

Sami Mustafa

## The Miracle of Marine Life Sami Mustafa





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PREFACE

All life is a wonder. All life is a miracle.

The hundreds of thousands of marine species, the known and the yet to be discovered, their incredible shapes and forms, their beautiful colours and patterns, their confounding intelligence and abilities are much more than a wonder. Their unique journeys from birth to adulthood, their feeding and mating habits, the ingenious ways in which they camouflage, communicate and defend themselves, their feelings, responses and social hierarchies—all of this is beyond the comprehension of the human mind.

There are fish that change sex naturally and routinely. There are jellyfish that never die unless devoured by a predator. There are sea slugs that self-decapitate for 'improved health', their severed heads moving around as if it were nothing unusual being bodiless, before regrowing a healthy body. There are nudibranchs that co-opt the defences of their prey for their own use. There are tube worms thriving in abyssal depths where, by all reckoning, there should have been no life.

Then there are coral reefs, the most biologically diverse ecosystem on Earth, known for the astounding richness of the life they support. There are mangroves, the only plants that thrive in salt water, providing a natural habitat and a nursery for countless species. There are also kelp and algae, which are neither plant nor animal, giving sustenance to myriads of fish and sheltering them from predators and storms.

We do not understand how such complex life forms evolved. We can only look and marvel at their magnificence.

This is what I have attempted to capture in The Miracle of Marine Life—the diversity and intriguing lives of these precious ocean dwellers, their stunning beauty and colours that dazzle our senses. The book could have easily been a thousand pages or more and would still tell no more than a fraction of the story of the marine kingdom. Far less than a thousand pages, it is but a tiny window into the fascinating undersea world.

The infinite variety of marine species is a reminder that there is so much beyond what we humans see. A reminder that this ever-changing, ever-expanding and ever-beautiful planet we call Mother Earth has given birth to unimaginable life forms. That Mother Earth sustains all life in perfect harmony and balance with a precision that can only be described as divine. Mother Earth is the mother of all miracles.

Sadly, modern humans are the only species that have not learned to live in harmony with nature, even when their own life depends on the life of others. The Miracle of Marine Life also draws attention to the urgency of preserving our oceans and everything that lives in them. Just as we need to preserve our clean air, save our birds and their habitats, and everything on land, from insects and animals to plants and trees. Today, much as fish, bird and animal species are endangered, the real endangered species is the human race. Sometimes it is hard to imagine how we have managed to come this far given our self-destructive ways.

Nowhere is this destruction more apparent than in the state of the oceans that cover 70 per cent of our planet and are vital to life on Earth. Global warming is bleaching and destroying coral reefs. Mangroves are being cut down with a vengeance. Dumping of toxic waste in seas is destroying fish habitats. Aquarium trade is endangering indigenous species. Commercial fishing is depleting fish populations at a rate that there may not be sustainable numbers left in a matter of decades. Species that survived and thrived for millions of years have been brought to the brink of extinction in the span of one lifetime. All in the name of progress and prosperity. All a result of human greed at its worst.

Fortunately, there are those who are desperately trying to save the oceans and the planet. The collective effort of scientists, naturalists, conservationists and climate activists may not yet be enough to turn the tide of destruction. But there is hope. Maybe it is still not too late.

Working on this book has been a profoundly enlightening and mystical experience. It was liberating to realize that we humans are not at the centre of the universe. That we are on the periphery and somewhat inconsequential in the larger scheme of nature and evolution. At the centre of the universe, perhaps, are the oceans with their deep waters and hydrothermal vents—the birthplace of all life.

## Sami Mustafa



The Ambon Scorpionfish is native to the Indo-West Pacific. It lives just offshore at the bottom of the sea and is one of the most poisonous fish in the ocean. It grows to 12 cm in length and can change colour to camouflage. Hiding in crevices, it waits for small fish and crustaceans to come close, then springs forward and devours its prey.

Ambon Scorpionfish raise their spikes when threatened, making them appear much larger to predators.



