

Mapping Exercise: Mallacoota

The following activities are based on the GTAV Mallacoota topographic map and aerial photo broadsheet. The activities were originally published in *Interaction*. Copies of this map can be purchased from the GTAV at the *special price* of \$1.10 each.

1. What is the distance between Gypsy Point (GR 372486) and Mallacoota (GR 436396)?

- a. by road _____
- b. as the crow flies _____
- c. by boat. _____

2. State the direction of:

- a. Gypsy Point from Genoa Peak _____
- b. Mallacoota Airstrip from Genoa Peak _____
- c. John Bull light from King Fish Point _____
- d. Lakeview” from King Fish Point _____
- e. “Lakeview” from Lake Barracoota _____
- f. Telegraph Point from Lake Barracoota. _____

3. Describe the scale of the map in two ways, i.e. as a ratio and a statement.

4. a. What is the approximate scale of the aerial photograph when expressed as a ratio?

b. Convert this ratio to a statement.

5. What is the contour interval of the map?

6. Describe the location of the highest spot elevation you can find.

7. Give the six-figure grid reference for each of the following locations:

- a. Genoa Peak _____
- b. Bastion Point _____
- c. Pumping Station _____
- d. Jingalong Lodge _____
- e. Buckland Lodge _____
- f. Quarry _____

8. What feature is found at the following Grid References? Draw the map symbol using the correct colour.

Grid reference	Feature Symbol
a. 398354	_____
b. 403467	_____
c. 445425	_____
d. 475455	_____
e. 413419	_____
f. 346446	_____
g. 337484	_____

9. a. Describe the spatial distribution of the navigation beacons in Mallacoota Inlet.

b. Suggest a reason why they are distributed in this pattern.

10. Trace the region bounded by Area Reference 5059 – 4049 onto a clean sheet of white paper. Use appropriate colours to complete the following:

- mark in the contours for every 100 metres (i.e. up to 300 metres)
- mark in the drainage systems
- clearly identify each drainage basin and mark in the divide between each
- mark in the areas of swamp or marshland, sand dunes and lakes
- label the management tracks and the walking tracks.

Don't forget BOLTSS.

11. Calculate the area of the region you have drawn? Show your working.

12. Describe the slope and landforms of the region.

13. Describe the land use of the area.

14. Describe three of the other land uses shown on the map using specific examples.

15. Describe the spatial association between land use and steepness of slope.

16. Describe the spatial association between land use and vegetation type.

17. What evidence is there on the map that indicates the direction of longshore drift along the coast? Explain.

18. Occasionally the entrance to Mallacoota Inlet silts up. How might this affect Mallacoota township? (Refer to the aerial photograph as well).

19. As there are few tracks and roads into Mallacoota Inlet, how do you think all the points and bays were named? Try to give reasons for the particular names.

20. Calculate the gradient of the management track in the Croajingalong National Park, from the intersection of Howe Range Track to Barracoota Link Track.

21. Suggest a reason to account for the closure of these tracks to the public in this area.

22. Locate Miners Track in the SW corner of the map. Give a grid square reference for the steepest one kilometer section along this track.

23. a. What landform feature is encountered just before the intersection with the unnamed track running roughly in a south easterly direction towards Pipeline Road?

b. Redraw the contour lines that show this feature.

24. Find the sewerage treatment ponds in the southwest corner of the aerial photograph. Suggest what the cleared area immediately to the southeast might be.

25. List two further examples of evidence of change over time that can be identified by comparing the map and the aerial photograph.

26. What do you think the white areas on the map represent? They are not specifically mentioned in the legend.

27. Suggest what the three white lines radiating from a point near the eastern border of the aerial photograph might be.

28. Refer to both the photo and the map. Suggest a reason as to why Horse Island would retain far more vegetation than the adjacent Goat Island.

29. Using both the map and the aerial photograph to guide you, make up a set of instructions for a holiday-maker who wishes to carry out a variety of activities. Start from Gipsy Point and travel along the Gipsy Point Road to Mallacoota Road, then into Mallacoota township and via the coast to Bekta Beach.

30. Draw a cross section from 354384 (Spot Height 94m) to 420368 (Bekta Beach). Be sure to label major rivers, tracks and roads on your cross section. Don't forget to include the vertical and the horizontal scale and to choose an appropriate vertical exaggeration.

Questions related to spatial concepts

Location

1. Describe the location of Mallacoota.

3. Describe the spatial association between the urban areas and Mallacoota Inlet.

Spatial Interaction

1. Suggest reasons for the spatial association between scrub areas and the eastern coastline. Suggest why the area of scrub along the western coastline is minimal.

2. What factors might determine the location of the Mallacoota airstrip.

Spatial change over time

1. Examine the sewage treatment ponds in the map 416388 and in the photograph. Describe the change that has occurred since the time the map was drawn (1990).

Movement

1. a. What resource would be moved to the urban areas along the feature at 385375?

b. What is the name of the river involved?

3. What vehicles are allowed into the area behind 510455?

Region

1. Draw a simple sketch map to show two regions in the western half of the map — public land and Croajingolong National Park.

2. Rescale your map so that it becomes four times smaller in scale. What is the new scale?
