RHODE ISLAND'S OCEAN AND COASTAL MAGAZINE • VOL 17 NO 1 SUMMER/FALL 2025

41°N

THE CHAMPIONS ISSUE

A PUBLICATION OF RHODE ISLAND SEA GRANT AT THE UNIVERSITY OF RHODE ISLAND • A SEA GRANT INSTITUTION

41°N

EDITORIAL STAFF

Monica Allard Cox, Editor
Alan Desbonnet
Meredith Haas

ART DIRECTOR

Ernesto Aparicio

CONTRIBUTING EDITOR

Annie Sherman

PROOFREADER

Lesley Squillante

PUBLICATIONS MANAGER

Marianne Prior

COVER

Jason Jarvis
Photograph by Jesse Burke

ABOUT 41°N

41°N is published twice per year by the Rhode Island Sea Grant College Program at the University of Rhode Island (URI). The name refers to the latitude at which Rhode Island lies.

Rhode Island Sea Grant is a part of the National Oceanic and Atmospheric Administration and was established to promote the conservation and sustainable development of marine resources for the public benefit through research, outreach, and education.

Contact us at: *41°N*, Rhode Island Sea Grant, University of Rhode Island, Narragansett Bay Campus, Narragansett, RI 02882-1197.
Telephone: (401) 874-6805.
E-mail: allard@uri.edu

Reprinting material from *41°N* is encouraged, but we request that you notify us of your intentions, give credit to *41°N* and the article's author(s), and send us a copy of your final publication.

THE UNIVERSITY OF RHODE ISLAND
GSO COASTAL INSTITUTE Sea Grant RHODE ISLAND

THEY ARE THE CHAMPIONS

I MET GREG SKOMAL *(see book review, p. 44)* once many years ago when Rhode Island Sea Grant invited him to give a talk on sharks at the Audubon Environmental Education Center in Bristol. The projector that we brought wouldn't connect with his laptop. Someone drove to nearby Roger Williams University to bring him another one, and while we waited the 20 minutes or so for it to arrive, Skomal sat on the projector table and told funny stories to pass the time.

I remember his improvisation more than the talk itself since that public speaking snafu would have been my worst nightmare. So when I read his memoir and found that he was naturally quite shy, and had to work hard to overcome that tendency to make friends with recreational fishermen and Martha's Vineyard locals so he could do his job, I was surprised.

And yet everyone in this issue has done something similar. Whether they are advocates, researchers, artists, teachers, or some combination of those vocations, their persistence has defined them as champions—for sharing knowledge, empowering others, improving the environment, and improving society. Or, to paraphrase Chuck Norris, "Whatever luck they had, they made."

—MONICA ALLARD COX
Editor

SUBSCRIPTIONS TO 41° N ARE FREE

Sign up or donate online at 41Nmagazine.org

Photograph: Dan76/Shutterstock

Contents

Capping Plastic Pollution

THE QUEST TO PASS A BOTTLE BILL IN RHODE ISLAND

by **Tyson Birch**

We can't remove all the microplastics embedded in Narragansett Bay and beyond, but we can do more to cut off the supply

WHILE CONDUCTING HER DOCTORAL STUDIES at the University of Rhode Island Graduate School of Oceanography (GSO), Anna Robuck examined the stomach contents from 217 seabirds—great shearwaters—collected from the Gulf of Maine all the way to the Falkland Islands in the South Atlantic. Because they forage for fish by plunging underwater from the air or by seizing items while swimming on the surface, nearly every bird she dissected contained high levels of plastic in its stomach.

When great shearwaters consume plastic, they experience "false satiation," leading to starvation. Biologists consider them excellent species to detect risks to humans because they traverse both the North and South Atlantic and reflect plastic ingestion across the entire Atlantic basin.

"The most recognizable type of plastic we found were fragments of bottle caps, like from soda bottles," says Robuck, now an Environmental Protection Agency staff scientist. "The cap fragments retained their shape and ridging and sometimes even the lettering, so it was easy to tell what they were."

They're easy to find on beaches and public streets too. Microplastics can come from anything plastic, from clothing to car tires, but a significant portion comes from the disintegration of improperly disposed plastic litter. J.P. Walsh, a professor at GSO, and his student Victoria Fulfer calculated there were more than 16 trillion pieces, the equivalent of 1,000 tons of plastic, in the top two inches of sediment of Narragansett Bay. Meanwhile, in just three months of 2023, Friends of the Saugatucket collected 80,000 empty nip bottles from roadsides, riverbanks, and beaches. The group focused on the tiny bottles because they can fit down storm drains and make their way into rivers and ultimately bays and oceans.

Photograph: Alessandro Zocchi/stock.adobe.com

The sheer volume of plastic litter accumulating across Rhode Island is forcing legislators and concerned industry leaders to reconsider a "bottle bill" that would incentivize plastic and glass recycling measures across the state.

It would create a 10-cent deposit on every plastic and glass bottle and aluminum can sold in the state, including nips.

Under proposed legislation, retailers like supermarkets, liquor stores, and corner stores would pay a deposit to their beverage distributors for each bottle or can. Consumers would then pay this deposit at the point of sale but get that deposit refunded when they return the empty container to any retailer or independent redemption center. Those retailers and redemption centers would then turn over the collected containers to a beverage distributor, who would reimburse them for the deposits, pay a handling fee, and sell the source-separated containers to recyclers.

Maine, Massachusetts, Connecticut, and Vermont all have versions of this legislation and recover as much as 75% of cans and bottles. Rhode Island only collects about a third in its recycling system and has struggled to enact regulation that would further improve its success.

The need to compromise is vital, says Jed Thorp, advocacy coordinator for Save The Bay. "We need a bill that doesn't place a lot of burden on the retailers, so the liquor stores and grocery stores are somehow not responsible for having to handle and process the empty containers," says Thorp. "If you can put most of the handling costs and responsibilities on a separate entity, I think liquor stores could be okay with it."

That separate entity would be a third party, called a producer responsibility organization (PRO), tasked with handling the entire system. In Oregon, beverage distributors formed the Oregon Beverage Recycling Cooperative (OBRC) that has resulted in them being able to process more than 2 billion containers for domestic recycling two years in a row. In addition to paying the deposit, like in Massachusetts or Connecticut, beverage brands in Oregon pay to handle all of the recyclables. They reported a return rate of 87% in 2023.

Beverage brands like this system because OBRC is charged with administering it, so they don't have to. Retailers like it because a lot of the returns happen offsite and not at retail locations. Consumers like it because they have a system where a user creates an account, tosses a bag of recyclable cans and bottles off at a centralized location with a QR code, machines sort the recyclables, and then the user's account is reimbursed with the deposit.

Photograph: iStock.com/Wirestock

Rhode Island's proposed bottle bill legislation has previously included a controversial "return to retail" requirement. Individual stores would be responsible for maintaining and operating reverse vending machines that take recyclables back, scan them to identify the material, and provide a reward to the user, like a coupon for a future purchase.

