Book Excerpt: "Thousands of Selves"

By Liz Cunningham '82

Adapted from *Ocean Country: One Woman's Voyage from Peril to Hope in Her Quest to Save the Seas*
Foreword by Carl Safina. North Atlantic Books, distributed by Random House, 2015

Liz Cunningham '82. Photo by Eiglys Trejo.

At age thirty-six, Liz Cunningham '82 was nearly drowned and temporarily paralyzed by a kayak accident. As part of her recovery she returned to the ocean, training to become a divemaster. Seeking out the Caribbean islands of Turks and Caicos where she first fell in love with the undersea world, she witnessed a four-degree spike in the water temperature that bleached a coral reef. Ocean Country *is Liz's quest to understand that and many other changes in Earth's oceans. It chronicles her journeys from her California home to the Turks and Caicos, Indonesia, and the Mediterranean, and her conversations with conservationists, fishermen, sea nomads, and scientists. Throughout, she offers poetic meditations on the state of the seas. Ultimately, this story of a woman emerging from paralysis to power is also one of finding true hope. Calling it "a stunning account of our endangered oceans," College of the Atlantic faculty member Rich Borden writes, "Time and again Liz Cunningham discovers threads of hope in people committed to reversing these tragedies. Taken together ... they unlock a hitherto unimagined and hopeful revelation. You can feel it in the author's heart. You will feel it in your own." The episode below is adapted from "Thousands of Selves," one of the concluding chapters of* Ocean Country, *set in the Mediterranean.*

A divemaster led us along what looked like an alpine rock face—the seascape beneath a rocky island called La Gabinière—one of several tiny islands surrounded by seagrass southwest of Marseille, known as the Îles d'Or. Clumps of seagrass grew in the crevices between the gigantic boulders. Schools of slivery sea bream chomped on it like little cows. The northern light was so angular that when one of the bream yanked on a piece of grass at a certain angle, its scales emitted a flash like a signal mirror.

Seagrass meadows have an abundance of life parallel to that of mangroves. They are filled with juvenile fish, crustaceans, and anemones. The seagrass in the Mediterranean is over a yard tall, with stocky, dark-green strands. Over 70 percent of all fish in the Mediterranean take shelter in it at some point in their life cycle. The marine ecosystem balance relies on it.

There was a tap on my shoulder. It was the divemaster, Pierre. He waved at me to follow him. The current was light enough to make a go at swimming to Le Sec de la Gabinière, a seamount—a kind of tiny underwater island—just to the southwest. Soon the rocky edge of the island vanished and we were swimming in open water. A few minutes later, Pierre turned around and pointed downward. Forty feet below, in the open sea, was an outcropping covered with seagrass and purple and yellow sea fans.

As we descended, two enormous grouper, each over a yard long, came into view. They hovered in a cut between two knobs of stone. Their lumbering bodies barely moved. Grouper usually have one cave or crevice they consider home and several others close by which they circulate to and from. These groupers may have lived there all their lives, perhaps over thirty years.

Large fish like this play an important role in healthy fisheries. They have been shown to have exponentially more young than small fish because more of their energy can be allocated to reproduction.

It had been two decades since I'd seen grouper that big. The Nassau grouper in the Caribbean were now on the International Union for Conservation of Nature's dreaded Red List of species at high risk for extinction. But the grouper at Le Sec de la Gabinière had been given a chance to grow old. And they hadn't done it in some far-flung

location, but in close proximity to one of the most populated areas of the Mediterranean. It was possible because they lived in a marine preserve whose boundaries were respected.

***

"We don't know it, but we have thousands of selves," Naima Andrea Rodríguez, a staff member at the World Wide Fund for Nature office in Barcelona, had told me when we were talking about biodiversity. She meant that it wasn't just the organisms in our guts that keep us healthy, there are microorganisms in our nasal passages, mouth, and skin, and all of them keep us healthy—the "human microbiome."

To save lives, we must save the thousands of lives that make each one possible—from a blue whale to a speck of plankton.

