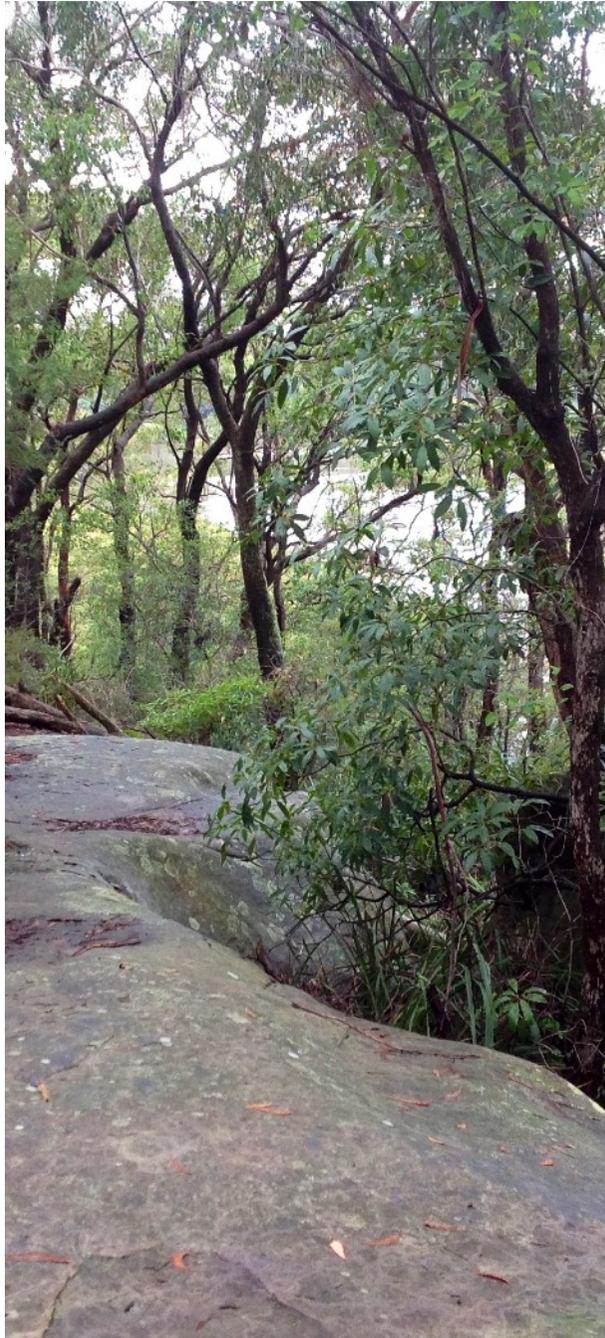


Plant Systems

Field of Mars Reserve - Stage 4 Science



School name:	
School phone:	
Organising teacher - first name:	
Organising teacher - last name:	
Email:	
Mobile:	
Excursion program list:	Science - Plant systems
Start time:	9.30 am
Finish time:	2.00 pm
1st date:	
Approx student numbers:	
Number of classes:	
Grades:	
Participating staff and email addresses.:	

Teacher checklist

Location – Field of Mars Reserve, western side of Pittwater Road, East Ryde.

Bus access - give supplied access information to driver. No bus entry into Field of Mars Reserve.

Cost - DOE \$28.00 per student, no GST.
sNon Gov School Cost: \$38 per student (GST free, minimum charge \$550)

Bring - essential items only: medications, food, water, sunblock, hat and wet weather gear packed in a small backpack. There are no shops near the study site.

Clothing - sports uniform recommended. Hats and sturdy closed shoes essential for all visitors.

Staffing - classroom teachers will be involved in all activities including rugged bushwalking.

Extreme or wet weather - may result in the excursion being modified, postponed or cancelled. This includes days predicted to be above 35°C, high winds, extreme bush fire danger and dust storms.

Ph: 98161298

Cancellations - less than two weeks notice \$100. This does not apply to cancellations due to weather.

Medical or special needs - please notify EEC staff.

Limited bin access - all student waste will be taken home by students so 'nude food' containers are encouraged.

Student welfare - students will be outdoors travelling through rugged terrain. The excursion may not be suitable for students who have been recently unwell.

Pre-excursion preparation - students need to watch an online video for homework in the week before the excursion which outlines the necessary preparation for one of the excursion tasks.
(link: <http://bit.ly/1Gy3myk>).

Learning activities

Making sense of the green.

Plant community comparison

These two activities investigate two environments in the reserve which are then compared and contrasted.

Students work in small groups using a variety of methods and equipment to record the abiotic measurements at the two study sites.

Students identify biotic factors in the form of dominant tree, shrub and ground cover species which are then used to construct a detailed profile diagram.

Finally students identify and explain the differences in their results recorded at each site and relate these to the effects of different landforms, climate, bushfire, drought and nearby human impacts.

Plants in place digital stories

This session uses the flipped model of teaching to prepare students for a creative communication task that sees them creating an engaging digital text or video that details the structure, adaptations and habitat value of a native plant growing in the native gardens at Field of Mars.

The flipped component is that students need to watch an online video for homework in the week before the excursion. This video outlines the excursion task and a template for the necessary pre-excursion research that will form the basis of the creative task.

(link: <http://bit.ly/1Gy3myk>).

Select Syllabus outcomes and content

Science K-10

SC4-14LW

- There are differences within and between groups of organisms; classification helps organise this diversity.
- classify a variety of living things based on similarities and differences in structural features
 - use simple keys to identify a range of plants and animals
 - explain how the features of some Australian plants and animals are adaptations for survival and reproduction in their environment

Other syllabus links

Learning experiences will also support but not explicitly teach the following outcomes and content:

SC4-15LW

Science and technology contribute to finding solutions to conserving and managing sustainable ecosystems.

- construct and interpret food chains and food webs, including examples from Australian ecosystems
- describe interactions between organisms in food chains and food webs, including producers, consumers and decomposers
- predict how human activities can affect interactions in food chains and food webs, including examples from Australian land or marine ecosystems

SCL4-9WS

Students communicate by:

- presenting ideas, findings and solutions to problems using scientific language and representation using digital technologies as appropriate
- using appropriate text types presentations, including a discussion, explanation, exposition, procedure and recount