Pushback from industry leaders suggests that retail space is limited, says Nicholas Fede, executive director of the Rhode Island Liquor Operators Collaborative and co-owner of Kingstown Liquor Mart in North Kingstown. "Mixing redemption into an already small retail environment would be a significant detriment to small, family-run businesses."

Fede also worries about how changing the market in Rhode Island will affect regional recycling programs.

"If Rhode Island were to enact a bottle deposit system that had a different reimbursement level than Massachusetts, there is no question that interstate redemption fraud would occur," he says. In 2023, a family from Arizona (where there is no bottle bill) was accused of smuggling 178 tons of aluminum cans and plastic bottles—worth $7.6 million—to California to exploit their recycling programs. To combat redemption fraud, other states have enacted safeguards such as establishing how many containers an individual can redeem each week or during a single visit.

Both Fede and environmental advocates agree that litter is a huge problem, but by following Oregon's lead, a solution could be in the offing.

"The beverage industry is very supportive of Oregon's bottle bill," says OBRC's Liz Philpott, public relations and BottleDrop Give program coordinator for OBRC. "Creating a statewide cooperative simplified and streamlined operations." Oregon was the first state to sign a bottle bill into legislation in 1971, and it designated beverage distributors as industry stewards, responsible for managing the flow of deposits, redemptions, and collecting redeemed beverage containers from retailers. The law placed responsibility with retailers to redeem containers they sell.

Initially, Oregon's bottle bill only allowed consumers to return bottles and cans to retail stores, but since then the state has created specialized redemption centers, offering reverse vending machines and special "green bags" for individual households and "blue bags" specifically for nonprofits. Oregon has set up a sophisticated system to process bags of recyclable material and scan individual RFID tags located on every bag to ensure deposits get credited to the correct account. In 2023, $208.8 million was paid to customers returning containers, with 80% of returns coming through BottleDrop locations.

More than 5,600 nonprofits participated last year in redeeming containers, collecting more than $5.5 million. Households who returned bags full of cans and bottles are allowed to receive a deposit, or they can receive 20% more if they choose to accept store credit.

"By creating an isolated stream just for beverage containers, the recycling process is more efficient and produces a reliable source of high-grade recyclable material," says Philpott.

Instead, Rhode Island's current recycling system involves throwing glass, plastic, aluminum, and paper into the big blue bin and hoping that it all gets sorted in the state's materials recycling facility (MRF). Built in 1989 and reserviced in 2012, the MRF is responsible for handling 350-400 tons of mixed recyclable materials from every municipality in the state. Material that doesn't get sorted by the MRF, or gets rejected visually before ever making it to the MRF, is sent to the Central Landfill in Johnston, which is expected to reach capacity before 2040. Unfortunately, only 15 of the 39 municipalities exceeded the state-mandated 35% recycling rate, with many residents disposing of their recyclables in the trash instead. Materials that can't be recycled, such as broken glass, containers with liquids, and frozen food boxes, reduce the quality of the recyclable materials that are eventually sold to make new products.

While a recycling hauler may be contractually obligated to take recyclables from a specified recycling bin, the MRF is not required to process it, and if there's excess contamination, then the entire load will be sent to the landfill.

"Single-stream recycling has proven to be bad for the overall recovery rates of recycled materials," says Fede, who also is part of a Rhode Island legislative study commission to explore the bottle bill and ultimately how to improve waste management in the state. "Separating recyclables into different categories produces cleaner containers that have a higher resale value on the raw materials market."

A solution to reducing the waste our state creates may come from a change in human behavior, combined with a small financial incentive.

"There's an idea that more and better technology will always improve systems," says Carla Doughty, projects coordinator with Zero Waste Providence, one of the advocacy groups in a coalition to educate people about the bottle bill. "I wish we would transition back to thorough source separation because there is a disconnect between our consumption habits and the idea that the waste will just 'go away.'"

Providence is an ideal city in which to begin transformation of Rhode Island's recycling systems because at only 7.8%, they have the lowest recycling rate in the state. Instead of wishing the MRF could perform miracles, Doughty and Zero Waste Providence are instead opting for targeted recycling outreach. In late 2024, the Zero Waste Providence outreach team, composed of

Anna Robuck dissects a seabird as part of her PFAS research.
Photograph courtesy of Anna Robuck

paid volunteers, was awarded funding and authorized to canvass residents via door knocking, attend community events, and inspect more than 38,000 residential curbside carts, leaving supportive feedback as to what can/cannot go in the recycling bin.

"As a collective society, we have an individual responsibility to recycle bottles and cans," says Doughty. "An attitude shift and the habit change at the household level is critical."

To demonstrate the need for action on such a bill, Save The Bay collected 43,000 beverage containers and beverage container pieces across one third of Rhode Island's shoreline during the International Coastal Cleanup in July 2023.

If a bottle bill does get passed, the days of seeing bottles and cans thrown away haphazardly may become a relic of the past because consumers will realize their inherent worth. Still, if bottles and cans do remain unredeemed, then all those deposits would have to go somewhere. In Oregon, the OBRC reports that $21.8 million was collected from non-redeemed deposits—an amount that went back into funding for the overall program. Just as in Oregon, experts believe unredeemed deposits would likely be retained by the PRO in Rhode Island to operate and improve the deposit return system, hopefully improving the circular economy of plastics overall in the state.

"All over the Earth's surface, from mountaintops to the ocean floor—plastic is pervasive at this point," explains URI Professor of Oceanography Walsh. "We find microplastics in almost every organism that we have sampled."

