
Rock Platforms: a Different Approach

Level

4-8+

Key questions

How do I prepare an interpretation plan for a rock platform?

Can I use a field guide to identify specimens observed?

What is the connection between this rocky platform and the surrounding coastal area?

Key outcome

Encourages you to look at interpreting a rock platform in the context of how it relates to and is part of adjacent terrestrial and marine ecosystems.

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Rock platforms have always held a fascination for beach goers. The pools and crevices support a diversity of plant and animal life adapted to a precarious existence in the zone where the land meets the sea. Understanding how a rock platform is related to the terrestrial ecosystem and the wholly submerged marine ecosystem as part of a continuum is critical to the integrated approach to management of terrestrial and marine national parks, such as is planned for Jervis Bay.

This field study and associated questions encourages you to look at interpreting a rock platform in the context of how it relates to, and is part of, adjacent terrestrial and marine ecosystems. Instead of examining a rock platform in isolation, an alternative approach is to examine a transect that commences at the top of a catchment and continues across the rock platform down to the sea bed. The different components of the transect can be interpreted for the public by a range of techniques, including signs drawing attention to certain features. But keep in mind the possible high cost of maintenance of such signs!

Though this field study was applied to Jervis Bay, any appropriate site with a small catchment and a rocky shore can be utilised for the field work and discussion.

What you need

Clipboard, paper, pencil

Species lists of marine and terrestrial fauna and flora

Magnifying glass, bucket or plastic bowl to act as a temporary holding area for identification of species

Maps of the walking track systems (see accompanying sheet)

Brief background notes on the natural and cultural values of the area

What you do

1. Select a rough pathway to form a transect that commences at the top of a beach (or, if circumstances allow, a catchment of a creek running onto the beach), and continues across the rock platform down to the sea bed.
2. Note the major features of your transect as you walk down it. Identify plants and animals using a field guide, or merely note the variety (e.g. scrub, low plants and reeds, grass tussocks, burrows, bare rock on slope, boulder field, rock platform with numerous molluscs and invertebrates, steep drop off into sea).

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When you have completed the transect:

- Prepare your own plan for a field study to examine a rock platform.
- Construct a list of plants/animals found during your examination of the rock platform.
- Compare the species found between the different zones you cross.
- Use a map of the walking tracks.
 - How do these tracks take advantage of the natural features of the area.
 - Do they allow protection of the special features.
- Imagine you are the ranger in this area.
 - How would you provide an interpretation service for your transect?
 - Would you put up information signs?
 - How would you label features?
 - How would you provide a self guiding walk?
 - Provide a brochure identifying the major species.
- Compare your methods with others and, working in a small group, develop a plan which could be submitted to the National Parks and Wildlife Service in the region.

Extension

Refer to the unit 'Field Methods' for detailed instructions on field work on rock platforms, and to the introductory unit 'National and Marine Parks in Jervis Bay' for species lists and further information about this area.

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Interpretation at an Aboriginal midden

The headland above a rock platform may contain an Aboriginal midden, demonstrating indigenous exploitation of rock platform molluscs in prehistoric times. Such middens often are around 3 000 years old.

A glance at the species occurring in a midden can tell us much about how Aboriginal people gathered the resources of the rocky shore platform. Shellfish gathering was carried out mostly by women, while the men concentrated on spear fishing. Some of the species favoured by Kooris were the large, solitary gastropods of the lower littoral zone. These could only be collected at low tide and would have required a greater effort than other more gregarious species of the mid and upper littoral zones. However, the return for effort in terms of the amount of shell fish meat that could be extracted from the large gastropods and bivalves probably was worth the effort.

It is also interesting to note the sizes of the shellfish gathered 3 000 years ago and those on the rock platform today. In some cases there has been a marked reduction in size over time, perhaps indicating modern day over-exploitation. A similar result is obtained by comparing the sizes of the skeletons of fish in midden deposits with those caught today.

Shellfish remains are the most common component of middens, but they also contain much other evidence of hunting and gathering activities, which usually cannot be seen unless the site is excavated. Stone artifacts, the bones of fish, birds and mammals, bone and shell implements, and human burials are often present, preserved as a result of the high calcium carbonate content of the deposits.

Extension

You need a special permit to examine a midden in detail. If you do, you could compare the size of the shells in the midden with those found on the beach or rock platform today.

Consider including the traditional Aboriginal use of the area in your interpretation.

You also could do a 'bush tucker' demonstration.