SUSAN MANCHESTER

Floating World No. 1: Foreshadow, 2019 Oil on linen, 20 x 16 in



W GOODWIN

Swimming to Atlantis

Lessons from an underwater sculpture garden

usk at Stake Bay on the small Caribbean island of Cayman Brac . . . The last seabirds of the day hiss past, their wing tips almost touching the shining water as they return to their roosts in the cliffs of fossil coral. In the western sky, where the sun blazed only minutes ago, clouds form towering pink arabesques.

I am here with my brother, Chris, and we are about to make a night dive on Atlantis. We complete our final gear checks and wade into the tepid water of what could be Homer's "wine-dark sea." Considering our destination, the comparison is apt. This is Chris's first visit and his voice reveals an edge of excitement as he says, "You know, the full moon's gonna rise any minute. This is going to be so cool."

When the water reaches our waists, we begin swimming. Our plan is to stay on the surface until we reach the Atlantis buoy, about a hundred yards from shore. I am aware we have entered the water at that brief juncture between day and night when it is still dusk above water but already night below.

As we swim, my mind goes to an image of a lanky guy with long yellow hair and a prodigious nose. His name is Foots (size sixteen shoe) and he is an artist from southern Alabama who began building his version of the lost city of Atlantis in 2005. When he first saw the site, it was a nearly barren plain of rippled sand, but that changed as his underwater sculpture garden and artificial reef began to grow. A variety of sea creatures soon made Atlantis their home, and as these new residents arrived, Foots honored the larger ones with classical names like Spartacus (a barracuda), Leonides (a stingray), Aristotle (a peacock flounder), Cleopatra (a queen triggerfish), and Plato (a spotted eagle ray).

Swimming on the surface for about twenty minutes brings us to the Atlantis buoy. The bottom is now in the darkness fifty feet beneath us. We insert our mouthpieces and begin our descent through the warm, clear water. Reaching the bottom, my brother switches on his bright light. Preferring the demiglow that seems to emanate from the white coral sand, I leave mine off for a while. Chris's light illuminates a large black-and-white creature flying with calm wingbeats across our path. That would

I peer into the distance. No structures are visible yet, so we continue following the fifty-foot contour in the direction Plato went. We do not have far to go.

Ahead of us, silhouetted against that dim light of unclear origin, a massive rectangular arch rises from the immaculate sand. It is the gateway to the lost city of Atlantis. I watch the beam from Chris's light wash over the heavy bridge across the top of the arch, then the broad pillars, and finally the immense stepped bases. Almost every surface is embellished with molded geometrical designs bearing an uneven veneer of growth.

Side by side, Chris and I swim beneath the arch. As we pass through it, I turn on my light and point it into the darkness. At once I see a human figure facing us—a sentry checking the documents of visitors to Atlantis?

Beyond the arch I can just make out the broad avenue lined with classical columns extending into the heart of Atlantis. Floating through this dreamscape, we begin to see more figures gathered together in small groups. We assess the faces of each Atlantean we pass. One is fierce, the next is welcoming, and the next one looks contemplative. We inspect a platoon of warriors, each bearing a large shield emblazoned with mysterious symbols. Behind the soldiers are more civilians. A young woman holds a small fish. Another woman's hands are demurely clasped beneath her bosom. There is a physician with a flowing beard pouring an elixir from a green bottle into a cup. Near him a scowling man reads a scroll while his neighbor clutches a plaque covered with enigmatic figures. We know Foots has a story for every one of these Atlanteans.

At the end of the columned avenue we arrive at a monumental sundial that reminds me of a Star Trek Enterpriseclass spaceship—maybe that's how the Atlanteans arrived here. The huge concave disk, we later learn, weighs two tons, and its base, covered with bas-relief ornamentation, is even more massive. We notice the sundial has only eleven hour markers, an enigmatic number occurring frequently in Atlantis.

In the tapering space beneath the sundial's disk, we find a rusty goby hanging out near the bright-red mantle and gently waving tentacles of a rough file clam. A chaotic swarm of wormlike creatures is attracted to our light beams, and a long-legged arrow crab lurking under the sundial quickly grabs the flesh-colored worms with its blue claws before unceremoniously stuffing them into its mouth.

We hear the distant whine of a boat engine. At first we cannot determine its location, but the sound becomes louder. We hear it slowing and look up to see the dark shape of a small boat visible against the moon-brightened surface. It glides directly over us on its way to the mooring buoy. A few minutes later, we hear a splash and see the light of a single diver descending. The diver reaches the bottom and swims toward us.

A figure of astonishing appearance swims into the periphery of our downward-pointing lights—divers are careful not to blind each other with their lights. He is a tall person with long white-blond hair streaming like a halo from his head. His arms and legs seem improbably long and slim. This can only be Foots.