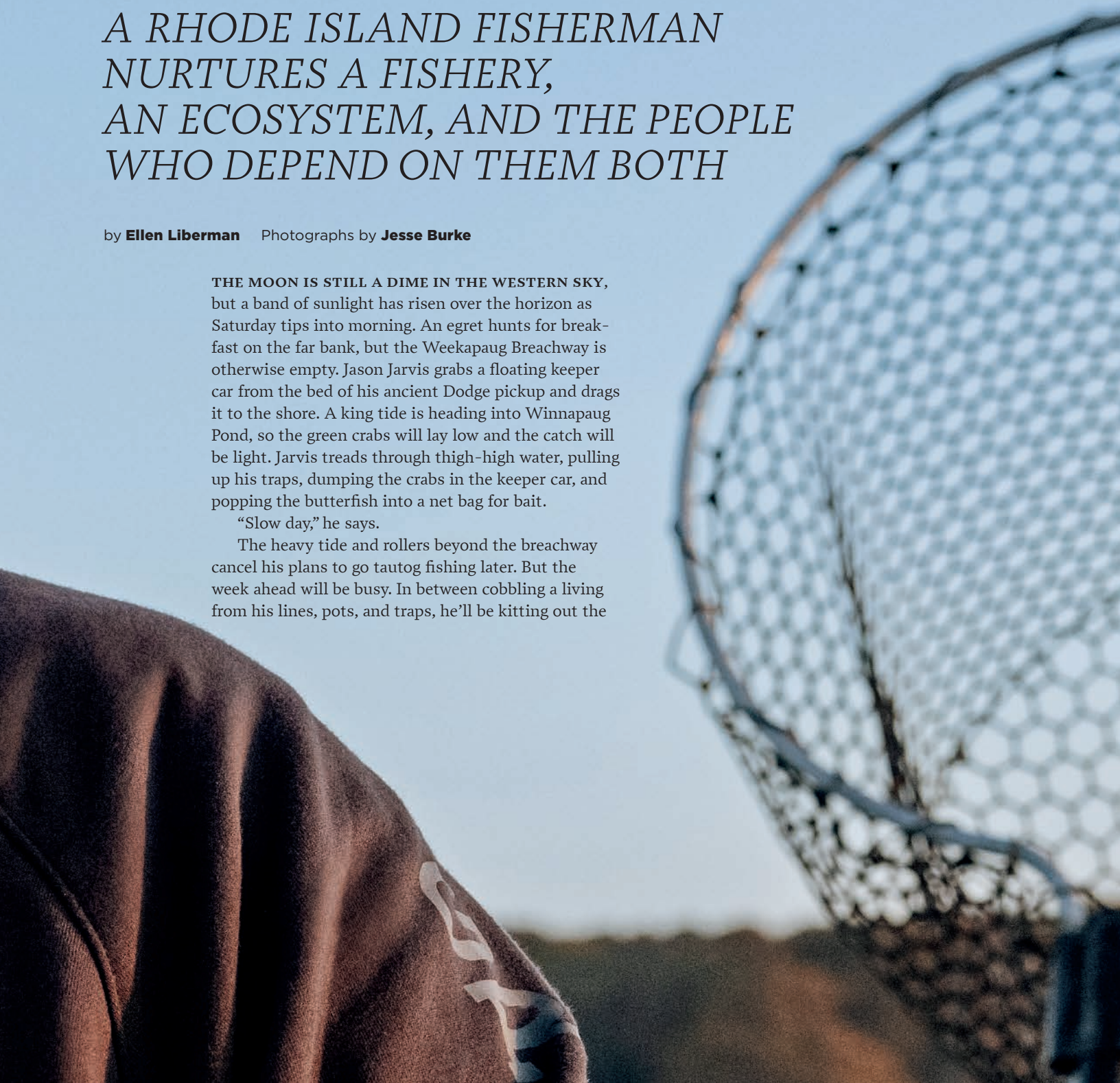
In 2023, the advocacy of the environmental nonprofits around this issue spurred the Rhode Island General Assembly to create a joint study commission, of which Fede and Thorp, along with state senators, representatives, and other experts in the field are a part, to study the problem and its proposed solutions. The 20-member commission has held more than 24 hours of meetings to hear from different experts from around the country with the goal of creating a comprehensive study identifying ways to improve the state's recycling efforts. A full report should be completed by spring.

"We know every body of water in the state has microplastics," concludes Save The Bay's Thorp. "We know that beverage containers are the most collected item during shoreline cleanups. We have to acknowledge that we need to do the most proven-effective policy that we can adopt, and that's to enact a bottle bill."

COMMUNITY HARVEST

A RHODE ISLAND FISHERMAN NURTURES A FISHERY, AN ECOSYSTEM, AND THE PEOPLE WHO DEPEND ON THEM BOTH

by **Ellen Liberman** Photographs by **Jesse Burke**



THE MOON IS STILL A DIME IN THE WESTERN SKY, but a band of sunlight has risen over the horizon as Saturday tips into morning. An egret hunts for breakfast on the far bank, but the Weekapaug Breachway is otherwise empty. Jason Jarvis grabs a floating keeper car from the bed of his ancient Dodge pickup and drags it to the shore. A king tide is heading into Winnapaug Pond, so the green crabs will lay low and the catch will be light. Jarvis treads through thigh-high water, pulling up his traps, dumping the crabs in the keeper car, and popping the butterfish into a net bag for bait.

"Slow day," he says.

The heavy tide and rollers beyond the breachway cancel his plans to go tautog fishing later. But the week ahead will be busy. In between cobbling a living from his lines, pots, and traps, he'll be kitting out the


HART
XL

kitchen for the summer opening of the Quonnie Fish Company, a fishers' cooperative he co-founded. He'll be making his weekly delivery to Providence as a supplier to a seafood program for low-income recipients. In a few days, he'll head to Brazil, as president of the North American Marine Alliance (NAMA), to discuss wind farms and the federal fishing permitting system at the 8th Annual World Forum for Fisher Peoples, an international organization that protects the rights of small-scale fisheries.

For more than three decades, Jarvis has pulled a living from the water. Those years have honed his angling skills, as they have transformed him into a fierce advocate for the rights of independent fishers. Championing the marginalized is the slow work of repeatedly making your case—at public meetings, in the media, and in Congressional conference rooms. Jarvis began to speak up after watching the captains he admired labor to articulate the impacts of commercial fishing policies on their livelihoods.

"I realized, I'm a pretty smart guy with a good sense of humor and fairly decent education. How do I help these guys that have taught me everything I know?" he says. "I was so tired of seeing them struggling to pay their bills, while beating their heads against the wall of antiquated regulatory BS that was just benefiting corporations."

NAMA Coordinating Director Niaz Dorry says that Jarvis brings one of the most important weapons to the fight against the status quo: persistence.

"The issues that we fight for don't happen overnight. We look at the measure of what we can accomplish as: Are we staying in this marathon? And do we have strong runners? And Jason is going to stay in the marathon as a strong runner," she says.

Jarvis also advocates as an educator and marketer for green crabs, a species long considered a scourge. First spotted in Massachusetts waters in 1817, these highly adaptable crustaceans aggressively outcompete local species for food and destroy eel grass—a critical ecosystem component. Capable of consuming up to 40 clams a day, green crabs are also a threat to shellfish harvesters. As an invasive species, they are unregulated, making them an attractive catch for Rhode Island fishers, who can take as many as they want. Jarvis had been trapping green crabs for bait as a lucrative sideline. But several years ago, he joined the effort to promote them as food and encouraging others to become harvesters.

"A lot of commercial fishermen are secretive about the way they use certain traps or bait," says Mary Parks, founder and executive director of GreenCrab.org, an organization creating a culinary market for green crabs. Jarvis, as one of their harvester advisers, "is willing to share his knowledge, and he doesn't see it as competition. He sees it as building participation and getting more people excited about eating green crabs, which has been invaluable to growing the fishery."

