

A stylized illustration of an underwater environment. It features three main types of coral: a large yellow fan-shaped coral on the left, a red branching coral on the right, and a smaller blue branching coral in the center. The background consists of three nested, wavy layers of blue, representing water depth. Small white bubbles are scattered around the scene.

Module 1

# TRAINEE CORAL BIOLOGIST

# Introduction

Discover the incredible underwater world of coral reefs - the most diverse of all marine ecosystems - and what you can do to help ensure their survival. Alongside our resident Coral Biologist, you'll take part in every aspect of our coral restoration project, from preparation and transplanting to photography and uploading.



# Schedule

**Morning - 9:30 to 12:30**

Presentation:

Introduction to Coral Morphology (60 min)

Practical Workshop:

Collect coral fragments from our lagoon and learn about the coral species found in the Maldives (120 min)

**Lunch Break - 12:30 to 13:30**

(with your family, or with us!)

**Afternoon - 13:30 to 17:00**

Practical Workshop:

Prepare and build your own coral frame using the fragments collected in the morning session (60 min)

Practical Workshop:

Transplant your frame to our lagoon and collect the necessary monitoring photos (90 min)

Practical Workshop:

Upload your frame to the Reefsiders database with the use of mapping software Arc G.I.S. (60 min)

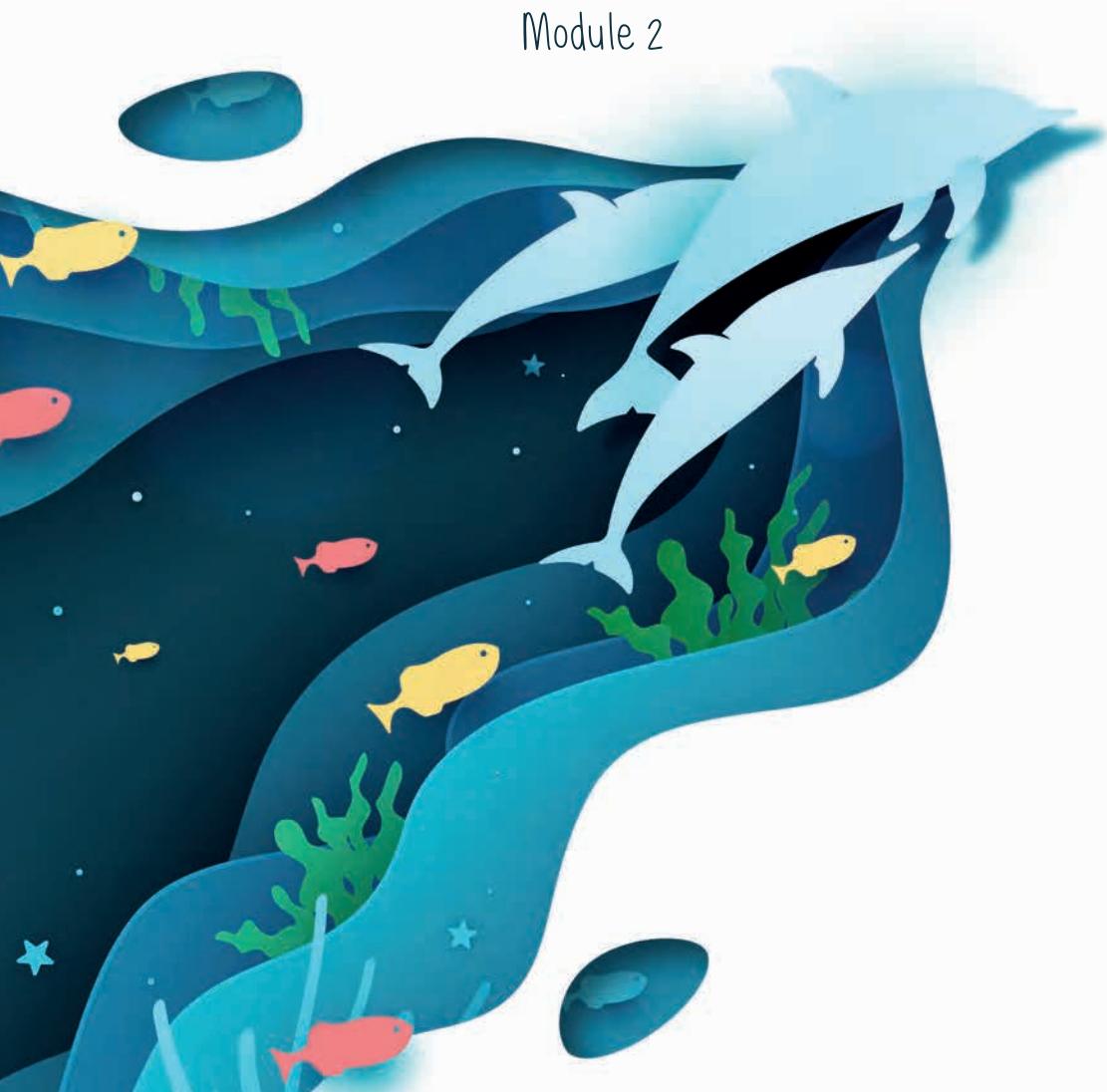


## After completing this course, you will be able to:

- Describe basic coral morphology
- Describe how corals reproduce
- Upload your frame to the Reefsappers Database with the use of mapping software Arc GIS
- Define and understand coral bleaching and the threats coral reefs are facing today
- Understand how coral reefs are formed and Darwin's theory on the creation of the Maldives
- Name the most common Maldivian corals
- Explain the coral frame restoration methodology and transplant techniques
- Monitor and maintain coral frames

# TRAINEE DOLPHIN BIOLOGIST

Module 2



## Introduction

Be part of the conservation story of the Maldives' much-loved marine mammals: dolphins and whales. Working alongside our Dolphin Biologists, you'll find out all about these magnificent creatures, go on a cruise to track their movements around the islands, and take and process photos to identify individuals.

# Schedule

**Morning - 9:30 to 12:30**

Presentation:

Introduction to cetaceans of the Maldives (60 min)

Practical Workshop:

Join a dolphin cruise and help take pictures (120 min)

**Lunch Break - 12:30 to 13:30**

(with your family, or with us!)

**Afternoon - 13:30 to 17:00**

Presentation:

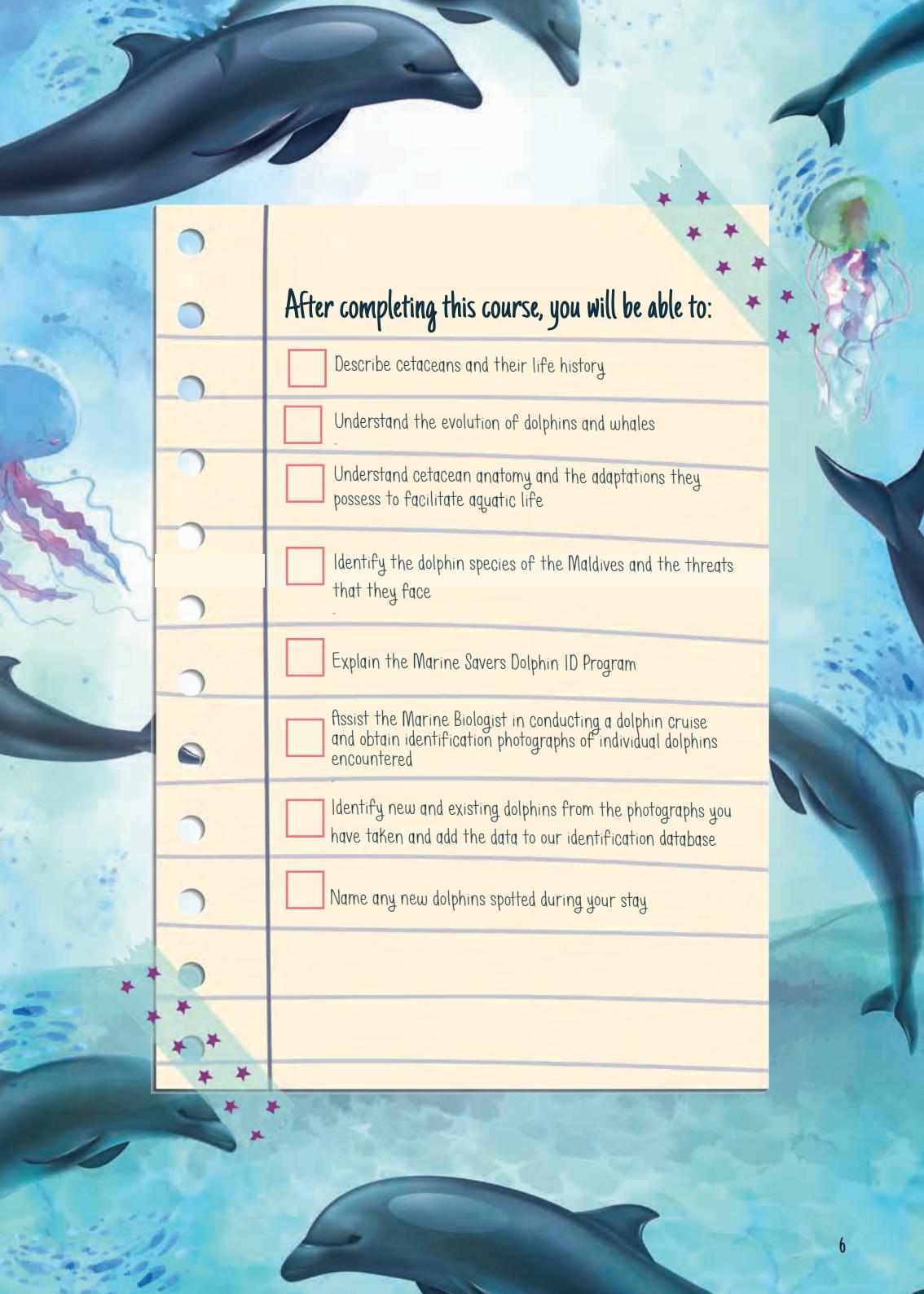
Introduction to dolphin photo ID technique (60 min)

