To the Ocean Floor and Back

In A Single Breath

Gloria Chang dives with the women of Jeju Island, South Korea.

The Sea Women, including Ahn Soo-ja (above), achieve amazing physical feats as they harvest the delicacies of the ocean floor.
world of the haenyo, or Sea Women.

Through rigorous training and physical adaptation, these women can dive to depths of 20 metres, holding their breaths for up to four minutes in waters as cold as 10 degrees Celsius, as they harvest abalone, sea urchins and other marine delicacies.

It’s a way of life that is quickly disappearing. With pollution and warmer seas taking their toll on sea life, and younger women opting for safer, more comfortable professions, the number of women earning a living diving for seafood has dropped from 30,000 to 5400 over the past four decades. Most Sea Women today are aged 50 and over. If the steady annual decline in numbers continues, the Sea Women will become a mere footnote in the island’s history.

“As a researcher, I feel sad because it
The Sea Women’s diving feats have long fascinated physiologists. When Suk Ki Hong and Hermann Rahn from the State University of New York at Buffalo studied the women before they started using wetsuits in the 1970s, the scientists found that their bodies consumed twice as much oxygen during winter as the average Korean.

“It’s likely that their thyroids stoke their furnaces so they burn more oxygen and generate more heat to keep themselves warm during winter,” explains Zapol. “It’s an extraordinary adaptation.”

The Sea Women start their training early, as young as seven, learning first how to gather seaweed close to shore and then how to pry loose the more lucrative shellfish in deeper waters, in their mothers’ secret spots, without getting caught among the rocks. They also learn to stay calm in the face of dangerous situations. Their training takes practice, patience and time.

Finally, after a couple of minutes, Chae turns her chin upwards, gives a few quick kicks and glides to the surface, her arms at her side. I expect her to be gasping for air. Instead, she lets out a series of high-pitched rhythmic whistles. “The sound just comes out when we get to the surface,” she explains. “All haenyo make the sound.”

It’s the Sea Women’s siren song, passed on from mother to daughter. But Dr. Warren Zapol, chief of anesthesiology at Massachusetts General Hospital in Boston, who conducted studies of the Sea Women in the 1990s, says whistling is more than just a centuries-old tradition.

“When you blow against pursed lips, you inflate the little air sacs in your lungs that might be collapsed by diving,” he explains. It also empties the lungs, reducing buoyancy and making it easier for the women to descend on their next dive. “It’s very similar to how whales and seals exhale when diving,” he says.

Zapol has discovered that the similarities to sea mammals don’t end there. Like Weddell seals, the Sea Women use their spleens as oxygen reservoirs. When they dive, the organ contracts, injecting oxygen-rich red blood cells into circulation and allowing them to stay underwater longer.

is the unique culture and history of the Sea Women that make Jeju Island so special,” says Han Rim Hwa, a Jeju Island-based author who has written extensively about the haenyo. “But when I put myself in their place, I’m relieved that they don’t have to do this difficult and dangerous work anymore.”

“Here,” says Chae Jung-za, a 47-year-old diver who sees me gasping for breath. Clad in a black rubber wet-suit and mask, she tosses me a rope with a round white buoy and fishing net attached. The other end is tied to her tiny waist. “Hold on. I’ll swim us both out.”

Several hundred metres out on the open sea, Chae kicks her fin-clad feet and dives smoothly to the bottom ten metres below. Watching from the surface, I see her flip over rocks and peer into crevices, scavenging with an ease that would make you believe she breathed water instead of air. With a small iron hook, she pries loose a sea snail.

It isn’t all easy living for the husbands of the Sea Women—many help sort their wives’ harvest at the end of the day. The women are all conscious that their work is dangerous and death is always a breath away. “Sometimes you stay to reach for another sea snail,” says Kang. “You don’t leave enough breath and when you reach the surface, you lose your mind.”

This explains why most Sea Women limit their dives to 90 seconds or less. “If you dive long and deep and hold your breath, you’re okay when you’re underwater because your chest is compressed by the seawater,” says Zapol. “But when you return to the surface,
your chest expands. The oxygen then diffuses out of your blood and into your lungs. You can turn blue and faint.”