Jarvis was born in New London, the second youngest child of his Bahamian mother, Minera, and his father, Henry B. Jarvis. A merchant mariner, Henry was a master shipwright for the Mystic Seaport Museum and helped restore the *Charles W. Morgan*—the sole survivor of the American whaling fleet and a premier attraction.

Jarvis grew up in the old Pequot Hotel, built in 1840 by retired sea captain Richard Burnett as a stagecoach stop at Burnett's Corner, a mill village west of Old Mystic. The blended Jarvis family filled the sprawling Greek Revival house with nine boisterous boys and a daughter. Jarvis was in a pack with the five youngest, ranging freely around the museum and the village, fishing for trout in Haley's Brook.

"My older brothers would put a window screen downstream. And then we little guys would go upstream and hit the water with a stick," Jarvis recalls. "We'd chase them downstream, look at them and let them go. My brother Ernie taught us to respect what we had and not just to take anything just to take it. That was my introduction to fishing."

Jarvis drifted through a variety of jobs before fishing became his profession: sous chef at 17, a stint at Sandy's Fruit Market in Westerly, followed by a cook's job at Corkery House, once a drug treatment center for adolescent boys in Wyoming. One day, the center's director watched him bring two kids brawling in the dining room around to a truce and a handshake and offered him a job as a counselor. Corkery House paid for his training as a licensed chemical dependency professional, and two years later, he was the house manager.

At the time, Jarvis had been trapping green crabs for bait and fishing for food on the side. The captain of *Seven B's* who took some Corkery kids out for a charter fishing trip noted Jarvis's facility with people and boats and offered him a spot on his blue-fishing crew. He began working overnight shifts on the charter boat before reporting to his day job at 7 a.m.

One day, his brother Mike begged him to take his place on a commercial fishing boat while he vacationed for two weeks. Jarvis recalled his dismay when he opened his first pay packet and saw only $1,200.

"I'm just sitting in my car in tears because I've got kids at home. And the captain saw me and he says, 'You okay?' I said, 'That's not a lot of money for a week's worth of work.' He starts laughing because that was for one day."

Jarvis quit Corkery House to fish full time. "It was a great program, and if I was independently wealthy, I'd go back to doing it. It just couldn't pay the bills," he says.

Charlestown's Wilcox Tavern has had many lives

in its 285 years: family home, general store, travelers' inn, and the host of thousands of celebratory dinners. The working restaurant had been defunct since 2019, but its kitchen is about to rise again as the place where small commercial fishers can earn a living by directly packing and selling their product.

Freshly painted, but stripped of its stoves and ovens, the narrow space is crowded on a December evening with well-wishers for the Quonnie Fish Company's open house. Jarvis is stationed at the far end of the room, shucking local oysters and chatting up the crowd. The co-op plans to create a CSA (Community Supported Agriculture) for retail customers to buy shares of their catch and make value-added products like a mince of green crab meat.

This evening represented the culmination of seven years of work with partners, accelerated by the pandemic and a $20,000 state Local Agriculture and Seafood Act grant.

But Jarvis has long been mulling a different model of commercial fishing. He spent 15 years in the big boat fishery, switching off weeks at sea with crewing charter boats. The money was good, but he watched his future prospects disappear in the wake of the Magnuson–Stevens Fishery Conservation and Management Act.

Passed in 1976, the law extended U.S. jurisdiction 200 nautical miles, established regional fishery management councils, and offered low-interest loans to build up the domestic fleet. Eventually, it set catch limits on specific species in specific seasons. It has been re-authorized twice and now covers 1,000 species.

In addition to limiting the total allowable catch (TAC), the law allocated shares, called individual transferable quotas (ITQs), of a particular fishery's TAC to individuals or groups. ITQs were established to promote more efficient and sustainable harvests. Essentially a permit to fish, an ITQ can be bought, sold, or leased. Small fishers like Jarvis and fishery organizations like NAMA have criticized the system for concentrating ITQs in fewer hands and allowing them to become more valuable than the catch itself. ITQ holders can include entities that don't fish at all—such as a retired fleet owner or an investment company who make money leasing their ITQs to the actual fishers. Lessees complain that the fees can be onerous, slicing the profit to razor-thin margins for those going to sea.

"If you wanted to get into the federal fishery, you needed to have a lot of money. It was no longer, you work the deck, then you work your way up to a captain, and then an owner. I saw a lot of people get broken," Jarvis says.

In 2015, he joined NAMA, and in 2019 became its

president, advocating for the passage of the Domestic Seafood Production Act. The act would prohibit permitting or constructing offshore fish farms in federal waters without Congressional authorization and promote research on their environmental impact. He continues to tackle the unintended consequences of the ITQ system.

"We've been at this for 13 years, trying to stop the corporate privatization of the fishery, and progress has been slow, but we're doing all right—making people aware of it, number one," he says. "It is such a complex issue."

In Rhode Island, Jarvis was among those who successfully pushed regulators to change state licensing regulations to allow fishers to make direct retail sales, and served as a member of the Rhode Island Marine Fisheries Council for 5 ½ years.

Jarvis works just as hard on consumer access to seafood, participating in a U.S. Department of Agriculture program to distribute fresh fish to 1,500 food-insecure families served by a variety of community organizations. Jarvis remembers the program director's reaction to his first delivery.

"She looked at me and said, 'Does it smell?' 'No,' I said. 'This is fresh caught by my friends who package it and freeze it.' 'This is for us? And it's fresh?' She was dumbfounded. That was an eye opener for me," Jarvis recalls.

Photograph courtesy of GreenCrab.org

He also partners with the African Alliance of Rhode Island. Director Julius Kolawole praises Jarvis's dedication to "the neighborhood and the opportunity that's been denied over many years," and adds, "Our philosophy is not to be a charity. We want to be a part of the economy of seafood, because this is the Ocean State."

To that end, Jarvis works with the alliance to teach people how to fish commercially and to navigate the licensing and food certification processes required to run a food business.

A fragrant pot of bouillabaisse simmers in the kitchen of the Elks Lodge in Wakefield. On the other side of the kitchen door, a full house awaits a five-course feast of local seafood hosted by Eating with the Ecosystem. The New England nonprofit works with scientists, fishers, wholesalers, retailers, chefs, and consumers to strengthen the local wild-caught seafood industry by promoting species that are underutilized by custom or ignorance, or that are newcomers driven here by climate change.

Executive director Kate Masury calls Jarvis "a great partner for the organization because he's so passionate about preserving fish populations for future generations, while harvesting food for people, and that aligns with our mission. Fishing is a really hard job; it's labor and time intensive, but Jason prioritizes speaking engagements and showing up at events, and he's really good at connecting with people and educating them."

Enthusiasts in the buffet line hold out their plates for helpings of slipper limpets and grilled whole butterfish. Jarvis supplied the limpets and 60 pounds of green crabs that David Standridge had rendered into stock.