Each of us hums with life; each of us is a busy orchestration of many creatures. The passenger manifest for the ark has been updated: to save lives, we must save the thousands of lives that make each one possible—from a blue whale to a speck of plankton.

***

There are three major islands in the Îles d'Or—Levant, Port-Cros, and Porquerolles. La Gabinière is just southwest of Port-Cros. When we finished the dive, the boat crossed to Porquerolles, where I was staying. Portions of the rocky islands thrust up out of the ocean like alpine peaks. There were over six miles of open water between the two islands, but halfway across, white butterflies fluttered over the waves. As we got closer to Porquerolles, the scent of pine trees filled the air.

In the summer, tourists flock to Porquerolles and take in the rocky vistas and wander trails through the forest and the olive and fig groves maintained by the Conservatoire Botanique National, the national botanical conservatory, which safeguards threatened plant species. Then, in the fall, like an exhausted snail, the island coils into its shell for the winter, and the two hundred or so inhabitants savor the quiet.

When I arrived in early October, things had already settled into a hushed peace. I stayed in an old villa retrofitted into a hotel next to a small nineteenth-century church with plain windows, a clock, and a prominent bell tower. In front of it was a dusty square with a flock of white pigeons. The brass key to my room had a hollow ring at one end, like the key to an antique trunk.

***

The next morning the dive boat motored to the rocky point of Porquerolles called the Médes. It was sunny, and the water was almost as smooth as a glass mirror. There had been several weeks of unusually calm, windless weather. As I sank into the sea, I was startled by how clear the water was. It reminded me of the gin-clear water in the underwater caves of the Yucatán.

The rocky terrain was covered with bright orange sponges and sea lettuce, a type of algae that grows in flowery swirls. I hovered in a sand channel and peered sideways into the tall seagrass. There was an ultrafine fizz, tiny bubbles on the surface of the seagrass blades and in the water.

"No," I mused. "It couldn't be!"

But it was: *oxygen.*

If you'd asked me the day before if I understood photosynthesis, I'd have said, "Sure. Carbon dioxide in, oxygen out. What's not to get?"

But now that truth came fully alive. I could hear my noisy breath through my regulator. I had thought of breath as inhale and exhale, but now I was vividly experiencing another dimension of it, a key and rather large-scale one: the biosphere.

I turned slowly in the water with my fins; all I could see were the seagrass meadows. I recalled seeing NASA images of them taken from satellites. One spanned 770 miles along the coast of Australia. Another, just below the Everglades, covered over five thousand square miles. There were miles and miles of seagrass, from the Mediterranean to Mexico to New Guinea to Zanzibar. And mangroves and plankton and forests and rainforests—all pumping out oxygen. We might go without food for months, water for days. But air? Minutes.

