

Science Excursions

Excursion	Level	Excursion Synopsis	Location	
<u>Living World</u>	YR7-8 Stage 4	This excursion examines the diversity of life on Earth. 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	Bantry Bay Camp Coutts Camp Kedron Manly Dam Botany Bay
			WETLAND	Mt Keira
			RAINFOREST	Long Reef
			ROCK PLATFORM	Narrabeen
<u>Advanced Living World</u>	YR9-10 Stage 5	Students build on their understanding that ecosystems consist of abiotic components and communities of independent organisms.	BUSHLAND	Bantry Bay Camp Kedron Camp Coutts Manly Dam Botany Bay
			WETLANDS	Mt Keira
			RAINFOREST	Long Reef
			ROCKPLATFORM	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	Bantry Bay Camp Kedron Camp Coutts
			RAINFOREST	Mt Keira
			WETLANDS	Botany Bay
			ROCKPLATFORM	Long Reef** Narrabeen <i>**Also tailored for 'Independent Research Project' depth study and 'Investigating Science' project</i>
<u>Biological Diversity & 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	Botany Bay
			DUNES & ROCKPLATFORM	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 and Processes & 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 water quality including abiotic testing and assessment of management strategies.	BUSHLAND	Bantry Bay
<u>Earth & Environmental Science</u>	YR12 E&ES Stage 6	OPTION 1: <u>Environments Through Time & Introduced Species</u> OPTION 2: <u>Introduced Species</u> Students will undertake field work & discuss exotic plant & animal species in two locations.	ROCKPLATFORM	Long Reef
			ROCKPLATFORM & BUSHLAND	Long Reef & Carroll Creek

* new programs designed for changes to the Stage 6 syllabus, suitable as depth studies. If you would like to see a copy, please contact the office by email or phone.

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