He swims up to us and checks in with divers' favorite signal, the "okay" sign, and we respond with the same. Then he gives us an insouciant wave and swims off toward the far end of Atlantis.

The full moon is floating up into the heavens now and I turn off my light to look at the silhouettes of this "lost city" in the dim glow of the moon. I think of duppies.

The northern Caribbean word for ghosts is *duppies* and in the aqueous moonglow tonight, I easily imagine Atlantis to be a village of duppies. As most islanders will tell you, "Them duppies is real," and the faces of those Atlanteans in the pale light might convince some skeptics.

After another half hour of exploring this undersea city of monuments and mute figures, it is time to head back to shore. Chris and I approach each other and plot our return route using a system of hand signals and body language born of hundreds of dives together. Our plan changes when Foots swims up to us, points up, and makes signs with his hands. We decipher his gestures to mean he is inviting us to return to shore in his boat. Our air is low and a boat ride is preferable to finding our way back through the maze of inshore reefs in the dark. We accept.

After our safety stop, we surface next to a small boat named Foot Loose. Floating beside the boat, Foots removes his tank and ties it to a rope dangling in the water. In an accent straight out of the heart of Dixie, he says, "I'll get in first and take y'all's gear. That way y'all can climb on in real easy."

We do as instructed and soon the three of us are huddled in the skiff. The full moon is ten degrees above the horizon now and its gleam provides all the light we need.

We are floating on the breeze-dappled sea surface,

Atlantis below, yellow moon above. Foots says, "Hope I didn't startle y'all down there but I was up the beach and saw you guys headin' out. I tried to get to the launch ramp before you got too far, but then you disappeared."

"Yeah, we decided to submerge before we got to Atlantis. We thought it would be fun to come upon it underwater in the dark. It's okay to dive here at night, isn't it?"

"Hell yeah, that's fine. I'm building her for people to eniov any time."

In the following days we discovered more about Foots. We learned that before he came to Cayman Brac, he had grown up diving in southern rivers and bayous looking for submerged Civil War ordnance. And he began daydreaming about building his own version of Atlantis.

Foots became an expert in molding concrete, which led to creating decorative moldings for buildings at Auburn University and helping with the restoration of historic buildings and churches in Germany, Austria, and Iran. When construction work brought him to the Cayman Islands, he fell in love with Cayman Brac, married a local girl, obtained dual citizenship, and became involved in island politics. At last he had the opportunity to build his dream of an underwater sculpture garden inspired by the legend of Atlantis, a sculpture garden that would also be an artificial reef in a previously barren place.

To convince the Cayman Islands Department of the Environment that Atlantis would be a good thing, Foots consulted marine scientists to make sure the materials and surface textures of his sculptures would both attract marine life and do no harm to what was already there. The concrete he uses for Atlantis begins with old coral that has the pH and surface texture optimized to support sponge and coral growth.

Foots does all of the design, concrete work, and positioning of the Atlantis structures himself, and he depends on a small group of volunteers to help with the grunt work. Several times a year, his right-hand man, Dave Stewart, flies down from the States to help out. Dave, a former nuclear submarine officer, is in his sixties, but to see him buzzing around Atlantis fifty feet below the surface, sawing stainless steel rebar or hauling ropes, lifting bags and air hoses, you would think he was much younger.

Speaking with Foots, it becomes clear that Atlantis is much more than one man's indulgent daydream. "You

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saw those guys with the big shields? They're the royal sentinels of Atlantis, but they're more than that. When those soldiers from the Underwater Warriors Foundation visited here with John Chatterton—y'all heard of the Wounded Warriors haven't you?—I made molds of their faces and created the sentinels to honor the courage and sacrifice of those guys. Some of them soldiers may never walk again but they'll always be standing tall in Atlantis."

Chris asked, "Any of those statues you?"

"Nope, but I put a little bit of my heart into every sculpture I make. You know, it's important to me that Atlantis be a damn fine artificial reef. I can hardly believe how much growth there already is on the older statues!"

This was an important point since the performance of Atlantis as an artificial reef was a major factor in obtaining government approval for his project.

"Man, have you seen the strawberry sponges down there? A dive master told me that they're bigger than any he's ever seen, even on the deep walls. Some a' them bigger than your haid!"

Strawberry vase sponges, to use their full name, are one of the many poriferan beauties to be found on the reef. They look black until you shine a light on them, and then their blood-red color blazes forth. But there's more than

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Marine biologists
like me are
gratified to
discover
aesthetically
pleasing reefs
are usually the
healthiest.

pretty red sponges growing on the concrete structures of Atlantis . . .

"And Atlantis is full of them gray sponges too. Man, they dang-near cover the sundial now. I'm tellin' you, y'all gonna love it. Take a look next time you're out there and tell me if I ain't right."

The next day, Chris and I returned to the shore entry point for Atlantis for our first daylight visit of this trip. We geared up and submerged. Following the alignment of the inshore reefs, much easier in daylight, we swam out to the sand flat where the lost city stood waiting.