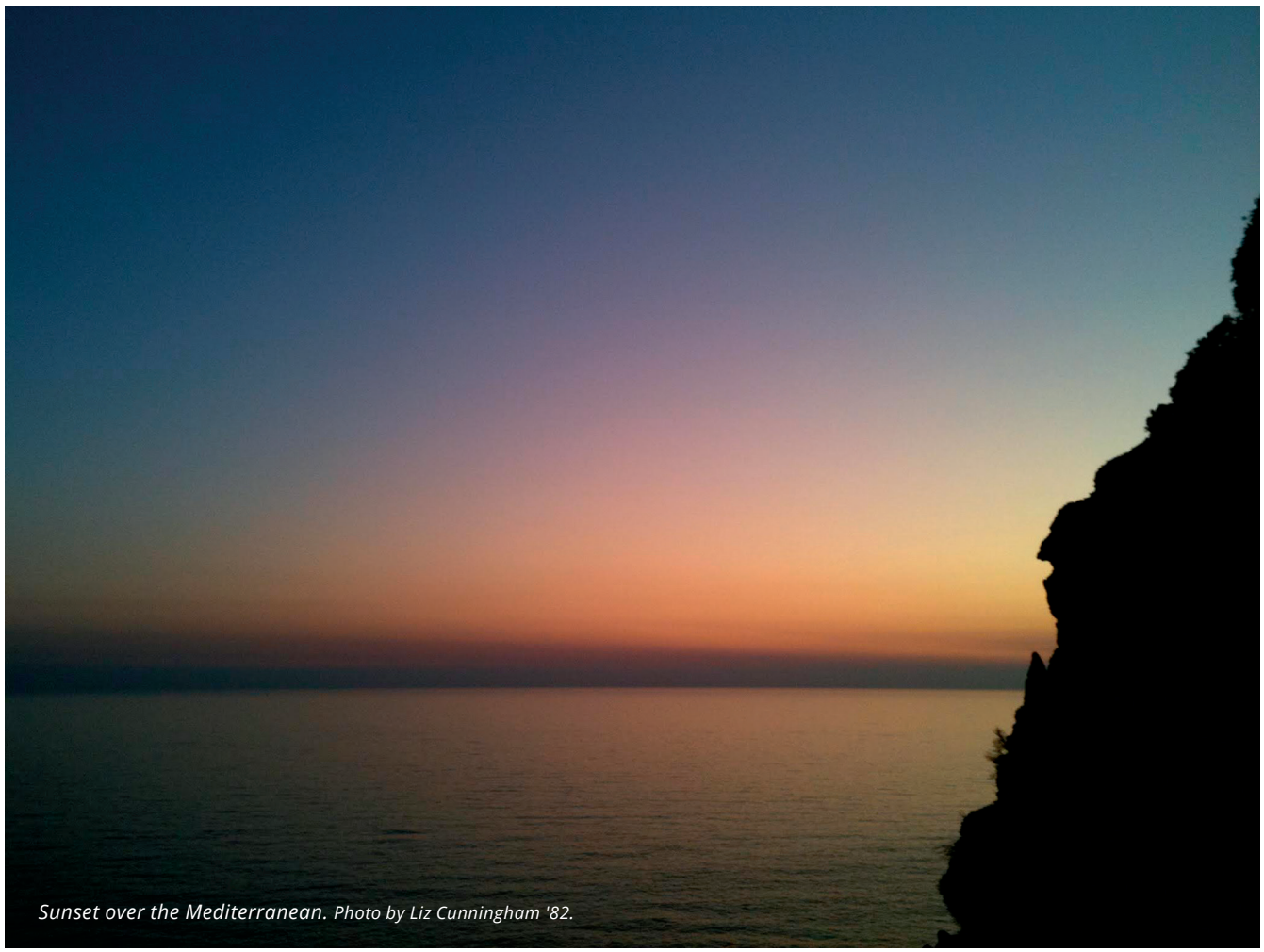
A houseplant would never look the same. Photosynthetic organisms are the Teddy Roosevelts of all life—they speak softly, but carry a big stick. They pump out oxygen and sequester carbon. "A square meter of seagrass," Nicolas Gérardin, the Port-Cros National Park operations director, had told me, "produces twice the volume of oxygen in twenty-four hours than a square meter of tropical forest, up to fourteen liters of oxygen per day." One acre of seagrass absorbs over seven thousand pounds of carbon a year, the equivalent of the emissions of an average car traveling over three thousand miles.

In some areas of the Mediterranean, scientists have estimated as much as a 30 percent loss of seagrass beds in the last fifty years due to damage by fishing gear, dredging, pollution, and poor anchoring techniques.

I recalled that over 50 percent of the oxygen in our lungs comes from plants and algae in the ocean. Nicolas had told me that scientists call seagrass "the lungs of the Mediterranean."

***

After sundown I went for a walk. A dirt road led past an ornate wrought-iron gate and wound up a steep hill through a dark canopy of pine trees. Some bushes with white flowers emitted a fragrant scent. The air was



Sunset over the Mediterranean. *Photo by Liz Cunningham '82.*

silky warm. At the top of the hill, the harbor came into view. The water was calm and windless. The road led inland to an eighteenth-century windmill perched on an overlook. Below, the moonlight illuminated olive and fig groves and the forest. From across the island, a lighthouse flashed.