Standridge, executive chef and part-owner of The Shipwright's Daughter in Mystic, learned about green crabs' culinary value when he was a chef at L'Atelier de Joël Robuchon in New York. The acclaimed French chef and restaurateur would come to town several times a year to revise the menu. Standridge's job was to assemble potential ingredients. On one visit, Robuchon asked for crabs. Standridge got every type available—except the one his boss wanted.

"When he got here, he asked, 'Where are the green crabs? They are the best ones for stock. We use them for everything.' I started searching for them, and none of the purveyors could get green crabs," Standridge recalls. "Maybe a year later, I was fishing with a friend, and, lo and behold, the bait was green crabs. I was amazed. 'How did you get these?' He's like, 'We catch them right off the dock. They're all over the place.' And that, to me, was a huge disconnect. How is it possible that they're that easy to get and I can't buy them?"

Three seasons ago, Masury connected Standridge with Jarvis, and he has been supplying The Shipwright's Daughter ever since.

From fishing, to advocacy, to running his fishers' co-op, Jason Jarvis never stops.

In October, Standridge prepared a sustainable seafood supper at the James Beard Foundation that used green crabs in every dish—including the cocktail. Jarvis's catch shows up on the restaurant's winter menu as Green Crab Crispy Rice. In 2024, Standridge's seafood and his sustainable approach won the foundation's Best Chef: Northeast award, and that honor has helped create a following among diners and fellow chefs.

"Five years ago, I reached out to wholesalers who told me they had no interest in working with green crabs—they're not edible, they're a trash species," Parks, of GreenCrab.org, says. "It wasn't until people started focusing on chef outreach and seeing them as a resource instead of just a problem that their tune changed. Now people are asking me: 'Can you connect us to a green crab supplier? Our restaurants are asking for this.'"

Back at the Weekapaug Breachway, Jarvis counts the morning's harvest: some juvenile sea bass, a snowy grouper, and four gallons of crabs. He slips the fish back into the water, puts the crabs in a cooler, and closes the lid. Everything he trapped at dawn will be sold by the afternoon.

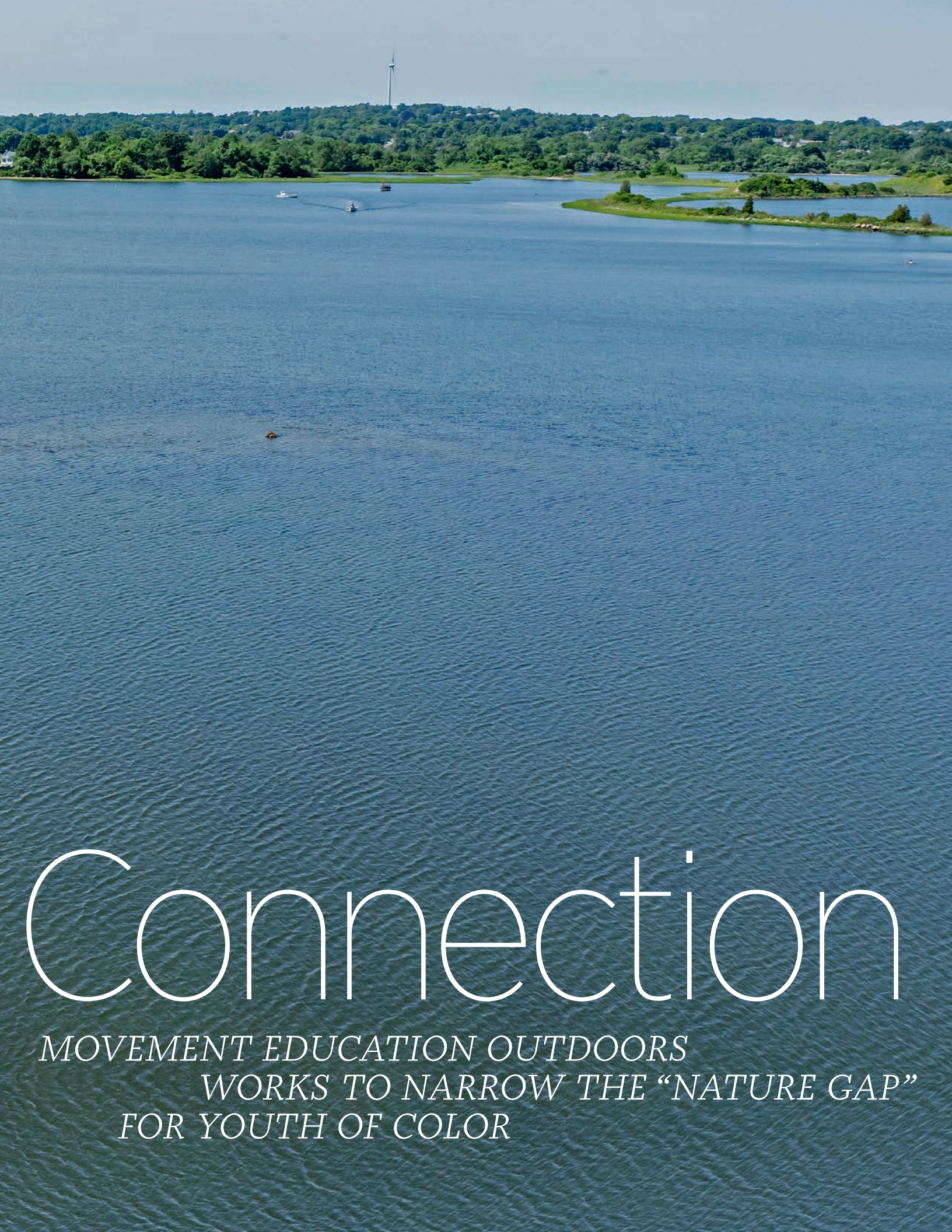
"They're plentiful. So we're going to wipe them out—definitely doing the ecosystem a favor. But it's tough to get somebody to eat something that they see as bait," Jarvis says. "A handful of restaurants are using them, and we're trying hard to change the narrative about green crabs."

So, Jarvis perseveres in pursuit of the environmentally sustainable and socially just food system he wants to create.

"It comes back to the stuff I've always believed in—the public trust," he says. "The fish belong to everybody, and I'm just catching them for the people who can't."

A Natural

By **Hilda Lloréns** Photographs by **Cate Brown**



Connection

MOVEMENT EDUCATION OUTDOORS WORKS TO NARROW THE "NATURE GAP" FOR YOUTH OF COLOR

YOUTH WHO HAVE CONSISTENT ACCESS TO SAFE green spaces see benefits to their well-being and physical and mental health. Not all kids and teens have equal access to these spaces, however.

A 2020 Center for American Progress report titled "The Nature Gap: Confronting Racial and Economic Disparities in the Destruction and Protection of Nature in America" found that "communities of color are three times more likely … to live in nature-deprived places [and] that seventy percent of low-income communities across the country live in nature-deprived areas."

