



SULAWESI SEAS

Indonesia's Magnificent Underwater Realm

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TEXT BY MIKE SEVERNS AND PAULINE FIENE-SEVERNS

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FIRST SPREAD: FISHERMAN OVER THE REEF TOP AT BUNAKEN ISLAND
SECOND SPREAD: TASSLED SCORPIONFISH, SCORPAENOPSIS OXYCEPHALA, AND THE DAMSELFISH CHROMIS VIRIDIS
FRONTISPIECE: A YOUNG BLOTCHED HAWKFISH, CIRRHITICHTHYS APRINUS

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WOULD NOT HAVE BEEN POSSIBLE



at 1795

TO OUR FRIENDS, RUTH AND ROD DYERLY

WHOSE LOVE OF DIVING STARTED US ON THE ROAD THAT LED TO THIS BOOK





SEAHORSE: HIPPOCAMPUS KUDA

INTRODUCTION

MIKE SEVERNS

Seven years ago, Pauline and I began diving in Indonesia along the coral walls of the islands in the Bunaken Marine Preserve, a few miles offshore from the city of Manado in North Sulawesi. The conditions were nearly perfect. Sunny skies and warm, clear water with magnificent soft corals, giant cuttlefish and clouds of spectacular anthias.

The variety and richness of life was overwhelming, and there seemed to be an endless supply of subjects—I was in photographer's heaven. But after several years of returning to the drop-offs of Bunaken, Manado Tua and the other islands in the preserve, my excitement began to wane. The animals I was seeing were too familiar, and I felt I was no longer breaking new ground.

To find new species and recapture some of that initial excitement, we began to follow the drop-offs deeper, and deeper, and deeper. At one point we were regularly visiting a deep wave bench, a horizontal cleft created by waves pounding against the shoreline ten thousand years ago. An artifact of a time when the sea was considerably shallower than today, this 12-foot-deep and 15-foot-high groove lies 240 feet underwater.

To visit the wave bench is to go back in time, descending along vertical walls that once loomed high above the surface of the sea. Plants clung to cracks in the limestone and the cliffs were crowned by thick forest. Ten thousand years ago, people may have walked where we were diving, and fished along the shoreline defined by this ancient wave bench. Bunaken then was very different from today's beach-ringed island, protected by shallow reef flats.

It was addicting to dive deep and to see animals that live in a world where light is filtered through hundreds of feet of seawater. This great notch cut into Bunaken's cliffs by Pleistocene seas sprouted spectacular sponges and soft corals, and in it lived deep-dwelling fish, foraging in the shadow of the sheer coral wall above.

The danger on these dives came not only from ourselves and our equipment, but from the animals encoun-

tered as well. On several occasions, big sharks swam up behind me while I was taking pictures deep on the wall. Usually I would see their reflections in the glass of my camera's viewfinder, then turn to see them leaving. Sometimes we would meet face to face, and in spite of their obvious advantage in size and ability, they would always appear timid and nervous.

As for my part, the effects of nitrogen at depth left me calm and fascinated during these meetings. On the long slow ascent to the surface after a particularly deep dive—during which a large gray reef shark had come very close, and lingered longer than usual—I began to realize the fragile nature of my situation. In my mouth was the electric taste of adrenaline that had flowed in response to the shark's behavior. It had been a futile attempt to get my nitrogen-inebriated mind to recognize the danger.

Although deep diving was thrilling, I was not finding as many new animals as I had hoped. I didn't yet realize it, but although I was looking for animals in a place few others did, I was still looking for them in the same way.

My real education began with the discovery of a little red cone shell, *Conus aurisiacus*, once one of the most valuable seashells in the world. Its great rarity made it a prize for collectors. This little cone shell was extremely rare, however, only until its habitat was discovered. Now *Conus aurisiacus* is one of the most common shells I know. Its habitat is so specific that a diver who knows the secret can find one literally in minutes, something difficult to do even with many common seashells. To those who know its habitat, this is a very common shell. To those who don't, it is as rare as it always has been. Habitat is the key.

I have discovered that many animals are considered rare not because there are only a few around, but because no one understands their habitat. Finding a particular animal is a matter of knowing where, or on what, it lives. And to locate new photographic subjects, my guiding principle has become: Find an unusual habitat and you will find unusual animals.

