

## How the Day Works

- All equipment is supplied
- We provide a master copy of worksheets to be run off by school
- Assessment task & extra information supplied for stage 6 excursions
- Risk Assessments supplied
- We provide a DVD of extra information and some printed photos of the day
- Students with disabilities are catered for (where possible)
- Large groups of up to 180 can be catered for

## Field Work Techniques and Equipment

- Personal observations, scientific drawings
- Equipment used includes soil moisture meters, soil depth spikes, dissolved oxygen kits, conductivity meters, salinity refractometers, turbidity tubes, pH kits, phosphate kits, thermometers, dichotomous keys, laser rangefinders, light meters & microscopes
- Group & individual activities

## Excursions offered

- Years 7-12 Science Excursions
- Tailored IB ESS excursions

See detailed excursion synopsis overleaf

## Overnight Excursions

Overnight *Ecosystem Dynamics* excursions allow us to visit a different ecosystem on each day; Long Reef rock platform and bushland from Camp Kedron or wetland and rainforest from Mt Keira. Students sleep at the site so we can go out at night to spot animals.

Please ask for more information about activities and inclusions.

## Prices for 2018

- Sydney excursions \$31 per student
- Camp Coutts and Mt Keira \$33 per student
- There is a minimum charge of \$450 per excursion for small groups. Schools may request to share an excursion with another school to reduce costs (if possible).
- A 10% G.S.T surcharge applies to all excursions
- A 25% holding deposit is required within two weeks of booking

**Schools will be charged for the number of students booked unless notified 1 week prior to excursion date.**

We plan for a maximum ratio of 30 students to one staff member. If you would prefer a small class size, we can try to provide an additional Auseco staff member for \$350 +GST.

## Please note

Excursion dates will be held for two weeks without a deposit. Deposits are non-refundable if excursions are cancelled within four weeks of the excursion date. In case of bad weather, an excursion can be postponed on the day.

### To book and for further information:

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# AUSECO

*Specialist in Environmental Education*



## Science Field Studies 2018

# Science Excursions

Excursion	Level	Excursion Synopsis	Location	
<u>Living World</u>	YR7-8 Stage 4	This excursion examines the environmental conditions and diversity of life in the chosen ecosystem. Students describe how producers, consumers and decomposers are related using a local food web. An animal catch and classification gives students an understanding for local fauna.	BUSHLAND WETLANDS RAINFOREST ROCK PLATFORM	Bantry Bay Camp Coutts Camp Kedron Manly Dam Botany Bay Mt Keira Long Reef Narrabeen
<u>Advanced Living World</u>	YR9-10 Stage 5	Students build on their understanding that ecosystems consist of abiotic components and communities of interdependent organisms. An animal catch and classification gives students an understanding for local fauna.	BUSHLAND WETLANDS ROCKPLATFORM	Bantry Bay Camp Kedron Camp Coutts Manly Dam Botany Bay Long Reef Narrabeen
<u>Ecosystem Dynamics</u>	YR11 BIO Stage 6	Students compare population dynamics in various communities within the chosen ecosystem. Study of animal or plant distribution & abundance, physical & chemical tests. In depth examination of a native producer & animal adaptations to their niche, and biotic relationships between organisms (symbiotic relationships and trophic interactions). Students complete an animal catch to study their animal in detail.  Discussion of evidence of past environments (including fossil evidence), and assessment of future change in the chosen ecosystem.	BUSHLAND RAINFOREST WETLANDS ROCKPLATFORM	Bantry Bay Camp Kedron Mt Keira Botany Bay Long Reef* Narrabeen <i>*Also tailored for 'Independent Research Project' depth study and 'Investigating Science' project</i>
<u>Biological Diversity &amp; Organisation of Living Things</u>	YR11 BIO Stage 6	Students will discuss evolution as the driving force for biodiversity, with focus on fossil evidence. The effect of the environment on tree diversity will be studied by comparing physical and chemical conditions along a transect line, whilst also identifying species diversity along the transect. The adaptations of two trees and two animals to the local environment will be studied in detail by looking at the organisation of microscopic and macroscopic structures in the organism.	BUSHLAND	Bantry Bay Camp Kedron
<u>Maintaining a Balance</u>	YR12 BIO Stage 6	In depth study including water regulation, temperature control, excretion of waste, obtainment of energy & food requirements. Measurement of abiotic factors. Students undertake a terrestrial & water animal catch.	WETLANDS & DUNES DUNES & ROCKPLATFORM	Botany Bay Long Reef
<u>International Baccalaureate</u>	YR11-12 Stage 6	An IB orientated, student-led study of the Long Reef Rock Platform	ROCKPLATFORM	Long Reef
<u>Earth's Resources &amp; Human Impact</u>	YR11 E&ES Stage 6	A study of the geosphere over time, including local geology, soil testing, and examination of fossils, investigation of human impacts on vegetation and water quality including abiotic testing and assessment of management strategies.	BUSHLAND	Bantry Bay Camp Coutts Camp Kedron
<u>Yr 12 Earth &amp; Environmental Science</u>	YR12 E&ES Stage 6	OPTION 1: <u>Environments Through Time &amp; Introduced Species</u> OPTION 2: <u>Introduced Species</u>  Students will undertake field work & discuss exotic plant & animal species in two locations.	ROCKPLATFORM ROCKPLATFORM & BUSHLAND	Long Reef Long Reef & Carroll Creek

*\* 'Independent Research Project' suitable for 'Ecosystem Dynamics based Depth Study' and 'Investigating Science' available for Long Reef rock platform only. Suitable for highly motivated students and teachers. Please contact Don to arrange.*