

Bio Kit for Kids  
NO. 3



# Rare Marine Creatures



United Nations Decade on Biodiversity

THAILAND



## Rare Marine Creatures

### Giant squid (Architeuthis)

The giant squid or architeuthis is the largest invertebrate in the world and is recognized as a mysterious animal. Its skin colour ranges from dark red to reddish-brown, resulting from pigment cells that enable it to hide well in the deep sea. For locomotion, it brings water in to the body through an inflow tube and closes it, then ejects the water through an outflow funnel so it can drive itself to the direction it wants.

Most rare marine creatures are nearly extinct. There are many species of rare sea animals living around the world, and this is why their stories have been told as legends of the sea. These are the examples of the rare ones.



### Mola

The mola fish has many names such as Sunfish, Oceanic Sunfish, Mola Mola, Moonfish. It is known as the largest bony fish in the world. Adult length can be up to 4 metres. It can weigh around 2,300 kilograms. Its shape looks like it being cut into half. It has a flat body with no tail and no scales. It has strong and flexible skin which can be up to 15 millimetres thick. It directs itself by moving its long dorsal and anal fins.



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## oarfish

The oarfish has long jaws and its head looks like a horse's head. It has the dorsal fin running along its entire long and flat body. It has two extra fins on both sides of its head. This fish is rarely found as it lives in the sea at the depth of 3,000 feet. The longest oarfish ever found is 200 feet in length.



Thailand has rare and nearly extinct marine creatures such as sea turtles, dolphins, whales, dugongs, giant clams and lobsters.



## Sea Turtles

There are five species of sea turtles in Thailand.



Olive ridley sea turtle



Hawksbill sea turtle



Green turtle



Loggerhead turtle

We can identify sea turtles from numbers of scales on their shells and numbers of scales between their mouths and eyes.



Leatherback turtle



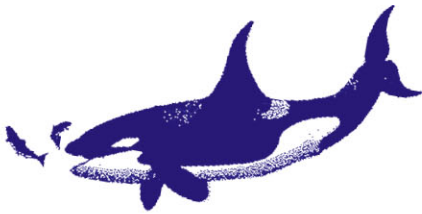
Nest temperature is important for incubation. Normal temperature results in more female hatchlings. In contrast, if the nest temperature is lower than the temperature outside, all the hatchlings are male.



## Dolphins and Whales

Dolphins and Whales are warm-blooded mammals living in the sea. Global studies revealed there are 78 species of dolphins and whales in the world while there are 23 species in Thailand. Their bodies were adapted to environment. For example, they have streamlined shapes in order to swim quickly

and easily, and as they still have lungs for respiration, their noses are on top of their heads for easy breathing.



In Pangnga Bay, Pangnga province, there are 20-30 bottlenose dolphins, 10 spinner dolphins and 20-30 finless porpoises.

In Palian Bay, Trang province, there are 40-50 bottlenose and humpbacked dolphins.





## Dugongs

Dugongs are mammals living near seashores and feeding on sea plants. They have breasts between their front legs. They, like other mammals, have lungs for breathing. Their nostrils are on top of their snouts, permitting them to breathe while the rest of their bodies are underwater. The nostrils can be closed to keep water out when submerge in water.

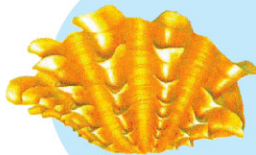
There are around 200 dugongs living in the Andaman Sea from Ranong to Satul provinces and in the Gulf of Thailand. Most of them, approximately 150 in number, are found in the Andaman Sea. Muk and Talibong islands in Trang province are the two places where most of them inhabit.

**seagrass** is main diet for dugongs and sea turtles.



## Giant clam


The giant clam is a mollusc having two shell valves joined by a ventral hinge. The outer edges of dorsal shell valves are wavy. It has 4–5 vertical folds on its shell, and has scales horizontally along the length of the shell.