My addiction to the adventure and narcosis of depth passed as I realized the shallows were far richer than the deeper waters. Not only were there more species to photograph, there were far more habitats in which to look for

AFTER MANY FRUITLESS DAYS DIVING AT SITES UP AND DOWN THE LEMBEH STRAIT LOOKING FOR SEAHORSES, I FOUND THE ONE PICTURED HERE RIGHT IN KUNGKUNGAN BAY, LITERALLY A STONE'S THROW IN FRONT OF THE COTTAGE WHERE WE WERE STAYING.

new species. Shallow water also gave me much more bottom time to observe and photograph my subjects.

Diving shallow became a passion as strong as diving deep had been. I soon discovered that the turbid, lifeless waters I had been avoiding by traveling to the offshore islands were not lifeless at all. On my first mud bottom dive I saw an unusual, incredibly drab sea snake, several hauntingly blue gobies, and more varieties of venomous fish than I had ever seen before. It was a gold mine of new



BUNAKEN ISLAND, WITH MANADO TUA BEHIND

species. One problem remained, of course—that awful mud background.

Instead of looking for magnificent coral formations in crystal clear water I began looking for logs lying on mud in quiet, silty bays—sometimes right in front of villages or even cities. Like a reformed smoker, I swore off anything to do with deep, clear water.

This phase didn't last long. Mud diving is interesting, but not inspiring. Except for animals such as tilefish, blennies, gobies and a small assortment of interesting but ugly mud-dwelling fish like the stargazers, which can dive into the ooze to escape predators, most animals on mud bottoms were just passing through. Occasional logs provided temporary shelter for juvenile fish, but when they grew up they left.

And after several days and nights in 10 feet of water in the same trough, I began to yearn for a little visibility and maybe just a hint of current to carry off the silt lifted by my fins. A site just a little more attractive. I guess I was showing signs of moderation, a symptom of old age I had not yet encountered.

Arakan reef, southwest of Manado, offered good visibility and a plethora of micro-habitats. It also had wide expanses of relatively flat bottom, something I had come to appreciate. To dive at 50 feet on a wall you have to fol-

low a thin contour in one direction or the other. At Arakan the 50-foot contour was as wide as a barn, and choked with life. Visibility was a vast improvement over that encountered on my mud dives, and the bottom was white sand—not the light sucking grey-green of mud.

The reef structure at Arakan consists of patches of sand interspersed with formations of hard coral and sponges. Offshore the bottom rises in coral-covered mounds, islands of shallow water in an otherwise deep sea. Arakan, like the islands around Bunaken, is also a national marine reserve, and is home to an impressive array of invertebrates and small reef fish.

The animals I encountered at Arakan were completely different from those living on the mud bottom. Nor did I find a strong representation of the species living along the drop-offs of the Bunaken reserve. Of course there was some overlap with these other habitats, but Arakan mostly offered a collection of animals uniquely its own.

From the Nusantara Diving Centre on the coast north of Manado where we stayed, the trip to Arakan generally took all day, and required that we pass in front of the city of Manado. One night on our return we passed through the Manado fishing fleet in Manado Bay. The fleet consisted of hundreds of fragile outrigger canoes drifting in the still evening on calm seas, each with a lantern to attract fish and a fisherman endlessly pulling his line up at arm's length, then allowing it to sink back down. Though they were floating in very deep water, they were fishing just below the surface for a small sardine-like fish which was then dried for market.

I have always thought that the water reflecting the lights of a city at night is the blackest water of all. The reflection of all the lanterns, and of the lights of Manado in the distance, gave me an eerie feeling, and the water looked less inviting than it ever had before.

I long resisted the temptation to dive Manado Bay, but eventually succumbed in service of my hunt for the lowly seahorse, and of my wife's desire to see every living nudibranch within a ten-mile radius of her current position. We anchored in about four feet of water, put on our gear and rolled off the boat, striking the bottom with our tanks. Then we were picked up by the strong current and swept through a minefield of sea urchins and scorpionfish, over a bottom that offered no hand-holds at all.

Don't get me wrong. I am very glad to have made this dive. Now I can talk very knowingly about it if the subject ever comes up, and I have gained some leverage in future dive site discussions with Pauline.

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THE REEFS OF NORTH SULAWESI,

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