Practical Workshop:

Processing ID photos (90 min)

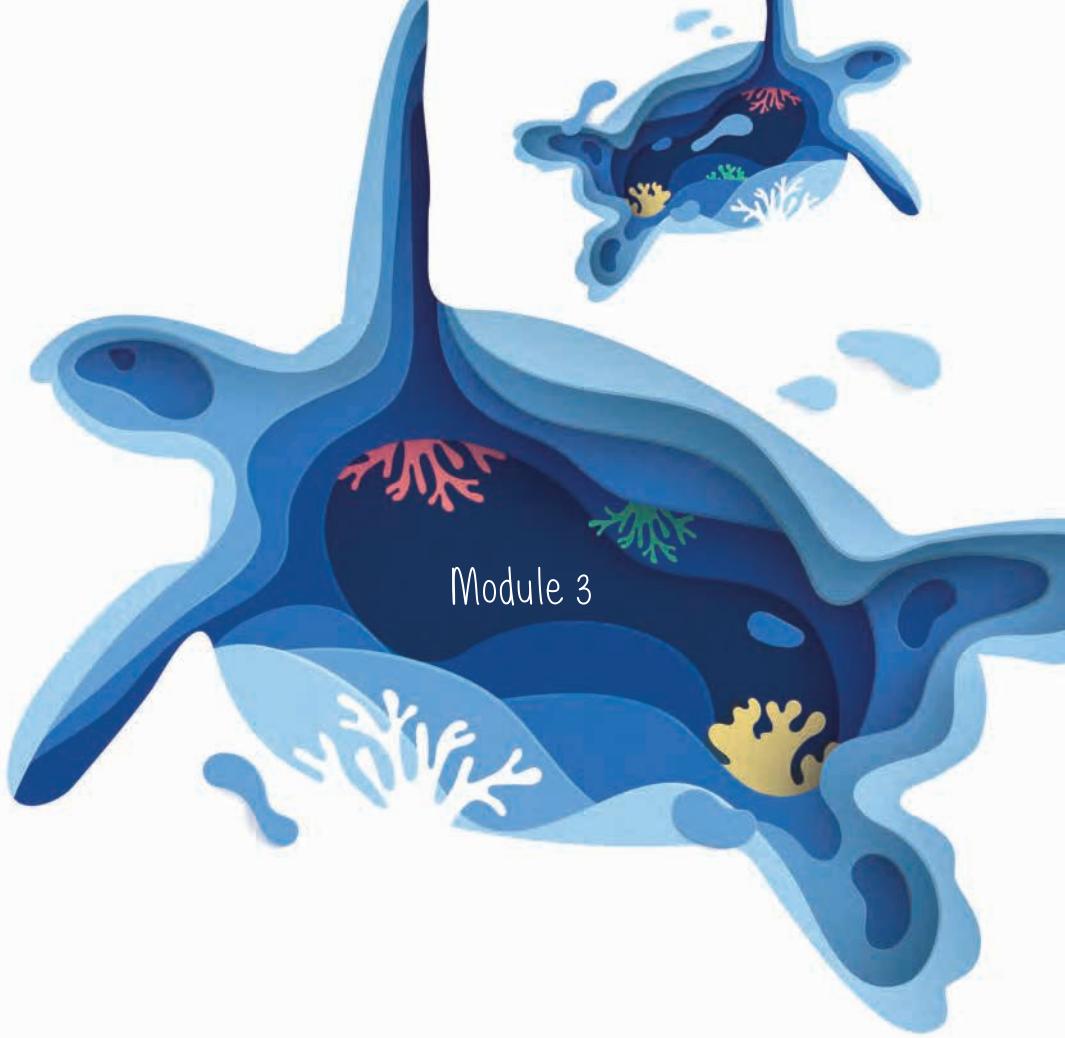
Practical Workshop:

Enter monitoring data into the Marine Life Database (60 min)



## After completing this course, you will be able to:

- Describe cetaceans and their life history
- Understand the evolution of dolphins and whales
- Understand cetacean anatomy and the adaptations they possess to facilitate aquatic life
- Identify the dolphin species of the Maldives and the threats that they face
- Explain the Marine Savers Dolphin ID Program
- Assist the Marine Biologist in conducting a dolphin cruise and obtain identification photographs of individual dolphins encountered
- Identify new and existing dolphins from the photographs you have taken and add the data to our identification database
- Name any new dolphins spotted during your stay



Module 3

# TRAINEE TURTLE BIOLOGIST

## Introduction

Around since the time of the dinosaurs, sea turtles are found throughout the world's oceans – with the exception of the polar seas – but now six of their seven species are at risk of extinction. Alongside our resident Turtle Biologist, learn about sea turtle anatomy and biology, the threats they face in the wild and what can be done to help conserve them.



# Schedule

**Morning - 9:30 to 12:30**

Presentation:

Sea turtles and their rehabilitation (60 min)

Practical Workshop:

Monitor our rehabilitating turtles' health and provide treatments as needed (120 min)

**Lunch Break - 12:30 to 14:00**

(with your family, or with us!)

**Afternoon - 14:00 to 17:30**

Presentation:

Introduction to sea turtle conservation and Satellite Tagging Program (30 min)

Practical Workshop:

Ocean swim with some of our patients (90 min)

Practical Workshop:

Processing collected data and entering information into our database (30 mins)

Practical Workshop:

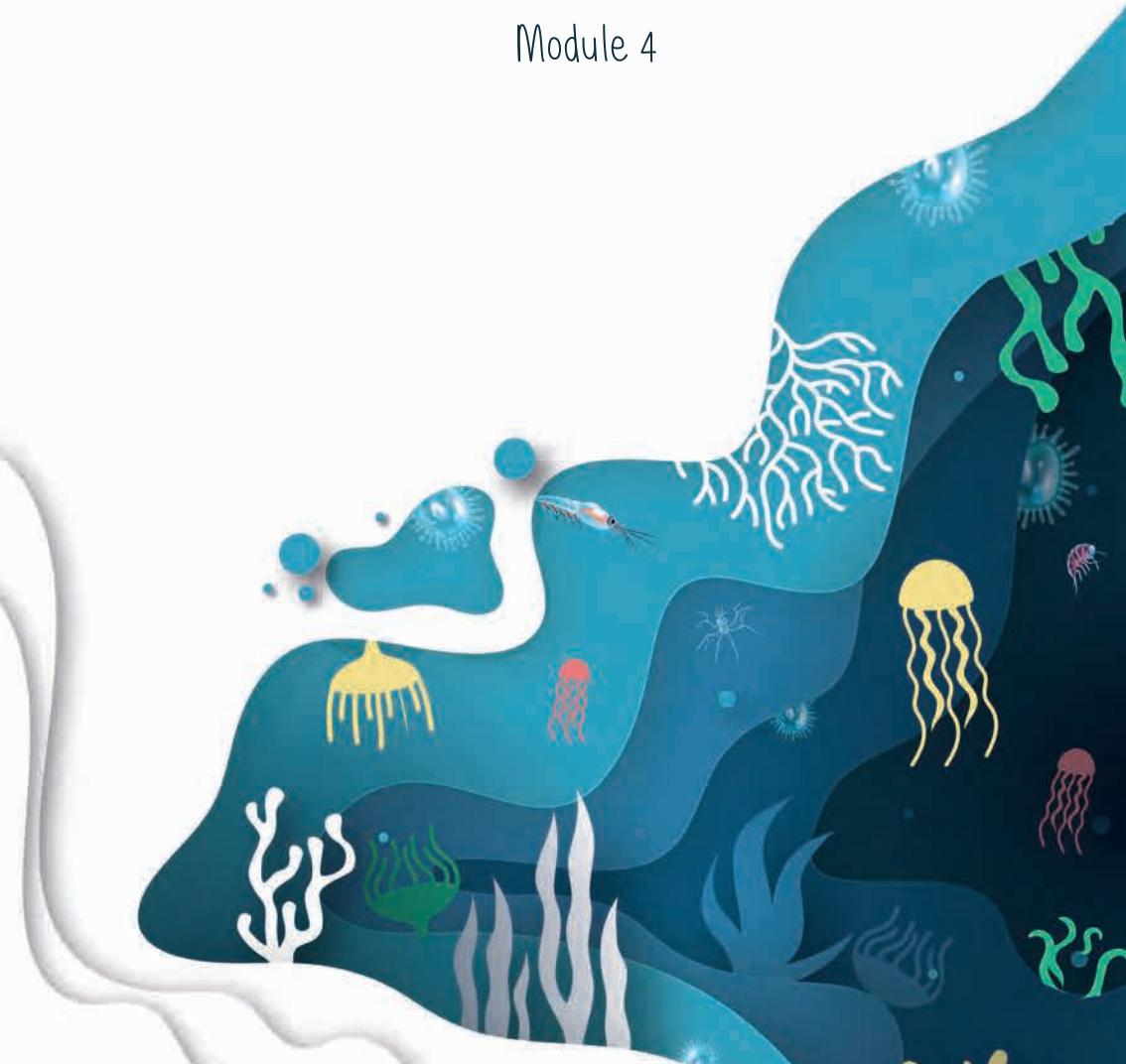
Preparing food and medication for patients and assisting in daily feeding (60 min)

## After completing this course, you will be able to:

- Describe sea turtles and their life history
- Understand the evolution, taxonomy and species identification of sea turtles
- Describe the life cycle and anatomy of sea turtles
- Name the threats to the species
- Explain conservation and rehabilitation methodologies
- Identify the species which can be found in the Maldives
- Monitor the health status and progress of our turtle patients alongside our resident Turtle Veterinarian
- Conduct scheduled feeding of our rehabilitation patients

# TRAINEE AQUARIST

Module 4



# Introduction

In this module we take a closer look at some of the smaller organisms that inhabit the underwater world. From plankton to clownfish, rotifers to jellyfish, each play a part in ensuring healthy ecosystems that sustain life. We'll introduce you to the work we do in the Fish Lab, assess the dangers and threats facing each species, and explore how we can help ourselves by helping the oceans.