That’s why the women always dive in groups. “If your friends are around, they can slap you awake,” says 75-year-old Boo Ahn-Ok. “Otherwise, you sink back to the bottom.”

The reality, though, is that the Sea Women have fewer and fewer opportunities to push themselves to the limit: there’s just not as much to catch. Pollution in the waters around Jeju-Do has killed off much of the underwater vegetation that feeds the shellfish that the women harvest. “There’s just sea urchin left,” says Chae.

To supplement their incomes, many of the Sea Women farm vegetables or work at seaside motels and restaurants, including the Seaside Inn and Restaurant where I am staying. They surround me there upon my return from the water one day. “How was it?” they ask. “Are you cold?” They invite me into a private room off to the side of the restaurant, where they gather to gossip and watch Korean soap operas, sharing a blanket on a warm ondol floor.

“When we were young, when we didn’t wear wetsuits,” Kang says, “we started shivering right away too.” At that time, they wore just homemade cotton swimsuits and goggles and fins. They would row out together, singing songs of plentiful seas and hard-earned money swallowed up by their husbands’ drinking.

Like her mother and her grandmother before her, Kang began diving because it was the only way to make a living. “You needed to dive to survive.”

Early the next morning, I take a walk along the shore as the sun peaks out from the morning fog. I’m surprised to find an elderly Sea Woman dressing in the open air a hundred metres from the house where the Sea Women store their equipment, change and shower. A pile of basaltic rocks, which give Jeju-Do its dramatic landscape, shield her from the wind. “It’s stuffy in there for us grandmothers,” she says. “It’s only good for the young.”

Beside her are remnants of another long-standing tradition: a pile of wood and debris. In another two weeks, when the weather cools down, the women will light them to warm up between dives, as they have done for generations.

Historical records indicate that both men and women dove off the shores of Jeju Island until the 17th century: men collected abalone from deeper waters, while women harvested seaweed close to shore. But when the king ordered the men to harvest abalone year round, they fled the island because the work was so dangerous and cold. This left the women to venture further out into the sea.

With their growing income came newfound economic powers, as well as freedoms that women on the mainland didn’t enjoy. They had the right to divorce and re-marry. They formed women diver associations that built schools and roads for their seaside villages. Such was their organizational
power that in 1932, the Sea Women led the resistance against the Japanese colonization of the island. In a sense, the Sea Women’s prosperity was their undoing. By the 1960s, many had earned enough to buy property and educate their children, who left to pursue opportunities on the mainland.

“Our children don’t come out to the water,” says 49-year-old Goh Tae-ok, the youngest Sea Woman in her village. “But what can we do? If they tried to swim and dive like we do, they’d probably die. My own daughter doesn’t even know how to swim.”

Later that day, I meet the women at the shore as they emerge from the water, wetsuits glistening and nets swollen with sea urchin. Some have caught fish with a primitive spear propelled by an elastic band. There’s also octopus and sea cucumber. Although the catch isn’t as plentiful as in times past, the women take an unmistakable pride in their diving and hunting prowess.

Husbands arrive to help their wives split the urchin and scoop out the yellow meat that will be weighed and sold to merchants on the island and the mainland, and in Japan.

A stiffness in my knee swells to a limping pain as I make my way back to the seaside inn. On closer inspection, I discover a puncture.

“Now you’ll have a reminder of your time with us,” one of the women tells me.

Indeed, long after the pain has disappeared, I find myself reflecting on the Sea Women of Jeju-Do, their rugged determination, their pride combined with sadness over the disappearance of their way of life. They’re happy they’ve given their daughters the opportunity to pursue a different way of life.

On one of my last dives with the Sea Women, I use scuba equipment so I can sit on the ocean floor and watch as they work. Above me, the women glide up and down effortlessly, poetry in motion, as they fish. Suddenly the sun shines through the water’s surface, and I am struck by the beauty of the moment, the strength in their survival.

“You do risk your life,” Chae later tells me, “but I still love to dive.”

Despite the demands of their work, the Sea Women find time to enjoy themselves, and each others’ company, when they aren’t diving.