



# CITIZEN SCIENCE SHORELINE SHELL SURVEY INSTRUCTIONS



---

## PURPOSE

The purpose of the Shoreline Shell Survey is to collect and analyse a range of data about the occurrence of various molluscs around the bay. The survey results will be combined with those of other contributors collected right around the Bay since January 2009. This will allow us to note any changes in local mollusc communities, show which species make each beach special, provide information for local brochures and educational publications on Port Phillip Bay shells.

---

## VICTORIAN CURRICULUM LINKS

- F-2** Use informal measurements in the collection and recording of observations ([VCSIS052](#)).  
Use a range of methods, including drawings and provided tables, to sort information ([VCSIS053](#)).
- 3-4** Use formal measurements in the collection and recording of observations ([VCSIS068](#)).  
Compare results with predictions, suggesting possible reasons for findings ([VCSIS070](#)).
- 5-6** Living things have structural features and adaptations that help them to survive in their environment ([VCSU074](#)).  
Compare data with predictions and use as evidence in developing explanations ([VCSIS086](#)).
- 7-8** There are differences within and between groups of organisms; classification helps organise this diversity ([VCSU091](#)).  
Reflect on the method used to investigate a question or solve a problem, including evaluating the quality of the data collected, and identify improvements to the method ([VCSIS112](#)).
- 9-10** Multicellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment ([VCSU117](#)).  
Analyse patterns and trends in data, including describing relationships between variables, identifying inconsistencies in data and sources of uncertainty, and drawing conclusions that are consistent with evidence ([VCSIS138](#)).

---

## LOCATION

Any suitable beach area with shells in Port Phillip Bay where it will be possible to do regular surveys.

---

## SAFETY

**Before you start:** Have a First Aid Kit and gloves on-site. Check the entire site to note possible hazards. Warn all surveyors: Wear gloves when collecting shells.

**Warn all collectors: Don't put your fingers where you can't see them!**

Do not go to steeply sloping sites where there is a danger of falling into the water

---

## EQUIPMENT

Data survey sheets, pens, clipboards, (phone)camera, gloves, calipers or measuring tape, containers for shells.

---





# CITIZEN SCIENCE SHORELINE SHELL SURVEY INSTRUCTIONS



## DETAILED INSTRUCTIONS

1. Choose two permanent landmarks at least 40 paces apart to mark the survey area. (eg. pole, tree, pier, bin, street name).  
**Note:** start and finish landmarks at top of survey sheet.
2. Walk slowly along the high tide line to find and collect different types of shells. Include pieces of broken shell if they are an obviously different species.
3. When your group reaches the end of the survey area: sort your collected shells into different species (look for different colours and shapes, patterns, sizes and textures).
4. Record details of each shell type on the data sheet:
  - Write the name of shell (if known) or its qualities (colour, shape, patterns, etc) on the datasheet
  - Note how many of this species are still joined together and/or show no sign of wear.
  - Estimate the number of each shell type in the survey area and tick correct box.
  - Use a caliper/measuring tape or the scale on the survey sheet to measure the length and width of the shell.
  - Write the length and width of the shell in columns on the right of survey sheet.
5. Photograph the shell and note its number in front of the relevant line on the data sheet.
6. Repeat the above steps for the next shell species.
7. When all shells are recorded in order, return them to the beach area.

## DATA COLLECTION TIPS

Remember to photograph your shell species for verification purposes.

If present, please note the number of nurdles (plastic pellets), Sand Snail egg masses (jelly sausages) and Northern Pacific Seastars that have been found.

Check that you've written the survey details (location and date) at the top of the datasheet.

**Note:** Please do not take shells home, as they are a vital part of the beach ecosystem.

## FURTHER STEPS

Any questions to Neil Blake on 0409 138 565 or 9534 0670  
Email your completed shell survey data sheets and your photos to: [baykeeper@ecocentre.com](mailto:baykeeper@ecocentre.com)

## RELEVANT LINKS AND RESOURCES

<b>Port Phillip EcoCentre</b>	
<b>Seashells of South-East Australia</b>	Patty Jansen. Capricornia Publications
<b>Coastal Invertebrates of Victoria</b>	Field Naturalists Club of Vic, Marine Research Group
<b>Australian Marine Life</b>	Graham J Edgar. Reed New Holland
<b>Bayside Beaches of Port Phillip</b>	Raymond V Lewis
<b>Marine Molluscs of Victoria</b>	MacPherson & Gabriel. Melb Uni Press & National Museum of Vic
<b>Victoria's Rocky Intertidal Coast</b>	Eds. Rebecca Koss & Dr Tim O'Hara
<b>Museum Victoria</b>	<a href="https://museums victoria.com.au/ask-us/">https://museums victoria.com.au/ask-us/</a>