# Schedule

**Morning - 9:30 to 12:30**

Presentation:

Introduction to microorganisms (60 min)

Practical Workshop:

Monitor and maintain our algae, plankton and brine shrimp cultures, alongside feeding our aquarium inhabitants (120 min)

**Lunch Break - 12:30 to 13:30**

(with your family, or with us!)

**Afternoon - 13:30 to 17:30**

Presentation:

Introduction to our breeding programs as well as the threats fish stocks face in the wild (60 min)

Practical Workshop:

Learn all about animal husbandry by assisting our Aquarists to maintain the exhibits and the species which call them home (120 min)

Presentation:

Aquaria considerations and species choice (60 min)

## After completing this course, you will be able to:

- Describe microorganisms in the marine environment, and their relevance in the food web
- Conduct aquaria maintenance on a wide variety of marine species
- Provide necessary care for a rotifer population
- Identify and observe rotifer cultures under a microscope
- Enter relevant data into our continuous database
- Hatch and care for your own batch of artemia
- Provide essential life support for our resident population of juvenile anemonefish
- Care for our resident population of moon jellyfish
- List and describe the current threats to global fish stocks, and how we can help alleviate the pressures they face

# TRAINEE PLANKTON BIOLOGIST

Module 5



# Introduction

Discover the role these incredible organisms play in our lives, from providing the oxygen we breathe to helping us track climate events and understand the migration of large sea animals. Be part of the first long-term, continuous plankton survey in the Maldives – and, to the best of our knowledge, in any global UNESCO Biosphere Reserve – and help contribute to a model of plankton diversity and biomass that we hope will expand into a national database.



# Schedule

**Morning - 9:30 to 12:30**

Presentation:

Introduction to plankton (60 min)

Practical Workshop:

Plankton identification and equipment preparation (120 min)

**Lunch Break - 12:30 to 13:30**

(with your family, or with us!)

**Afternoon - 13:30 to 17:30**

Practical Workshop:

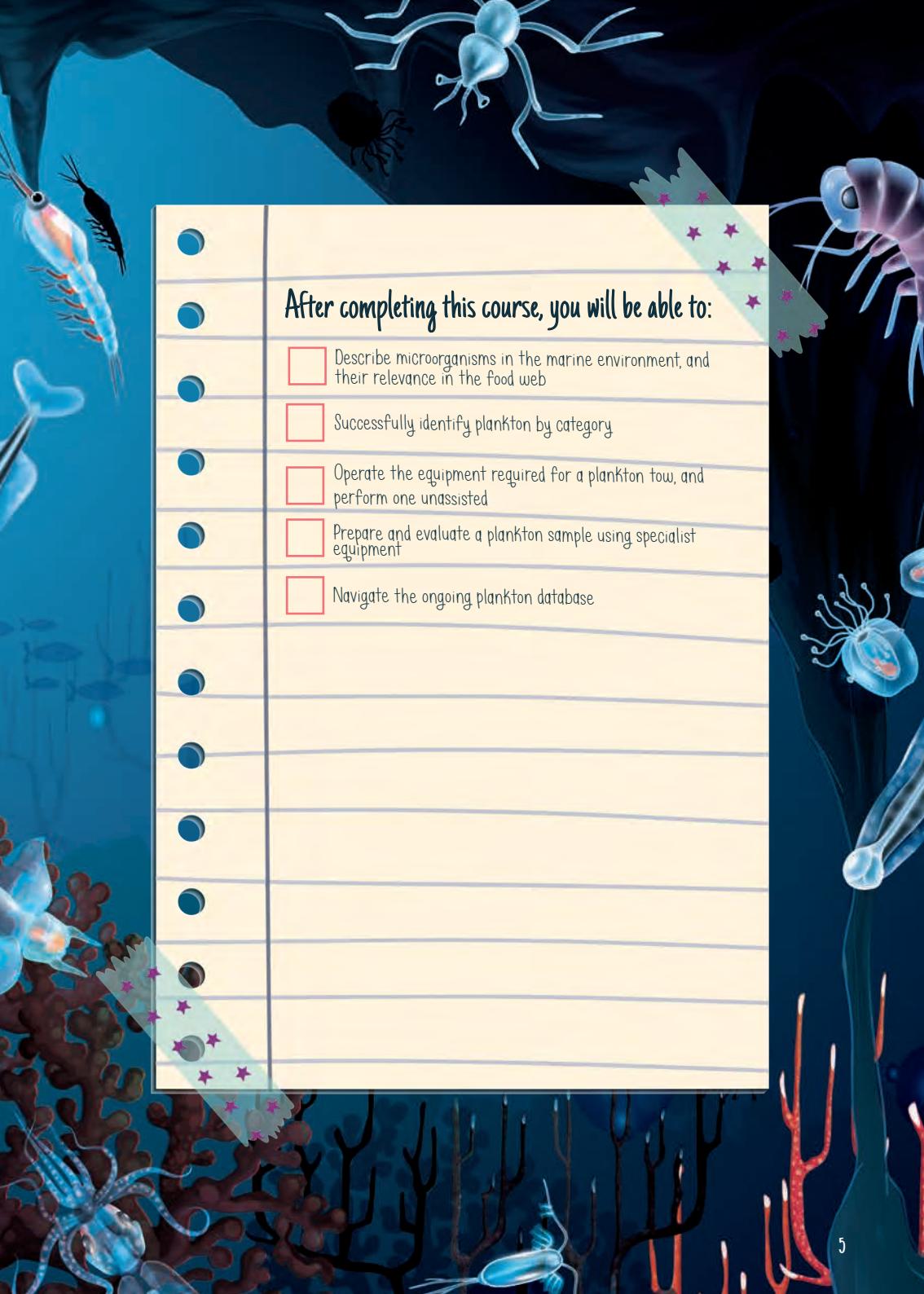
Plankton collection and snorkel adventure (180 min)

