

When Triton's Trumpet Sounds a Warning, Heed the Call

A review by Kyle Pierson

The Sound of the Sea: Seashells and the Fate of the Oceans

By Cynthia Barnett

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In 1979, I worked for a family-owned weekly tabloid that operated from the back of The Shell Bank on Clearwater Beach. The Shell Bank was a quirky subdivided souvenir shop off the main drag. It hadn't changed since the 1950s, still using homemade display boxes and shaky-hand-lettered identifying cards. The simplicity probably added to shoppers hoping to find a genuine discovery. I assumed that it was still possible to pluck a perfect local conch shell out of the sand at low tide on Clearwater Beach.

The shop's owner, Major Clifford McKay, had been stationed in the Pacific during WWII and, like many service members, brought home exotic shells as souvenirs: pink conchs, shiny cowries, and iridescent abalone shells dazzling the folks back home. According to Cynthia Barnett, it's no wonder McKay opened his shop after he retired on Clearwater Beach; by 1956, shell collecting was one of the fastest growing hobbies in the US—just one of the many facts the author shares in *The Sound of the Sea: Seashells and the Fate of the Oceans*. However, anecdotes, not just the facts are the devices Barnett uses to humanize the history of seashells and make the urgent connection to our dependence on mollusk conservation. A mollusk, the animal that builds the shells, covers a broad classification of marine snails.

By 1979, Major McKay couldn't supply his shop with many local shells although he still went shelling until the day he died. I still remember "Mama" McKay opening plastic bags of imported varieties—tourists really didn't care where the shells came from. It's that ignorance and indifference that Barnett seeks to correct.

Barnett begins this mission by educating readers that a living animal makes the shell and that the poorest people in places such as the Coral Triangle survive by scraping tons of rotting animals out of their shells, which are then destined to be sold in Western shell shops. But, she cites an even more practical reason to care about mollusks: their vast numbers clean ocean waters, provide food for other marine life, and absorb carbon dioxide. Barnett quotes research finding that 90 percent of visitors to Sanibel's Bailey-Matthews National Shell Museum didn't know that a living animal makes the shell. I was shocked that this group of visitors is so uneducated.

Why does it matter? One hears Barnett's silent voice answering that question between the lines. She recalls Rachel Carson's 1962 *Silent Spring* warning that the widespread use of the pesticide DDT was found in eagles that had been feeding on toxic fish which then depleted the calcium in their egg shells. Carson's book is often credited with starting the environmental movement. If we don't do more now to protect mollusks, Barnett believes we are again poised at the edge on an ecological disaster. Research shows that in the last 50 years, the ocean has absorbed 90 percent of the excessive heat in the atmosphere, which is killing mollusks, or causing them to produce thinner shells, or migrate to cooler waters to survive, but they're moving at a snail's pace. As more and more succumb to the heat-related ocean acidification, fewer animals mean fewer seashells to store carbon dioxide and an inevitable dead zone in the marine food chain.

The ugly mollusk does not inspire devotion, but its beguiling shell does, so Barnett allots most of her book to the surprising history surrounding shells. At the turn of the twentieth century, at shell auctions, fanatics outbid each other for the chance to own rare examples of a Chambered Nautilus, Lettered Olive, a Lightning Whelk, or Queen Conch to impress their friends. But, knowing an interesting story about it makes it even more precious. Fostering pride in owning a rare and beautiful specimen is likely why Barnett chose a quote from Anne Morrow Lindbergh, *Gift From the Sea* for the epigraph: "We can have a surfeit of treasures—an excess of shells, where one or two would be significant." While reading, I often turned to my copy of *Seashells of the World* (Golden Guide) to check my memory. Pictures are necessary and an unfortunate omission in the book. Even though I helped my daughter with her fifth grade shell identification project many years ago, I often needed to brush up on my conchology. Color

photos of each of the twelve most endangered species highlighted would have reminded the reader just what's at stake. Even as most readers will just Google each species, having a picture would be more convenient.

Barnett's entertaining stories are the sweet stuff sandwiched between the good-for-you malacology (the study of mollusks and shells). She reveals how shells have shaped art, architecture, religion, economics, science, literature, and even history. Occasionally, the many names, places, and career histories she cites bog down her narrative. But she always connects the scientists to their interesting backstories. She also takes pains to mention the many women researchers who have advanced the field and whose contributions were overlooked or minimized. She dips into the historical record and snags readers with unlikely stories like the rise of Shell Oil, which grew from a peasant hawking shell-encrusted boxes for tourists from his kiosk. As the story goes, in 1833, Marcus Samuel's boxes grew in popularity, and he eventually expanded his product line to include shell sewing boxes, shell needle cases, and shell frames. Later, his son Marcus Samuel Jr. went further by importing "china bowls, olive oil, goatskins, ostrich feathers, sandalwood and an exotic assortment of tropical shells." Over two generations, thanks to good timing, an excellent location, and a gift for entrepreneurship, the Samuels grew their import business into Royal Dutch Shell. This story isn't just a believe-it-or-not tale; it's literally the connection to how Samuel grew his family business into an import business, which made his son a shipping magnate who conspired to reinvent oil tankers, thus monopolizing petroleum transportation around the world. The story illustrates the butterfly effect of how cheap oil transportation rippled through the world economy allowing for the inexpensive manufacture of plastics, and how between plastic pollution and rising sea temperatures, those two drivers of modern life now threaten oceans and marine animals more than many others.

One of the most haunting tales in the book is Barnett's account of the "voices" of an ancient people who used shell horns called Triton's Trumpets to announce births, deaths, calls for assembly, and warnings. Here again I consulted my handy *Seashells of the World* for a picture. It was easier to imagine her description of the shell and how it was cut to fashion a mouthpiece to "create the ideal windway for blowing a clear and powerful tone. Low and long, urgent and mesmerizing, there is nothing in the soundscape quite like it."

This is the voice Barnett wants us to hear, reverberating over millennia to reach us with a critical warning.

Readers are reminded at every turn that mollusks are dying from a myriad of environmental stresses caused by humans and that our own survival is dependent on the fate of the oceans. Just when the reader starts feeling that we've already traveled too far down the path of no return, Barnett injects a ray of optimism. For example, rapacious giants, such as the world's largest chemical corporation BASF, want to patent the DNA of marine animals found off the coast of countries such as Ghana and the Maldives to use for the raw material for developing new drugs. Barnett sees hope in the new field of science diplomacy. If scientists can advocate on behalf of small countries, the countries have a better chance of protecting their natural resources against capitalistic giants. This protection strikes me as a thin shield, but it's another authoritative voice sounding the alarm. Barnett concludes her book on the note of optimism she sees in the increasing activism of young people fighting for social justice as well as the reduction of large amounts of carbon dioxide pouring into the atmosphere. Overall, the book implores us to listen to the messenger—scientists, young people, and the “voices” of the shells before it's too late to save them.