Everything felt so vivid. I remembered the French woman I dove with when I first returned to the Turks and Caicos after over a decade—how she said, "I must recover my sensations," when she explained she'd need to get used to being underwater again. And I remembered that "everything is alive" sensation I'd felt diving in the reef. Now it wasn't just in the ocean that I felt it. Sea, sky, land: the world was more alive. Some recovery beyond my own imagining had occurred. I wondered if that intense sensation of aliveness—that "hum" of life—might be the thousands of selves that Naima talked about. But the price for that openness had been high. My travels had afforded me a searing first-hand view of the damage wrought upon the seas: coral reefs pulverized by dynamite fishing or rendered lifeless by coral bleaching; mangroves choked by logging runoff; entire coastlines that once provided fish to feed hundreds of villages now nearly bereft of marine life; coastal wells inundated with salt water, leaving families scrambling for the money just to drink clean water.

The world was so much more cruel and greedy than I'd ever fathomed. It felt like what last shreds of innocence I'd retained had been stripped off. But a second innocence was slowly growing in its place. Like an offshoot sprouting from a felled tree, its roots were sturdier and less easily vanquished: the willingness to say yes, to begin again, to trust, to risk.

I retraced my steps to the hotel. In the middle of the night a warm wind stirred. The lace curtains over the windows billowed like the sails of a boat.

***

There was a narrow dirt road that went south, to the other side of the island, a little less than an hour's stroll. It was close to dusk and I wanted to see the sunset. Pine trees formed an arc over the road. On either side were the fig and olive groves maintained by the botanical conservatory. The rows of scraggly trees converged into the hilly distance.

The island is a "garden island"—sea and land are both cared for. This is true of many coastal parks around the world. "Wildness"—wilderness—will need to enter its second innocence. The first was not chosen; the second will have to be. And it will be our choice.

Another dirt road appeared, veering off to the right. It too was lined with a rhythmic row of evenly spaced trees. The evening's angular light had grown rosy and golden. A hundred or so yards away I saw a woman standing still. She looked transfixed. I didn't dare disturb her. I imagined for a moment she might have been a botanist at the conservatory, lingering in the last glimmers of evening light before walking home.

We might go without food for months, water for days. But air? Minutes.

I kept walking toward the south side of the island. I remembered asking Annie Aboucaya, one of the park botanists, when she had really known she wanted to become a botanist.

"You mean the big *flash*?" she joked with a self-deprecating smile. The term *flash* is slang for a revelation in French.

"Yes," I grinned, "the big *flash.*"

"If there was one, it was when I began to work with the botanical conservatory on Porquerolles."

The conservatory saved seeds of endangered plant species in a "seed bank" that had the seeds for over seventeen hundred species. Annie told me that they had germinated some seeds of threatened species and cared for them until they had grown into small plants.

"There was a day we went into the wild to replant them," she gestured with her hands, as if carefully putting a plant into the ground. "That was the big *flash*." She grinned, adding, with emphasis, "Because we gave these endangered species a second chance."

I kept walking. But a few moments later I glanced back; the woman was still there, lingering. I wouldn't see another soul that night until I returned to the village. Annie and many others I'd met had found their place in the growing linkage of people at work to preserve the earth. They'd found something they loved to do that contributed to making the world a better place.

And I had too.

I'd published some articles. I did my first radio interview in over ten years. And I was starting to understand something: one of the world's most belligerent lies is delivered in the guise of the seemingly innocuous words: "Don't bother, your voice won't matter."

How many times had I thought that myself? But the day after I'd resolved to find a way to be a part of ocean conservation efforts, I watched a TED talk by Sylvia Earle, the founder of Mission Blue. Her words caught my attention: "I wish you would use all means at your disposal—films, expeditions, the web, new submarines—and campaign to ignite public support for a global network of marine protected areas, hope spots large enough to save and restore the ocean, the blue heart of the planet."

She'd sent out a call—strong and clear. I heard that voice, her words. I felt needed.

Walking down the dirt road, I asked myself something so simple I felt embarrassed that I'd never *really* asked myself this before: "What if I really lived as if my voice mattered?"

