

## **KINGDOM OF CORALS**

I found this article in National Geographic, January 2001. I found it interesting because it is amazing what can living organisms do.

Largest structure on the planet built by living organisms, Australia's coral rampart hosts a carnival of sea life.

With new fish species found in the Great Barrier area every year, the total is approaching 2,000. It will likely keep rising. So will the estimates of 4,000 mollusks and at least 350 hard, or reef-building, corals. Researchers counted more than 250 types of shrimps on the reefs just around Heron Island, near the Great Barrier's southern end. One volleyball-size coral chunk there yielded 1,441 worms from 103 species.

While I strapped on an air tank, Duncan Johnstone, one of the professional divers helping to crew our boat, offered advice. The waters, he said, would be very clear, with visibility at 150 feet (45 meters) or more, and very shabby, "shack" being how Aussies say "shark." What kind? "Whalers," another name for members of the requiem shark family. Great whites are rare in tropical waters. Another big boy is not: the tiger shark, a whaler that grows to 20 feet (6 meters). But Johnstone was referring to the more common five- to ten-foot-long (1.5- to 3-meter-long) bronze whalers, gray reef sharks, and silvertips.

"They hunt in small packs," he continued, "and they like to come right up for a look, give you a bit of a squeeze. Just back toward the reef if you can. Don't go popping to the surface."

Descending past green coral that looked like sunken organ pipes, I got squeezed by a pack right away. The whalers moved on, and I leveled out a hundred feet (30 meters) down on the lip of a sheer drop. I hovered awhile, then kicked out into nothing but blueness. Though my depth gauge gave a constant reading, I couldn't shake the perception of falling. Southern bluefin tuna cruised under my feet. Schooling unicornfish and trevallies, or jacks, swirled past like currents made visible. Far bigger shapes bulked where the blue turned to gloom.

Feeling more and more like a hapless mote of plankton, I turned back and drifted up balcony-like tiers of coral toward the clerestory light far above through chromis, sergeants, triggerfish, surgeonfish, and clouds of other fish feeding on everything from algae to shrimps to the corals that housed them. By the time I neared the anchor line, I knew the main challenge ahead wasn't going to be sharks. It was going to be how to make sense of the polychrome dazzle of creation that is a reef.

Heaving aboard after a dive, I would head straight for the identification books, thinking: Surely I can pick out the rainbow fish with pink stripes radiating from its eyes. Aha, it's a wrasse. But there must be a hundred wrasses here? And at least a dozen with that eye pattern. So is it the tailspot, threespot, checkerboard, pinkbelly, moon, or sunset wrasse?

