

Polperro Dolphin Swims and Marine Education

About Polperro

Polperro runs both water-based activities and land-based presentations that provide students with a unique and potentially life-changing opportunity to see and experience what makes Port Phillip Bay a precious environment. Heavy emphasis is placed on seeing and informing students about the unique marine life living in the bay, the pressures which Port Phillip Bay faces and the management strategies used and available to protect this environment.

More specifically Polperro is able to provide information about the following topics:

- The formation of Port Phillip Bay and the changes that have occurred over time.
- The characteristics of Port Phillip Bay that make it a unique and precious environment.
- The physical processes at work in the bay.
- The marine life present in the bay.
- The physical and human pressures which Port Phillip Bay faces and the impact these have on the marine environment.
- The impact of plastics in our waterways
- The strategies that have been put in place or are available to protect the bay's environment.

The activities and information passed on by the staff of Polperro provides a valuable insight into the environmental change and management of Port Phillip Bay. This is highly relevant to those who looked at coasts, or more specifically Port Phillip Bay as a resource, or examined the impacts of plastics in our water ways.

To consider:

As mentioned above Polperro offer both water and land based activities. You can choose to do just one or combine the two together.

The water based activities centre on a boat trip around selected areas of Port Phillip Bay. During this trip students will get the opportunity to see examples of the marine life and a chance to snorkel with dolphins and seals. Whilst on board, the experienced crew of Polperro talk to students about the environmental significance of Port Phillip Bay, the marine life that is seen on the trip and the need to manage this environment. If notified, the crew can concentrate their content to suit the focus of your fieldwork trip/class content (see the above list). For example, if your class concentrated on the impact of plastics in our waterways, this would then be discussed in relation to Port Phillip Bay and the marine life

5. Describe the impact of physical forces (eg The Great Sands) present in Port Phillip Bay and the impact they have on this environment.

6. Complete the table below outlining the changes to Port Phillip Bay that have occurred over time.

Changes to Port Phillip Bay that have occurred over time.	Indicate whether the change was the result of physical or human pressures (these can also be classified as economical and technological)
Eg Urban Growth	

7. In the table below list the uses of Port Phillip Bay and briefly discuss the impacts that these uses may have on the surrounding environment.

Uses of Port Phillip Bay (in categories)	Impacts that these uses may have on the surrounding marine and coastal environment
E.g. Tourism	
Shipping	

8. Using the identification charts supplied, list and briefly describe the species that you observed or heard about whilst with Polperro. Comment on the pressures that these species may face and the management strategies that have been implemented to reduce the impacts of these pressures.

Name and key characteristics of the species. Indicate whether they are unique to Port Phillip Bay.	What pressures do these species face?	What management strategies have been put in place to reduce the impacts of these pressures. Comment on the effectiveness of these strategies (consider factors such as the sustainability of the strategy and whether the strategy achieves the goals set

9. On the map below indicate with the use of a key the potential source of plastics entering Port Phillip Bay.

Port Phillip Bay Catchment Areas



Source:

<http://www.bom.gov.au/water/nwa/2015/melbourne/contextual/physicalinformation.shtml>

Alternatively,

What are the sources of plastics entering Port Phillip Bay? (reference to the base map and previous classroom content would be useful here)

12. Complete the table below showing examples of the impacts to marine life as a result of plastics entering Port Phillip Bay.

Species affected by plastics (indicate whether this species is unique to Port Phillip Bay)	Impact of plastics to the species

13. Complete the table below outlining the strategies that exist in the Mornington Peninsula to reduce the impacts of plastics in our waterways and their effectiveness.

Brief description of the strategies implemented to reduce the impacts of plastics in Port Phillip Bay	Effectiveness of these strategies (consider factors such as the sustainability of the strategy and whether the strategy achieves the goals set)

