

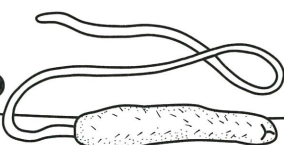
# Student

## Fact Files



Australian Government

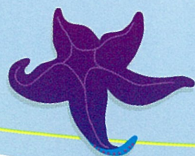
Great Barrier Reef  
Marine Park Authority

#24 

May 2005

### *Marine worms*

- Flatworms live in water filled spaces between grains of sand.
- There are about 900 species of ribbon worms in oceans around the world.
  - Some species of ribbon worm live in symbiotic (mutually beneficial) relationships with crabs, bivalve molluscs and tunicates.
- Most ribbon worms are less than 20 centimetres in length, however some can reach several metres or more.
- About 15,000 nematode worms have been described by scientists so far. However, it has been estimated that there may be closer to 500,000 species of nematodes in the world.
- Many nematodes are microscopic, however some may be up to a metre in length.
  - Nematodes are pests as they can parasitise and cause harm to almost every species of animal and plant.
  - Sipunculids are sometimes called peanut worms because their body shape is very similar to a peanut.



our great barrier reef  
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There are many types of worms in the Great Barrier Reef with the main categories including flatworms, ribbon worms, nematode worms, non-segmented coelomate worms and annelid worms.

### **Flatworms**

Four groups of flatworms are found on the Great Barrier Reef including:

- macrofaunal (large free-living worms)
- meio-faunal (small free-living worms)
- interstitial (less than one millimetre); and
- symbiotic (these worms live in a mutually beneficial arrangement with other species)



Flatworms have flattened bodies and are tiny marine animals. They live in the water-filled spaces between grains of sand. The spaces between the grains of sand create a complex three-dimensional labyrinth through which the worms move, feed and reproduce. Where there are strong currents and tides, flatworms risk being washed out of the sand and into the water because they are so small. So, most have adhesive organs that enable them to grip grains of sand. Flatworms mainly eat other invertebrates small enough to be captured.

### **Ribbon Worms**

Ribbon worms usually live in or on the sea floor under shells and stones, or in marine algae. Some burrow into sand or mud. Most ribbon worms are pale, however some species are brightly coloured with patterns of yellow, orange, red and green. Ribbon worms extend a proboscis to capture their food. The proboscis shoots out of the body under pressure and coils around the prey. Sticky toxic secretions from the proboscis help ribbon worms hold and immobilize their food.

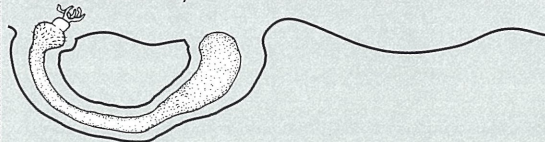
### **Nematode Worms**

Nematodes (also known as round worms) live all over the world and have been discovered on the very highest mountain tops, and in the greatest depths of the oceans. Nematodes have a cylinder-shaped body which is covered with a secreted, flexible, non-living cuticle, similar to the material from which our fingernails are made.

#### **Non-segmented Coelomate**

**Worms** The non-segmented coelomate worms include the following three groups of similar animals. They all lack segmentation and are similar in appearance.

**Sipunculids** - 320 species. They burrow in sand and mud or live in coral or wood excavations, or in old mollusc shells.



**Echiurans** - 140 species. These sausage-shaped marine animals burrow in sand and mud, or live in rock or coral crevices. They feed using a special apparatus called the prostomium, which transports food to their mouth.

**Priapulida** - 16 living and 11 fossil species. These cucumber-shaped or worm-like marine animals live buried in sand and mud in shallow and deep - but mainly cold - water.

