The Great Tide Pool

TALES OF PACIFIC GROVE, CALIFORNIA

by local award-winning author, Brad Herzog



DEEP THOUGHTS



One of my favorite things to do in Pacific Grove is to walk to Lovers Point Park, make my way to the collection of boulders that constitute the outcropping at the tip of the park, scamper to the top... and take in the wonders of Monterey Bay. The rolling waves rimmed by sand dunes and rocky cliffs... it is a sight that calms the soul. But recently I came to a realization – about everything I don't know about those frothy blue waters. Specifically, for all the beauty of Monterey Bay, the most spectacular parts of it are actually unseen.



Until sailing (metaphorically) on a research quest of my own, for instance, I didn't fully realize that Monterey Bay is part of a much larger geographic phenomenon, one brimming with superlatives. I'm not talking about the vast Pacific Ocean, but rather the Monterey Bay National Marine Sanctuary. Designated as a federally protected marine area in 1992, it is simply the largest protected ocean area connected to the continental United States.

The numbers are astounding. Consider:

- The sanctuary stretches along 276 miles of shoreline, all the way north to Marin County and all the way south to Cambria. That's nearly onethird the length of California's coast.
- The MBNMS covers 6,094 square miles of ocean, extending (on average) 30 miles from shore and sometimes as far as 53 miles. It is larger than Yellowstone National Park, even larger than Connecticut.
- The total volume of water in the sanctuary? How about 4,480 cubic miles. That's equivalent to 7,469,681,093 Olympic-sized swimming pools.

Perhaps even more remarkable is its depth, a feature that begins close to home in Monterey Bay in the form of the largest submarine canyon along the coast of North America. Monterey Canyon is similar to Arizona's Grand Canyon in both shape and scale – extending nearly 300 miles offshore, 7.5 miles across at its widest point, with walls plummeting as much 2.5 miles at its greatest depth. But while the Arizona wonder was created by the Colorado River over millions of years, Monterey Bay's marvel was formed by sediment piling up after being carried along by coastal waters.



Another superlative offered by those blue waters: the rich biodiversity. I knew, of course, that it provided a habitat for sea otters and harbor seals and humpback whales, each of them frequent visitors as seen from the shores of PG. But the MBNMS is actually home to three-dozen species of marine mammals (from the bottlenose dolphin to the northern elephant seal to the pygmy sperm whale), more than 180 species of shorebirds and seabirds (black-bellied plovers, long-billed curlews, marbled godwits) and some 525 species of fishes (rockfish, salmon, white seabass). Thus its nickname: the "Serengeti of the Sea."

But it gets even more remarkable. As one of America's closest-to-shore deep ocean environments, Monterey Canyon teems with organisms both beautiful and bizarre – from giant squid to lanternfish to creatures on the seafloor that use methane instead of sunlight to create chemical energy in absolute darkness.

So the next time you stand on the shores of Pacific Grove, stare out at Monterey Bay, and inhale the serenity, remember that there are countless unseen curiosities – mind-boggling geological and biological wonders. Did I mention that there have been 1,276 reported shipwrecks in the waters that constitute the Monterey Bay National Marine Sanctuary? The stories beneath the surface are endless.



