* environmental conditions that affect the growth and survival of living things.

WHY ... are we learning this?

• Science helps us understand the world around us and therefore we use science to help us protect and conserve our precious environment. By understanding how the physical conditions effect living things, we can change our behaviours to help assist with sustainability.

HOW ... will you know you're successful?

- Actively explore different ecosystems Mangroves, Rocky Shore, Casuarina Forest and Dunes
- Describe the difference between Biotic and Abiotic factors
- Collect data relating to the abiotic features of an ecosystem
- *Explain* the effects of human impact on the ecosystems.
- Compare the similarities and differences of abiotic conditions in different environments.

*Suggested Timetable of the day – Facing Island

EMPOWERING EXTRORDINARY	TIME	ACTIVITIES
	7:30	Meet at Curtis Ferries, Alf O'Rouke Dr, Gladstone
	8:00	Depart for Farmer's Point, Facing Island
	8:45	Arrive to Facing Island
	9:00	Morning Tea
	9:30	Call to action and prepare for the walk
	9:45	Commence walking to Pirate Rock, Mangroves, Salt Pan, Dunes, Beach walk and Casurina
		Forest.
	Approx	Lunch at Oaks Campground
	1:15	
	2:00	Commence walk back to Farmer's Point
	3:15	Board ferry
	4:30	Arrive back to Curtis Ferry Marina (Please note that time is only approx. as tides may impact
		the trip)
_	*Denotes – activity taken by BIEEC staff with visiting school staff support	
	+ Denotes – act	ivity taken by visiting school staff
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*Suggested timetable only and subject to change