

I had scuba-dived on that coral reef many times before and was familiar with the eye-catching abundance of fishes: blue-headed wrasses, ocean surgeonfish, Nassau groupers, stoplight parrotfish, and a hundred others. They slowly cruised about as individuals, pairs, and small schools, constantly in motion, forming a halo over the corals, sponges, and algae that encrust the reef. But on this day in 1979, I peeked under the halo by placing my masked face within inches of the surface, and not only did I see the tiny shrimp, crabs, and worms that I had expected, but also fish! Teeny fish, only an inch long. These were not baby fish; they were adults. And they were not swimming about like other fish. These guys lived in holes in the stony coral surface—very unfishlike!

The face of a coral reef is pocked with cavities made by an assortment of creatures that burrow into the stony material—mussels, worms, barnacles, even sponges. It's a Swiss cheese. And many of these holes are occupied by little fish, bodies hidden within, heads projecting out, looking, always looking, for predators to avoid and food to eat. The more I scanned, the more I saw. These little hole-dwellers were the most abundant fish on the reef, and I had been totally unaware of them. My perspective completely changed. I now envisioned the fish community on a reef as lots of big fish openly swimming about and even more tiny fish living on the surface, or rather in the surface—cryptic fish. Time to recalibrate my perception. That recalibration changed the direction of my life.