

Careers in ocean science: lesson 1 of 2

# Who works for the ocean?

Twelve jobs, and the people who do them



MCP survey divers at work. Photo: MCP



# A country made of coastline

The Philippines has one of the longest coastlines in the world, and millions of people depend on the sea for food and work.

That means the country needs scientists, rangers, planners, divers, farmers, lawyers and storytellers who understand the ocean.

**How many ocean jobs can you name in one minute?**



The Negros coast. Photo: MCP

# Ocean jobs, part 1

## **Marine biologist**

Studies ocean life: how animals and plants live, grow and interact.

## **Fisheries technologist**

Helps manage fish stocks and fish farms, and supports fishing communities.

## **Oceanographer**

Studies the physics and chemistry of the sea, from currents to the deep trenches.

## **Dive instructor**

Teaches people to dive safely, and often leads survey and conservation dives.

## **Protected area ranger**

Patrols marine reserves, enforces the rules and talks to visitors.

## **Coastal planner**

Plans where to build, protect or restore along the coast.



# Ocean jobs, part 2

## **Data scientist**

Turns survey records and satellite data into answers and maps.

## **Science communicator**

Tells ocean stories through photos, films, writing and social media.

## **Aquaculture specialist**

Farms fish, shellfish and seaweed in ways that don't harm the sea.

## **Environmental lawyer**

Uses the law to protect the ocean and the people who depend on it.

## **Community organiser**

Helps coastal communities plan and run their own conservation projects.

## **Boat captain**

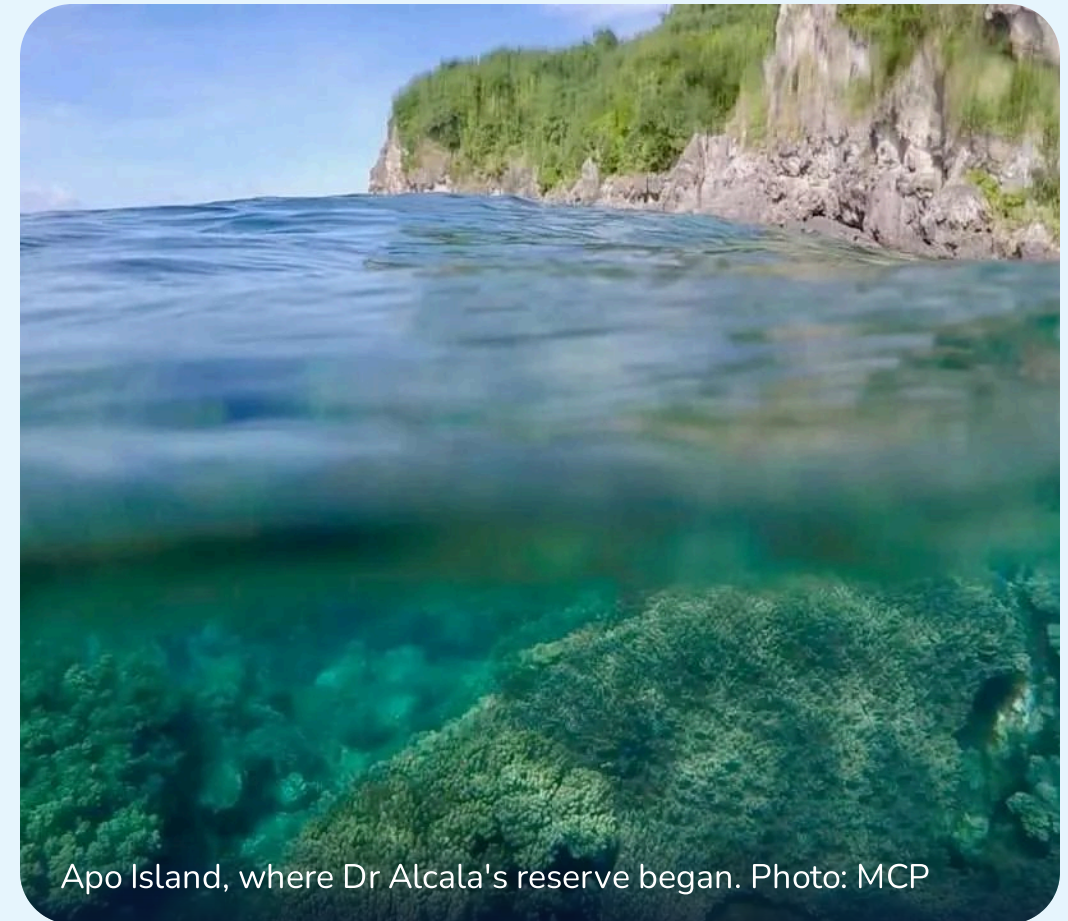
Runs boats safely for research, diving, tourism or patrols.



# Meet two Filipino ocean scientists

Dr Angel Alcala, a National Scientist, pioneered community no-take marine reserves at Sumilon and Apo Island. Hundreds of sanctuaries across the Philippines followed his model.

Dr Deo Onda of the UP Marine Science Institute studies microbes in the deep sea. In 2021 he became the first Filipino to dive to the Emden Deep, the deepest point of the Philippine Trench.



Apo Island, where Dr Alcala's reserve began. Photo: MCP



# The ocean job fair

1. Your teacher puts the twelve job cards around the room.
2. Walk around with your worksheet. For each job, give it a score from 1 to 5 for how interested you are.
3. Write down the skills each job needs.
4. Pick your top three, and find one skill you already have for each.



# A day as a science officer at MCP

Science officers train and lead volunteer divers, run the reef surveys, and check and manage the data that comes back.

It needs a science degree, strong diving and people skills, and speaking Tagalog or Visayan is a real bonus.



# Talk about it

Which job surprised you most?

Which jobs don't need you to be a strong swimmer?

Which skills came up again and again?

Next time: your path into ocean work



# Photos and sources

**Photos:** survey divers, coast and Apo Island by MCP. All illustrations drawn for this lesson by Marine Conservation Philippines.

## Sources:

- Silliman University (2024). Alcala MPA marker.
- University of the Philippines (2021). First Filipino to reach Emden Deep.
- Marine Conservation Philippines. Internships.
- British Council Philippines. MSc Tropical Biological Oceanography.

Full links are in the teacher reading. Free to use and share for education. Made by Marine Conservation Philippines. More free lessons: [marineconservationphilippines.org/resources/teachers-resources/](https://marineconservationphilippines.org/resources/teachers-resources/)