The giant clam has a relationship with algae namely zooxanthellae as well as corals. Plenty of algae live on its mantle and use waste, such as carbon dioxide, nitrate, phosphate, etc., of the giant clam for their photosynthesis. The clam receives nutrients, such as oxygen and carbohydrate, back from the photosynthesis of the algae, apart from feeding by filtering suspended food particles in the water.

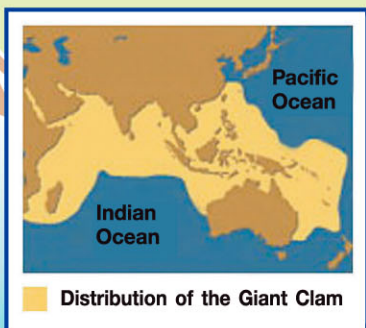


## Importance of Giant Clam

 The giant clam is a habitat of zooxanthellae which produce oxygen and carbohydrate for it and other marine lives living in the surrounded area.

 The photosynthesis of zooxanthellae obtains substances and wastes from other creatures in the ecosystem and transforms them into nutrients and energy. In other words, the giant clam serves as a food factory and waste treatment plant at the same time.

 The giant clam strains suspended matter and food particles from water, resulting in clearer water.





## Lobster

Lobsters are large sea shrimps which are mostly found in the Andaman Sea along the coast of Ranong, Pangnga, Phuket, Krabi, Trang, and Satul provinces. They are generally called, in Thai, Kung Hua Khon because of their beautiful heads.

There are many species of lobsters in Thai sea, but 3 species mostly found are the followings.



### Longlegged Spiny Lobster

*(Panulirus longipes)*

The longlegged spiny lobster is brownish-gray. Its somites and legs are striped with white bands. A pair of antennae are twice the length of its body. There are spines on its heads. The biggest twin horns are behind its eyes.

### Ornate Rock Lobster

*(Panulirus ornatus)*

The ornate rock lobster is brown with some orange spots. It has a very hard shell on its head. Its legs are striped with yellow bands. There are two yellow short lines on both sides of its somites.

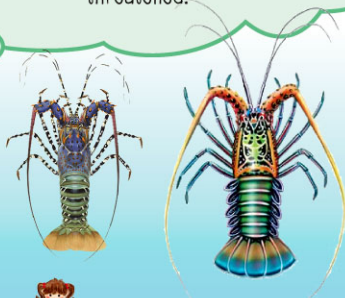


## Spiny Blue Lobster (*Panulirus versicolor*)

The spiny blue lobster is larger than other lobster in the same genus. Its body is quite long. Its head is half length of its body. It has two pairs of antennae, the first of which is small. Each of the antenna has a pair of small antennae. The second pair of antennae are bigger and twice the length of its body. Its head is spiny. It has five pairs of legs and one reddish-yellow flat tail. Its body is dark green. Every somite is striped with a white band. There are six pairs of appendages under abdomen.



Now you know that there are a lot of living things in the world. Some are nearly extinct. There may be only their stories and pictures left behind if we don't preserve those threatened.



## How can we protect rare sea creatures?

- Do not drop litter in the sea.
- Preserve natural resources and the environment.
- Report officers if you witness illegal fishing of rare sea creatures.
- Do not sell, purchase or possess rare sea creatures.

## Thank you

<http://animal.discovery.com>

<http://pirun.ku.ac.th>

<http://www.burapha.net>

<http://www.forest.go.th>

<http://www.greenexpander.com>

<http://www.icef.or.th>

<http://www.imax.com>

<http://www.mthai.com>

<http://www.nationalgeographic.com>

<http://www.negrilscubacenter.com>

<http://www.nicaonline.com>

<http://www.pmbc.go.th>

<http://www.siamscubadiving.com>



Let's collect aluminum cans left in the sea and see how many you can find.



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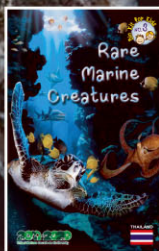
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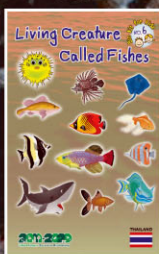
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