Nature deprivation means people have little to no access to safe green environments such as parks, trails, coastlines, and safe streets for walking and biking. It also means they live in areas with limited clean air and water, minimal neighborhood tree coverage to mitigate urban heat, and little protection of green areas against destruction from development.

In Rhode Island, the report shows, the situation is stark: 93% of people of color and 94% of the low-income population live in nature-deprived communities. The report's authors trace these persistent inequities to the racial disparities that people of color in the U.S. historically experience, including spatial segregation, redlining, and resulting settlement patterns, environmental injustice, and experiences of racist threats and violence in the outdoors—to name only a few.

Recognizing these inequities, Jo Ayuso created an organization—Movement Education Outdoors (MEO)—that would offer opportunities for low-income youth of color to safely access the outdoors while also learning about environmental justice, sustainability, stewardship, social and natural history, and enjoyment.

MEO programs include urban farming, aquaculture, and environmental and food justice education, offering youth the opportunity to develop ideas and solutions as part of the learning process. MEO educators teach youth participants about environmental justice and Black and Indigenous history along with water safety,

MEO program participants learn about the organisms living in Narragansett Bay.

swimming, kayaking, boating, and being comfortable in the water. Located in Providence, MEO has taught more than 1,200 low-income middle school and high school students—primarily from Providence, Pawtucket, and Central Falls—to find comfort, safety, and health benefits from being in nature.

Programs like this have proven results: a report on ethnic studies published by the National Education Association, among other sources, found that teaching all students, and students of color in particular, about Indigenous, Black, and Latinx history bolsters their self-esteem and nurtures appreciation of their own and of others' histories, cultural identities, and traditions. It also promotes cross-cultural understanding, respect, and has a positive impact on civic and academic engagement, democracy outcomes, and graduation rates.

In the fall of 2021, my 13-year-old son and I attended our first intergenerational hike at the MEO Lodge at the King Benson Preserve in Saunderstown. The lodge, where some of the summer day camp pro-

grams take place, is part of a partnership with The Nature Conservancy. During that hike, MEO youth participants led the hike and encouraged us to pause along the trail to practice mindfulness and presence, and to learn about the Indigenous and Black histories of the land on which the preserve is located, as well as about the adjacent ecological history of the Narrow River and the animals and plants that inhabit it.

During this academic year, my son is participating in MEO's hands-on Kelp Skills Program, learning about kelp farming from seeding to harvesting, biodegradable materials science (plastic replacement), and kelp in artistry and in the food and farming industries.

Jo Ayuso works to fill the "nature gap" many young Rhode Islanders of color experience.

These connections are exactly what Ayuso envisioned when she was in the U.S. Army. Like many young adults from low-income backgrounds, and following in her older brother's footsteps, she joined the military with dreams of building a good future for herself and her family. While there, backpacking in nature, learning about trails, swimming, and exercising her mind and body with a community of peers transformed her understanding of the health and wellness benefits of nature and the outdoors and inspired her to share this knowledge with urban, low-income youth. She earned a bachelor's degree, and later, at 42, a master's degree, both in exercise science and physiology, and she became a mindfulness practitioner and trainer. In 2018, she founded MEO, realizing her longtime dream of building an organization to connect urban,


VANS
Coleman

"I WILL BE TAKING THE LESSONS I LEARNED EVERYWHERE"

low-income youth with the outdoors and its natural, Indigenous, and Black histories.

"One of the things that makes up the nature gap is a lack of transportation, such as bus lines to green spaces, and working parents lacking time to take their kids places, having money to enter beaches, and also to buy equipment to hike, camp, and kayak for example," explains Ayuso, adding that funding for the organization comes through donations and state and foundation grants. "For this reason, MEO provides youth with all the equipment, clothing, and transportation for free."

At the end of each program, families are invited to hear from youth participants about what they have learned and to gather in community to support and celebrate the participants' journeys and achievements.

"As we were having fun, we were learning many new things, such as how to set up tents, to stories of the Pokanoket tribe .... I will be taking the lessons I learned on the trip everywhere I go. From how to scare off coyotes, to how I should be proud of my lineage and ethnicity," writes one former participant. A day hike participant writes, "I enjoyed being in nature and learning about the Indigenous history of our land. I think it's important because they don't teach us this information in schools."

MEO is now looking to support youth past graduation through programming to expose them to career and job readiness training. In this effort, MEO collaborates with other local environmental organizations and individuals, such as Groundwork Rhode Island, Conanicut Island Sailing Foundation, and The Nature Conservancy, as well as individual fishers, boat captains and sailors, aquaculture experts, and environmental justice activists. They work together to expose youth to the gamut of environmental career opportunities and teach them about the environmental justice issues facing frontline communities in the Ocean State.

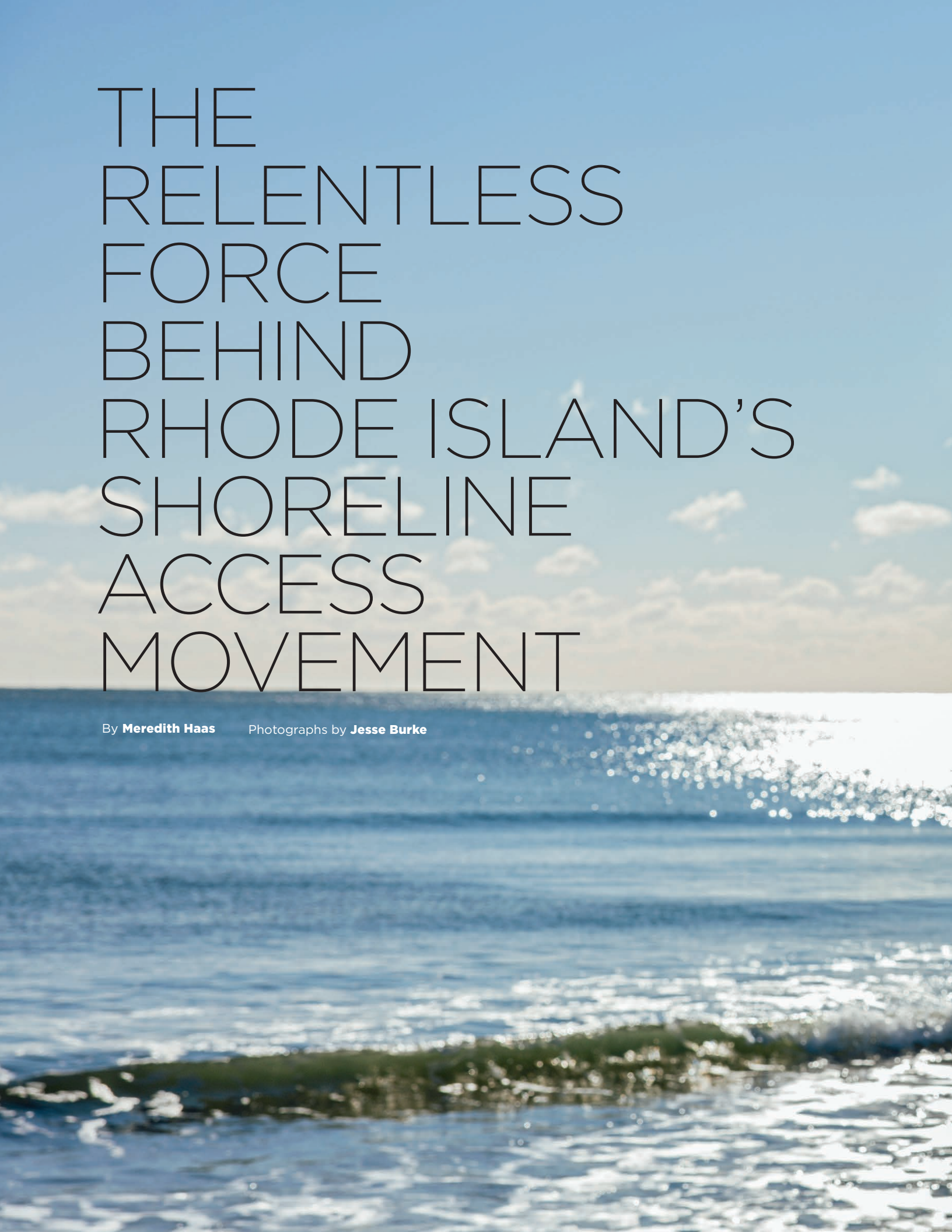
Enjoying local quahogs and oysters was part of a program to introduce youth to the blue economy.