We saw immediately that the strawberry vase sponges had indeed proliferated in size and numbers compared to my last visit. The gray stuff, which had appeared as small patches the year before, was now covering large sections of Atlantis. And I knew it wasn't a sponge.

Just to be sure, that afternoon I paged through a friend's reference book. As I feared, the gray stuff was an invasion of Trididemnum solidum, common name overgrowing mat tunicate. Despite the simple appearance of this species, tunicates are actually much higher on the evolutionary scale than sponges. Most tunicates are beautiful, but not this one. The fast-growing leathery gray T. solidum can overgrow and outcompete almost everything else on the

reef. And it's also unequivocally linked to eutrophication due to the presence of nutrients from agricultural runoff or sewage—and there is no agriculture to speak of on Cayman Brac. *T. solidum's* presence throughout the Caribbean has increased more than tenfold compared to the 1980s and the increase correlates perfectly with a sharp rise in coastal population.

It was difficult to give Foots this news. At first he seemed depressed about it, but after a few days, he decided that this was the "way of nature and it" ll all pan out."

Funny how the eutrophication in Brac's waters panned out for me . . . After decades of diving all over the world, I collected my share of abrasions, coral cuts, and sea urchin punctures, all of which eventually healed on their own. Then one day as I was leaving the water near Atlantis, I scraped my shin. The shallow scrape became infected. I applied disinfectants and continued diving day after day with only a Band-Aid—poor judgment on my part. Naturally my infected and frequently reexposed scrape failed to heal. By the time I got back to the states and saw a doctor, the lab tests revealed the presence of five different infectious agents, at least three of which are present in contaminated seawater. The "way of nature" can be harsh when humans are messing with it.

Foots's philosophical attitude notwithstanding, T. solidum poses a grave threat to the more desirable life that might attempt to colonize Foots's sculpted artificial reef, or any other available surfaces in the area. Desirable sounds like a subjective term, but in this case it is freighted with objective, measurable attributes. We desire a reef to be healthy, complex, and resilient because then it will have both an abundance and a balance of diverse and interdependent creatures like hard and soft corals, sponges of many types, different crustaceans, a big variety of fish, and an uncountable number of other life-forms, many of which are hidden and seldom seen. Subjective attributes also include aesthetics. We desire a lush, colorful fantasy land filled with amazing shapes, cryptic creatures for which we must search, and bustling fish life. Marine biologists like me are gratified to discover aesthetically pleasing reefs are usually the healthiest. It turns out that underwater, healthy is beautiful, just like above the water.

It takes time for a new reef, in this case Foots's coral concrete sculpture garden, to mature to this *desirable* condition, assuming circumstances are all conducive to achieving it. It's quite possible that desirable growth patterns will eventually supplant the gray overgrowing tunicates and other signs of eutrophication like proliferating macroalgaes, particularly if the nutrients fueling these enemies of a healthy reef are somehow eliminated.

As luck would have it, Atlantis's undesirable reef elements were about to be rendered irrelevant in one long, horrible night.

The next year, a Category 4 hurricane named Paloma blasted Cayman Brac with 140-mile-per-hour winds. Not only did the storm damage almost every building on the island and shut it down for many months, it also wreaked havoc on Atlantis. Even at fifty feet deep, most of the statues were toppled, the four-ton sundial was somehow lifted vertically off its keyed base and flipped upside down onto the sand, and the monolithic horizontal part of the archway was knocked off its supporting columns.

It was a terrible state of affairs, both above and below water. A year after the hurricane, with the island more or less functioning again, Foots and his team began working to restore Atlantis. Tackling the daunting task of repairing his severely damaged Lost City while facing medical and personal challenges was difficult, and Foots found himself unable to continue working on his dream.

For almost a decade now, Atlantis has existed as a tumbled monument to human ambition. It seems to be awaiting the return of the master who has personally sworn to me that he will set it all right and place more structures and statues "as soon as possible."

Last time I visited Atlantis, I saw Plato cruising the ruins. It seems that despite the ravages of hurricanes, eutrophication, and time, the Lost City, resplendent in its veneer of sponges, algae, tunicates, and corals, will continue as a thriving artificial reef.

W Goodwin is a writer, photographer, parent, teacher, and sailor who graduated from the University of California, Los Angeles, with degrees in biology and English and has completed the coursework for a PhD in biochemistry. Goodwin has written numerous blogs and countless articles and stories and is presently completing a novel. Goodwin's stories also appear, or will soon appear, in the Adirondack Review, the Dead Mule School of Southern Literature, Two Hawks Quarterly, 805 Lit + Art, the Sunlight Press, and Odyssa. Goodwin's photographic art appears in numerous publications (online and print) and in several galleries, two museums, a corporate headquarters, a children's hospital, several businesses, and homes of private collectors.

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