

# WELCOME TO CLUB MER



What's it all about?



## **CLUB MER PROGRAMME**

### **What is *Club Mer's* Introductory Marine Ecology Course?**

This course has been designed to introduce you to the coral reef, lagoon and coastal habitats found in the Western Indian Ocean region, the species that inhabit them, and how people make use of, and impact on, these ecosystems. There will be a series of 20 weekly sessions with talks and practical activities to help you understand the different aspects of tropical marine ecology. The course will focus on the topics listed below:

#### **Shore Safety:**

Be prepared for possible hazards and learn how to avoid incidents and treat injuries.

#### **Tides, Currents and Waves:**

Basic oceanographic principles outlining how the sea behaves locally and globally.

#### **Oceanography Practical:**

Collect data to map water depth and plot currents.

#### **Plankton:**

Learn about the microscopic plants and animals at the base of the food chain, including a practical activity to collect and identify zooplankton.

#### **Ecology Essentials:**

The important terms and concepts that are fundamental to marine ecology.

#### **Molluscs, Echinoderms and Crustaceans:**

The biology and behaviour of the diverse animals belonging to these groups.

#### **Seagrass and Algae:**

How to identify marine plants, and their role as habitats for other sea life.

#### **Seagrass Field Study:**

A practical exercise to find out which species inhabit seagrass beds.

#### **Rocky Shores:**

What can be found on rocky shores, and how animals adapt to life on a hard surface.

#### **Rocky Shore Field Study:**

A survey of a local rocky shore, looking particularly at zonation.

#### **Reef Fish:**

Identification of local species, and learning more about their biology and behaviour.

#### **Fisheries Study:**

Learn how to study fish populations by working with local fishermen.

#### **Coral Reefs:**

More about the formation, morphology and inhabitants of coral reefs.

**Coral Reef Field Study:**

Using viewing buckets to observe and identify the coral and fish species on the reef.

**Marine Resources:**

How the sea's biological and mineral resources are used by Man & How this exploitation can cause environmental problems.

**Mammals and Turtles:**

Learn about some of the sea's largest creatures.

**Seawater:**

The characteristics of seawater and the behaviour of the nutrients and minerals it contains.

**Water Quality Study:**

Measure the levels of certain nutrients and suspended sediments in the lagoon.

**Pollution:**

The different types of pollution and their effect on the environment.

This course manual contains all the information covered in each session, and includes definitions of important terms. A glossary is also included at the end of the manual, which lists all the technical terms covered in the different sessions. The first time terms included in the glossary appear, they are shown in the text ***bold italics***. Simple *italics* are used to indicate species names.

**Complementary Activities**

There is more to *Club Mer* than the scheduled sessions described above. Activities that complement the *Introductory Marine Ecology Course* include: swimming lessons and competitions; hosting open days to keep parents and friends up to date on *Club Mer* activities; and organising beach clean-ups, presentations and drama activities to raise awareness of marine conservation issues amongst the wider community. There will also be an opportunity for you to follow the *Club Mer* skills courses and become a *Lagoon Snorkeller* or *Reef Snorkeller* before moving on to learning scuba diving.

**Awards and Certificates**

It is possible for you to earn awards in recognition of your achievements as you progress through the *Introductory Marine Ecology Course*. Attending talks and taking part in the practical activities, completing worksheets and passing short, multiple choice tests gives you the chance to gain certificates. If your talents are artistic or literary, there is also the opportunity to collect awards by demonstrating these skills instead of completing worksheets and passing a test.

## Scheme for Certificates

	Talks	Practical Activities
<b>All certificates</b>	Shore Safety Ecology Essentials	
<b>Beach Patrol</b>	Molluscs, Echinoderms and Crustaceans Rocky Shores Seagrass and Algae	Rocky Shore Field Study Seagrass Field Study
<b>Reef Ranger</b>	Reef Fish Coral Reefs Seagrass and Algae	Coral Reef Field Study Fisheries Study
<b>Oceanographer</b>	Waves, Tides and Currents Seawater	Oceanography Practical Water Quality Study
<b>Fish Watcher</b>	Reef Fish Marine Resources	Fisheries Study Coral Reef Field Study
<b>Marine Artist</b>	Molluscs, Echinoderms and Crustaceans Reef Fish Coral Reefs	Coral Reef Field Study either Rocky Shore or Seagrass Field Study Assignment*
<b>Science Journalist</b>	Pollution Marine Resources	Water Quality Study either Fisheries or Coral Reef Field Study Assignment*

### \*Assignments

#### *Marine Artist:*

- Draw three animals from different taxonomic groups (with biological accuracy) and identify their anatomical features.
- Choose any art form to produce an illustration or model showing a marine habitat.

#### *Science Journalist:*

- Write two short articles (500 words), one with a descriptive style and the other discussing issues related to the use of a particular marine resource.