Last summer, MEO provided a pilot program to 10 Providence high school students. "The program was a full-week fellowship that introduced the youth to quahogging, clamming, learning boat safety, driving a boat, fishing, and introduction to kelp and oyster farming in Portsmouth," Ayuso says. "Our aim is for the youth to bring these skills with them to college whether working in a marine lab, or working in a farm, or as a captain of a boat. Our goal is to introduce youth to professionals in these fields so that they can see examples of professional careers that they might want to pursue."

Learn more at: meoutdoorsri.com

THE RELENTLESS FORCE BEHIND RHODE ISLAND'S SHORELINE ACCESS MOVEMENT

By **Meredith Haas** Photographs by **Jesse Burke**



OUTSIDE THE NATIONAL HOTEL ON BLOCK ISLAND, a weather-beaten "No Parking" sign hosts a collage of stickers. One stands out: a bright red circle with bold white letters that read, *"Conrad Ferla Sucks."* It's a strange claim—especially considering the man it targets stands grinning beneath it, giving a thumbs-up to the camera. Wearing a black t-shirt, trucker hat, black shades, and a backpack slung over his shoulders, Ferla looks more amused than insulted.

The photo was taken last summer and quickly made the rounds on social media—particularly in *Saving RI Coastal Access/Rights of Way,* a Facebook group Ferla started in 2020. Now, with more than 9,000 members, the group has become a hub for Rhode Islanders pushing back against shoreline privatization.

If the sticker was meant to shame him, it backfired.

"Keep up the good work, Conrad!" one follower cheered. "Must be doing something right," another wrote. Hundreds responded with a similar sentiment.

Many saw the sticker as a badge of progress in the fight for public shoreline access—a movement Ferla has come to embody as a lifelong surfer and outspoken advocate. With a deep personal connection to Rhode Island's coastal waters, Ferla has made it his mission to challenge illegal encroachments and push for stronger protections. His confrontations with property owners

and officials have made him both controversial and a champion for those demanding action.

Anyone who knows Ferla will likely hear him before they see him. A fixture in the local surf community, he's just as vocal in the lineup as he is in a parking lot or town hall. Whether he's talking about surf conditions, venting about access issues, or diving into local politics, one thing's clear: he cares deeply about his community.

"Conrad is unapologetically himself," wrote TJ Thran, a fellow surfer and owner of CVRRENT, a Rhode Island media company focused on surfing, in an op-ed for the Surf Exchange Company. "Few of us actually have the drive and wherewithal to take action … Conrad is one of these few, and I admire the hell out of him for it."

A Rhode Island native, Ferla's mission is simple: defend Rhode Islanders' constitutional right to the shore—a right he sees slipping away.

"Shoreline access is inherently public, but there's always an incentive to privatize," he says. "If nobody tries to stop it, they'll take everything."

A Swell of Public Pressure

Rhode Island may be the smallest state, but its nearly 400 miles of coastline hold enormous public importance. The state constitution guarantees the public's right "to enjoy and freely exercise all the rights of fishery, and the privileges of the shore." But where exactly those rights begin and end has long sparked fierce debate.

At the center of the confusion is the elusive mean high tide line, which historically marked the landward boundary of the public beach in Rhode Island. This definition came from a 1982 Rhode Island Supreme Court ruling (*State v. Ibbison*), which set the boundary at the average of high tides over an 18.6-year tidal cycle. In


CRMC
Adopt-An-Access Program
This Shoreline Right-Of-Way
has been adopted by:
Surfrider
Foundation
Program Administered
By The Narragansett
Conservation Commission
CRMC

practice, this line is a mathematical abstraction, often submerged and virtually impossible to identify on the ground. For everyday Rhode Islanders who want to walk along the beach without breaking the law—or for property owners trying to protect what they believe is theirs—the ambiguity created a legal minefield.

In 2019, Charlestown resident Scott Keeley was arrested in South Kingstown for trespassing while collecting seaweed on the beach in front of private homes. He later sued the town and police, receiving a $25,000 settlement. His arrest—and similar incidents—sparked public backlash against shoreline privatization.

This backlash was amplified by Ferla's relentless social media campaigns and on-the-ground organizing, which helped thrust the issue into the spotlight.

"Shoreline access became a major public policy topic—it was in the headlines almost daily for a while," says Michael Woods, chair of the New England Chapter of Backcountry Hunters & Anglers, who credits Ferla with energizing the public. "When these debates happen in the open, it puts real pressure on elected officials to act. That's something Conrad does incredibly well."

State Representative Terri Cortvriend, a co-sponsor of the 2023 bill that clarifies the public's right to walk laterally along the shore up to 10 feet landward of the "visible" high tide line—typically marked by the debris, or wrack line—also acknowledges Ferla's role for raising public awareness. "The commission that helped frame the bill got a lot of press thanks to people like Conrad," she says.

Breaking Point

Before the conflict over lateral access along the shore, Ferla and others organized to fight for access TO the shore. Keeley recalls his first impression of Ferla in 2018 at a heated town council meeting in Narragansett regarding parking issues at rights-of-way in the Point Judith neighborhood, where barriers and private property markers appeared almost overnight. The local council had just voted in favor of a homeowner's request to restrict parking on a public road.

