

Exploring and identifying invertebrates

The **aim** of this activity is to identify characteristic features of different invertebrate groups and their associated habitats and learn about the biodiversity of the reef.

ACARA curriculum links

Science understanding (ACSSU111)

Science inquiry Skills (ACSIS125)



Instructions

- This activity should be conducted on the reef flat/lagoon at low tide. Check tides timetable and plan this activity accordingly.
- To increase the amount of data collection, split the group into smaller groups. Walk from shore to the reef crest and let students make notes on any changes in habitat.
- The invertebrates result table can be printed onto waterproof paper or copied onto a waterproof slate.
- It can be useful to laminate the ID-sheets with common groups of invertebrates, and take them into the field.

Equipment

- Booties, hat, sunscreen and water bottle
- Waterproof slate with pencil
- Underwater camera (if available)
- Viewing tube (if available)
- Waterproof ID guide (if available)
- ID reference books

Resources

- Invertebrate identification books
- Waterproof ID sheets / Common invertebrate cheat sheet in this curriculum

Recommended classroom activities

- Worksheet C2 - Observable features of organisms and dichotomous keys.

COMMON INVERTEBRATES

Porifera and Ascidians: Sponges, Seasquirts, Salps



Chris Roeliffsema

Polycarpa aurata (Sea squirt).



Ovet Hoehn-Gulberg

Didemnum vexillum (Ascidian).

Crustaceans:
Copepods, Crabs, Shrimp, Lobster, Mantis shrimp, Amphipods, Isopods, Mysids, Barnacles



Chris Roeliffsema

Carcinus maenas (Green crab).

Cnidarians: Jellyfish, Hydroids, Corals, Anemones



Craig Reid

Stomolophus meleagris (Cannonball jellyfish).



Eva McClus

Heteractis magnifica (Magnificent anemone).



Wenjung

Reef-building corals.

Echinoderms: Sea stars, Sea cucumbers, Sea urchins



Douglas Sattner

Holothuria atra (Black sea cucumber).



Chris Roeliffsema

Stenopus hispidus (Banded coral shrimp).



Chris Roeliffsema

Archaster typicus (Common sea star).

Worms: Bristleworms, Nematodes, Flatworms, Lace animals



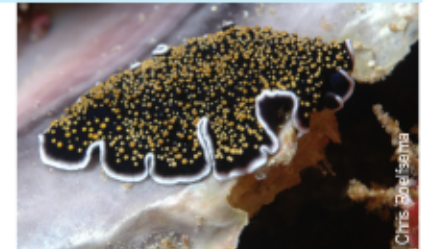
Chris Roeliffsema

Eupolymnia crassicornis (Spaghetti worms).



Craig Reid

Spirobranchus spinosus (Christmas tree worm).



Chris Roeliffsema

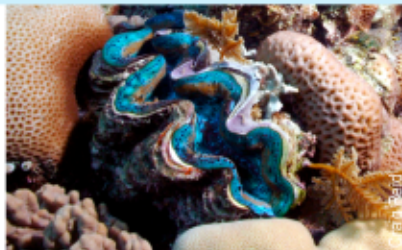
Thysanozoon nigropapillosum (Yellow-spotted flatworm).

Molluscs: Chitons, Clams, Mussels, Oysters, Snails, Slugs, Nudibranch, Octopus, Squid, Cuttlefish



Diana Klama

Acanthopleura granulata (Fuzzy chiton)



Craig Reid

Tridacna gigas (Giant clam).



Chris Roeliffsema

Cypraea tigris (Tiger cowrie).

Exploring and identifying invertebrates

Instructions

Species ID - Reefwalk

1. Make simple drawings of the invertebrates you find. Work as a group and let everyone draw a different invertebrate to maximise the number of species found.
2. Use the invertebrates result table and make notes about colour, shape and other characteristics.
3. Take a photograph and use this as reference to look up in books once back on shore.
4. Back on shore, identify the invertebrates drawn/photographed and count the number of species.
5. Compare your data results with other students.
6. Answer the following questions:
 - a. What kind of animals do you find on the reef?
 - b. How many species did you find? Can you give them common and scientific names?
 - c. Are there certain groups of invertebrates quite common in your area?
 - d. How biodiverse is your area?
 - e. Does the biodiversity change between zones?
 - f. List some of the different functions of reef invertebrates.

INVERTEBRATES RESULTS TABLE

Observer(s): _____

Location: _____

Date: _____

Weather conditions: windy / calm / cloudy / sunny _____

| Drawing | Description <small>List any characteristic features that assist identification</small> |
|---------|--|
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