Practical Workshop:

Sample processing and identification (60 min)

Please Note:

Daily course schedules may change according to environmental conditions or participant interests/ability level. An appendix of scientific terminologies can be found at the end of this document.

The background of the page features a vibrant underwater scene. Various marine organisms are depicted in a blue-toned environment. At the top center, a translucent blue sea spider with long legs is visible. To its left, a large, transparent shrimp-like creature with red appendages swims. On the right side, a pinkish-purple copepod with long antennae is shown. In the bottom left corner, a small blue fish with a glowing orange spot on its side swims near some dark, branching coral. The bottom right corner features a red, tentacle-like hydroid colony. A light blue ribbon or banner with small purple stars flows diagonally across the upper right quadrant.

## After completing this course, you will be able to:

- Describe microorganisms in the marine environment, and their relevance in the food web
- Successfully identify plankton by category
- Operate the equipment required for a plankton tow, and perform one unassisted
- Prepare and evaluate a plankton sample using specialist equipment
- Navigate the ongoing plankton database

# TRAINEE MANTA RAY BIOLOGIST

Module 6



## Introduction

Gain insight into the secret lives of the gentle giants of the Maldives: manta rays. Spend time with these majestic animals and learn from our very own manta ray biologists. Discover how we work to conserve and protect the local manta ray population, and become a part of our research journey, from photo identification to helping monitor size, behaviour and even pregnancy.

# Schedule

**Morning - 9:30 to 13:30**

Presentation:

Introduction to manta rays and research techniques (60 min)

Practical Workshop:

Join a Manta Safari and help take IDs (180 min)

**Lunch Break - 13:30 to 14:30**

(with your family, or with us!)

**Afternoon - 14:30 to 17:30**

Presentation:

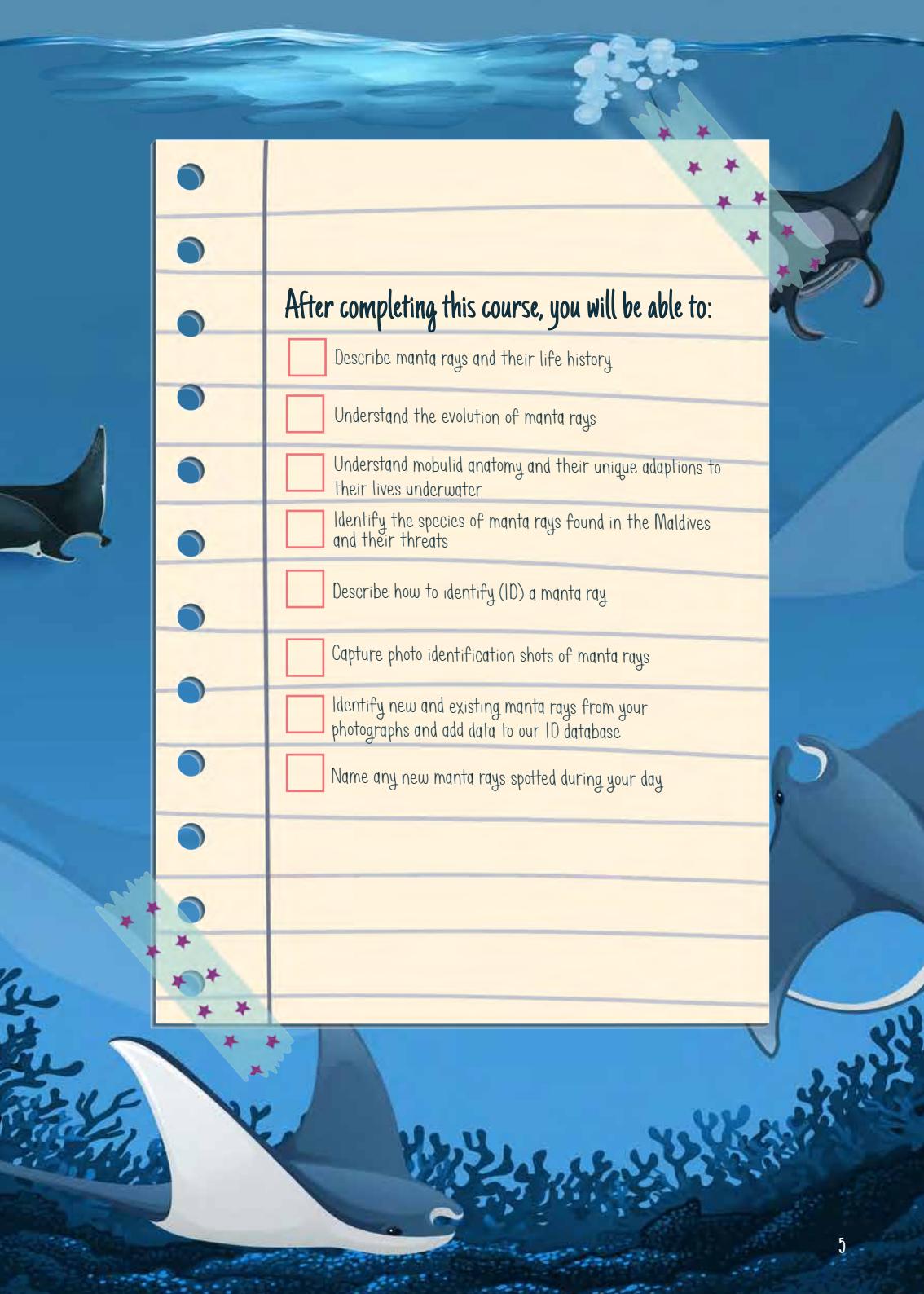
Manta ray biology and behaviour (60 min)

Practical Workshop:

Processing ID photos and survey data (120 min)

Please Note:

Daily course schedules may change according to environmental conditions or participant interests/ability level. An appendix of scientific terms can be found at the end of this module.



A large central box with lined paper and a blue border, containing a list of learning objectives, is set against a vibrant underwater background. The background features several manta rays of different sizes swimming gracefully. Sunlight filters down from the surface in bright rays, creating a dappled effect on the sandy ocean floor. Various types of coral and sea fans are scattered throughout the scene, adding to the depth and realism of the underwater environment.

## After completing this course, you will be able to:

- Describe manta rays and their life history
- Understand the evolution of manta rays
- Understand mobulid anatomy and their unique adaptions to their lives underwater
- Identify the species of manta rays found in the Maldives and their threats
- Describe how to identify (ID) a manta ray
- Capture photo identification shots of manta rays
- Identify new and existing manta rays from your photographs and add data to our ID database
- Name any new manta rays spotted during your day