

Kamay Botany Bay Environmental Education Centre

Excursion outline

Stage 6

Ecosystem Dynamics – Biology Module 4

Location

Kamay Botany Bay National Park, Kurnell

Overview:

Biology Module 4 - ecosystem dynamics - enables mandatory fieldwork, including the comprehensive modelling of the working scientifically process through the inclusion of pre and post fieldwork lessons.

During the intertidal rocky shore investigation students are given the opportunity to observe patterns across the ecosystem. Students can then suggest reasons for these patterns and formulate hypotheses for testing in the field. Fieldwork data is later organised and presented through the use of tables and charts for analysis and ultimately reporting.

Outcomes:

- BIO11/12-1 develops and evaluates questions and hypotheses for scientific investigation
- BIO11/12-2 designs and evaluates investigations in order to obtain primary and secondary data and information
- BIO11/12-3 conducts investigations to collect valid and reliable primary and secondary data and information
- BIO11/12-4 selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media
- BIO11/12-5 analyses and evaluates primary and secondary data and information
- BIO11-11 analyses ecosystem dynamics and the interrelationships of organisms within the ecosystem

Key Inquiry question:

What effect can one species have on the other species in a community?

Students will:

- explore the rocky shores of Kamay Botany Bay National Park
- use both a belt transect and quadrats to collect primary data (both qualitative and quantitative)
- use instruments to collect abiotic data
- analyse collected data to answer a key inquiry question

Learning across the curriculum content:

- Aboriginal and Torres Strait Islander histories and cultures
- Sustainability
- Critical and creative thinking
- Personal and social capability
- Numeracy

Booking Information:

| | |
|-----------------------------------|--|
| Location | Kamay Botany Bay National Park, Kurnell 21 Cape Solander Drive, Kurnell |
| Bus booking | Drop off and pick up at The Visitor Centre, Kamay Botany Bay National Park |
| Timing | Ideally schools should allow 4 hours for the program, including meal and toilet breaks. |
| Student checklist | <input type="checkbox"/> low waste lunch and recess (reusable containers, no plastic wrap) <input type="checkbox"/> refillable water bottle (Kamay Botany Bay National Park has a refillable water station) <input type="checkbox"/> hat <input type="checkbox"/> sunscreen <input type="checkbox"/> school or sports uniform (sports uniform preferable) <input type="checkbox"/> sturdy, enclosed walking shoes <input type="checkbox"/> backpack and raincoat (no plastic bags) |
| Teacher checklist | <input type="checkbox"/> students' prescribed medication and health action plans <input type="checkbox"/> First aid kit <input type="checkbox"/> General use EpiPen |
| Staffing | The EEC complies with NSW DoE policy for a student/adult ratio of 15:1 for bushwalking. Parent helpers welcome, no pre-schoolers. |
| Medical or special needs | Please notify Kamay Botany Bay EEC staff at time of booking. |
| Risk Management Guidelines | RMG will be provided at the time of booking |
| Excursion pack | See KBBEEC website /resources for teacher background notes. Bring a camera, iPad or phone to photograph the students during the day. |

Weather

In the event of extreme weather conditions,
please phone or text 0477 742 281

Bushfire

During bushfire season (approximately 1 October-31 March), check [Rural Fire Service fire danger rating](#). During catastrophic ratings, the park and centre are closed. Kamay Botany Bay Environmental Education Centre fieldtrip experiences will be postponed. During extreme or severe conditions, fieldtrip experiences and locations may be cancelled or modified to ensure the safety of all students and staff.



Buses should drop off students in the designated bus bay, located near the EEC.

Buses should then move to the parallel parking bays on Solander Drive.

Buses generally take 10 minutes to drive from Cronulla High School to Kurnell.