***

Close to the southern edge of the island I followed a narrow trail through the woods. It brought me to a bluff overlooking the ocean. I found a perch on which to sit and watch the sunset. The stone was still warm from the day's heat. I remembered what Annie had told me about the Maures Massif. I was sitting at the top of an ancient mountain range.

The sea turned blue-violet and a slice of moon rose. There was nothing but open ocean until Africa. What is it about distances? Mountaintops, great expanses of water—they bring something out in us. To the south and west and east there was nothing but the open waters of the Med.

Just before I left for Europe I'd read the book *Blessed Unrest* by Paul Hawken. He described how he'd began to wonder if we really knew how many people around the globe had joined the effort to preserve the earth and protect human rights. He searched the government records and tax census data of many countries to see how many organizations were devoted to these causes.

"In trying to pick up a stone," Hawken writes, "I found the exposed tip of a much larger geological formation." His calculations led him to believe that there are over a million organizations devoted to sustainability and social justice, the largest social movement in history. Social psychologists Paul Ray and Sherry Ruth Anderson had documented a similar cultural upwelling through focus groups and social surveys. Beneath their overturned stones were millions of people.

"Could it be," Hawken writes, "an instinctive, collective response to a threat?" The threat that the earth has a "life-threatening disease, marked by massive ecological degradation and rapid climate change?" But a movement? Where's the figurehead? The manifesto? Might it be like the co-management committees I had encountered in Spain, in which fishermen, scientists, NGOs, and government administrators were managing a fishery together on equal footing—bottom-up, community-based, decentralized?

The hand-carved wooden diving goggles that Liz Cunnigham received from a Bajau sea nomad in South Sulawesi, Indonesia. Photo by Liz Cunningham '82.

I recalled some wooden diving goggles given to me by a Bajau sea nomad in Sulawesi. A similar set of goggles had been given to Jacques Cousteau by a friend when he was young man. The moment Cousteau put them on and swam in a harbor in the south of France was the epiphany that began his lifelong love of the sea—he could see clearly the abundance of life in the ocean. I realized my entire journey had been like donning a pair of wooden diving goggles, but it wasn't the undersea world that they revealed. It was all the people who worked to make change, thousands upon thousands upon thousands of "selves."

I remembered how two years before, bluefin tuna seemed doomed to extinction. Pegged as the most "hopeless fishery in the world," the activists working to save it refused to quit, despite terrible odds. Then in the fall of 2012, bluefin stocks ticked upward. All the efforts all around the world—quota reductions, moratoriums, position papers, awareness campaigns, documentary films, lectures, books, all those efforts—had added up. Nearly invisible plus signs had caused these seemly disconnected efforts to save the "most hopeless fishery in the world."

But could that "largest social movement in history" be powerful enough to change the course of civilization? The runaway industrial locomotive—change that? Something deep inside me shuddered, bolted awake—the sensation of a gigantic, beautiful force afoot in the world. *Don't discount the invisible plus signs. Even if you can't do the math, don't quit.*

***

I'd lingered too long. The trail back to the road was pitch dark. But soon the moonlight illuminated my path. The road was now a soft tunnel of trees and singing crickets.

Suddenly there was a bolt of light. I stopped. Fear rippled through my chest. Then it was dark again. I resumed walking.

Another flash.

"Who's there?" I squawked, and swirled around.

It was the broad sweep of the lighthouse's beam, which had just been turned on. It moved swiftly and then vanished, leaving a fleeting path of light and long shadows that flickered through the trees and the olive groves and out onto the jagged coast and the wide, southern expanse of sea.

***

Twenty-one percent of royalties from Ocean Country *are being donated to the New England Aquarium's Marine Conservation Action Fund (MCAF): neaq.org/mcaf. That is the percentage of oxygen in each breath we take, over half of which comes from plants and algae in the ocean. MCAF aims to protect and promote ocean biodiversity through funding of small-scale, time-sensitive, community-based programs.*

Liz Cunningham '82 is also the author of Talking Politics: Choosing the President in the Television Age. *She has written for numerous journals and newspapers and is cofounder of KurtHahn.org, the web archive for the founder of Outward Bound and serves on the board of Outward Bound Peacebuilding. For more visit lizcunningham.net.*