Eco Explorers
Year 6 Day Visit Program

An engaging Biology program that takes learners beyond the capacity of the classroom to discover the physical conditions of many different local environments.
Students are called to action as scientists and locals have noticed certain plants and animal species are disappearing, while others are thriving in unexpected areas. A short barge ride to the northern end of Facing Island in the Gladstone harbour is one 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, coastal Casuarina Forest and mangroves. Taking on the role of EcoExplorers, students set upon their self-guided journey to investigate the physical conditions of different ecosystems and how these affect the growth and survival of living things. They 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 on Facing Island.

Facing Island walk is approx 10km loop around the northern end of the island. For both locations, students are required to wear shoes that may get wet or muddy depending on tides and conditions.

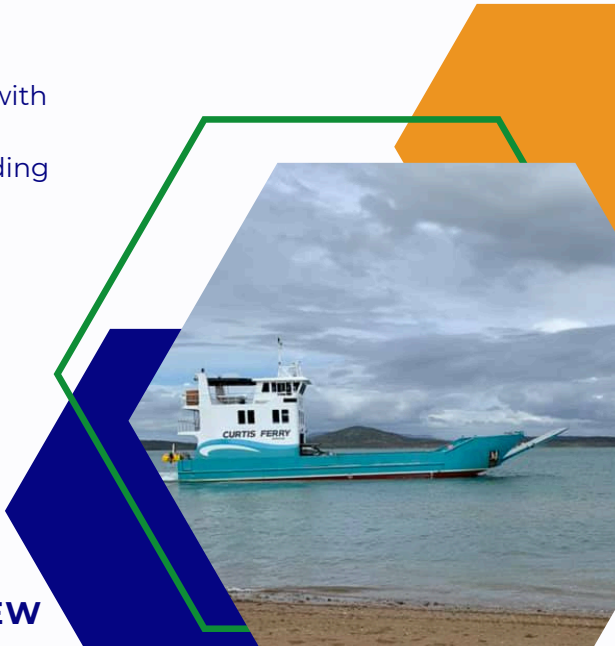
Please note about this program on Facing Island:
- This program can only run on a Wednesday due to suitable ferry times
- This program has an early start time and later finish due to travel into Gladstone and barge times
- This program involves approximately a 10km loop walk around the Northern end of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

Curriculum Links

Science
Science Understanding – Biological Sciences
- AC9S6U01 – Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions.

Science as a Human Endeavour
- AC9S6H02 – Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions.
- AC9S6H01 – Describe how scientific knowledge helps us to understand the effect of our actions and develop solutions to contemporary problems.

Science Inquiry Skills
- AC9S6I01 – Pose investigable questions to identify patterns and test relationships and make reasoned predictions.
- AC9S6I03 – Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate.
- AC9S6I04 – Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships.
- AC9S6I05 – Compare methods and findings with those of others, recognise possible sources of error, pose questions for further investigation and select evidence to draw reasoned conclusions.



General Capabilities

Intercultural Understanding

AC9HU6IC01 – Analyse how culture influences people's values, relationships, and responses to challenges

- Explore how local Indigenous knowledge connects to land and environmental care
- Reflect on different cultural perspectives regarding ecosystems and conservation

Personal and Social Capability

AC9HP6P01 – Evaluate how respectful communication and collaboration support positive outcomes

- Work collaboratively during field investigations and data collection
- Practice respectful listening and teamwork in diverse group settings

AC9HP6P02 – Demonstrate empathy and inclusion in group activities

- Show care for different viewpoints and cultures during learning experiences
- Foster inclusion by sharing responsibilities and valuing contributions

Critical and Creative Thinking

AC9HP6C01 – Generate questions and solve problems using evidence and reasoning

- Pose scientific questions about habitat conditions and living things
- Develop and test hypotheses based on observations and data

AC9HP6C02 – Reflect on possible solutions and think creatively about challenges

- Consider environmental issues and suggest science-based solutions
- Adapt methods and approaches during investigations as needed

Ethical Understanding

AC9HP6E01 – Justify decisions based on fairness, respect and responsibility

- Reflect on the ethical impact of human activities on ecosystems
- Discuss responsibility towards protecting local environments and species

AC9HP6E02 – Explore reasons for rules and consequences in different contexts

- Understand environmental laws and community guidelines for habitat protection
- Discuss consequences of actions like pollution or habitat disturbance

Literacy

AC9E6LY01 – Use interaction skills to communicate effectively

- Listen actively and contribute to scientific discussions and group work
- Ask clarifying questions and provide constructive feedback

AC9E6LY02 – Present information clearly for different purposes and audiences

- Share findings from fieldwork using appropriate scientific and everyday language
- Use digital tools and visual aids to support presentations and reports

CARA's

- ·Walking on uneven surfaces
- Science Activities
- Marine organism activities
- Travelling on ferries (Facing Island only)

Learning Intentions

WHAT... are we learning?

- Explore the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions.

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 growth and survival of living things is affected by changing physical conditions, 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 possible causes of changing physical conditions and the effects of human impact on the ecosystems.
- Compare the similarities and differences of abiotic conditions in different environments.

BIEEC PEDAGOGY

Our student-centred learning approach focuses on hands-on, interactive activities that engage students and encourage exploration. By allowing students to take ownership of their learning and set personal goals, they develop independence and critical thinking skills. Teachers act as mentors, supporting students by asking questions throughout their learning journey to assist with building a lifelong love of learning.

SAMPLE ITINERARY

Please Note: This is a SAMPLE itinerary and your Program Manager will forward your individual program shortly.

" Empowering extraordinary minds"

TIME	ACTIVITIES
Welcome	Meet at Curtis Ferries, Alf O'Rouke Dr, Gladstone Or Canoe Point, Tannum Sands
Morning Session	Depart for Farmer's Point, Facing Island
	Arrive to Facing Island
	Morning Tea
	Call to action and prepare for the walk
	Commence walking to Pirate Rock, Mangroves, Salt Pan, Dunes, Beach Walk and Casuarina Forest. Canoe Point-commence walk to Sand dunes, mangroves, melaleucas. Collect and analyse data
Lunch	Lunch at Oaks Campground/Canoe Point
Afternoon Session	Commence walk back to Farmer's Point Canoe Point-Rocky shore study and data analysis
	Board ferry (Facing Island option)
Farewell	Arrive back to Curtis Ferry Marina (Please note that time is only approx. as tides may impact the trip)

Students and adults will need:

· Closed in shoes
· Sun-safe clothing and hat
· Sunscreen and insect repellent already applied
· Water bottle
· Morning tea and lunch (litter-free)

Litter-free Lunch: We encourage students and staff to pack a litter-free lunch. Everything in it can be re-used, composted or recycled. Drinks are brought in refillable bottles.