"He stood up after they voted and pointed to each council member who voted yes and said, 'You suck, and you suck, and you suck,'" he laughs, noting that he had connected with Ferla through the Facebook group after his arrest. "We need someone to stand up and call them what they are … Conrad is the thorn in your side, and you need that kind of activity."

Conrad Ferla isn't afraid to challenge local leaders when they restrict shoreline access.

"THE WATER AND THE SHORE BELONG TO EVERYONE"

That meeting was the culmination of rising tensions from surfers, anglers, and beachgoers who faced a surge of "No Parking" signs, blocked rights-of-way, and confrontations with homeowners claiming public land as private. While homeowners cited property rights, advocates like Ferla organized to attend town council meetings and working sessions.

"The water and shore are natural resources that belong to everyone, and they should remain accessible to all through a lasting solution," Ferla said during a 2019 work session held by the Narragansett Town Council to explore public rights-of-way and possible resolutions.

The breaking point came during the COVID-19 pandemic, when public beach access and parking around Point Judith were further restricted. With his outdoor and lifestyle brand business stalled by shutdowns and with a newborn at home, Ferla's frustration boiled over.

"Surfing is my therapy and I lost my s*… I drove down State Road, on the public part, nailing those 'No Parking' signs with my truck," he says with a laugh. "The only thing I ever damaged was my truck—I never hurt anyone."

In his backyard, Ferla keeps a growing collection of signs—"Private Beach" and "No Parking"—that he says were illegally posted on town- or state-managed rights-of-way—what he calls evidence of ongoing efforts to quietly shut people out.

"I double-dog dare anyone to go after me for it. I mapped everything and know exactly where the [boundaries] are," he says.

Eventually, sustained public pressure—amplified in part by Ferla's efforts to elevate the issue—helped lead to the reinstatement of parking in Point Judith.

"We fought long and hard [to get parking back]," he says, emphasizing that he is a small part of a much larger effort. "I'm just a catalyst. There are hundreds of people doing the work."

From Surfing to the Frontlines

Ferla's activism isn't about politics—it's personal. Raised along the Narrow River in South Kingstown by his late mother, Anne Parente—a Warwick Police detective—Ferla grew up with a strong bond to the water and an early sense of justice.

As a kid, he joined her on beach outings with at-risk youth through the D.A.R.E. (Drug Abuse Resistance Education) program she organized with other officers.

"These kids lived in the Ocean State and had never been to the beach! Imagine that?" he says. "I remember it would just light them up."

Shortly before her passing right before Christmas last year, Parente reflected on her path into law enforcement, why being by the water was important for her family and work with at-risk youth, and how she passed her grit and drive to her son.

"We are a highly motivated family," she said. "I've always taught Conrad that knowledge is power and never to back down, but I think he learned that just by watching his mother."

After developing a chemical allergy that forced her to sell her hair salon in Jamestown, she pivoted, earning a degree in criminal justice at Roger Williams University to support her young son. She then graduated at the top of her class at the police academy and trained at Quantico to become a forensic artist. Parente was one of the few women detectives in the Warwick Police Department, assigned to some of the toughest beats. She credited her ambition to her father, a WWII Army glider pilot and state aeronautics inspector, who taught her never to quit or settle.

At the time of this interview, Parente was battling complications from a brain tumor. Ferla fought back tears as he described how deeply she shaped him. "I've got a drive in me that's unlike other people … I get it from my mother," he said.

Parente said she took her son to the beach every chance she could and reflected on how bringing at-risk youth there was meaningful not just for them, but for her and her son as well. "They had a blast riding the current on boogie boards at the mouth of the Narrow River," she laughed. "But I had to keep an eye on them because a lot couldn't swim. Conrad was always a water baby, so I think it was a real eye-opener being around kids like that."

Despite the joy of those trips for the kids, their presence was often met with subtle hostility from beachgoers.

"I realized that I lived with a bunch of snobs," she laughed at the memory. "They would move their blankets away from us, and it was quite noticeable, but the kids were oblivious."

Except for Ferla.

"IF NOBODY STANDS UP, NOTHING CHANGES. I'M NOT GOING TO STOP."

"I remember people giving [the kids] glares and talking under their breath. I remember thinking, 'That's wrong. The ocean is for everybody,'" he recalls.

The experience stuck with Ferla. It hadn't occurred to him before that something so central to his life—and so vital to his mental well-being—could be out of reach for others.

"Nothing calms me more than the moment I put my head underwater when the only thing I can hear is the sea," he says.

He went on to teach surfing for more than two decades, connecting many to the ocean for the first time.

"For some, it changed them. That stoke is real. And as access to the shore becomes harder, it's the people who need it most who lose it first," he says.

Pushing Back

Ferla witnessed the limits of shoreline access as a kid—but he didn't feel the impact personally until his twenties. While surfing at Green Hill in Matunuck, he was approached by a group of angry homeowners. "One guy even tried to take a swing at me," he recalls. "He shouted, 'This is my water.'"

Years later, he faced a similar situation—this time with his wife, young children, and friends. They were in South Kingstown, near the beach by Ocean Mist restaurant, when someone told them to leave, claiming the area was private.

"I stood my ground because it was public," he says.

For Ferla, standing up for himself is second nature. "I've been bullied my entire life. I was always overweight, a little different, with a speech impediment and a lazy eye," he laughs.

That experience prepared him for what came next.

Running his own business representing surf and skate brands rooted in counterculture, Ferla leaned into his community when he encountered pushback to his shoreline advocacy work. "When people started calling my clients to get me fired, I thought, 'Go ahead—tell a pro skateboarder I'm a bad guy. See how that goes,'" he laughs. "But if I worked at a bank, ran a local business, or was tied to the university or real estate industry, I would've been out of a job."

During the pandemic, Ferla tapped into the social-media following he'd built through his business and local surf contests to launch the *Saving RI Coastal Access/Rights of Way* Facebook group. His goal: to bring together people from seemingly different walks of life who shared a common interest in protecting shoreline access.

"Everybody's on the beach. Whether you want to do yoga or shoot ducks, it doesn't matter," he says.

He started by joining "Our Town" Facebook groups to connect with residents concerned about access, then expanded into fishing, birding, hiking, and other coastal communities—bridging groups that often operated in silos but cared deeply about the same public spaces.

"I shared the message across all those spaces because they all overlapped," he explains. "Surfers do surfer things. Fishermen do fisherman things. These groups weren't connected, but now they are."

According to Woods, bringing different groups together is one of the biggest contributions Ferla has made.

"Most of what I work on relates to hunting and fishing," Woods says. "It's a pretty small constituent group … It's been cool fighting the same fight as some of the other people that appreciate the same resources that I do."

The Facebook group members regularly share photos of fences and "No Trespassing" signs blocking shoreline access, along with maps, property records, and legislative updates to keep others informed. They've organized letter-writing campaigns to lawmakers in the lead-up to hearings on shoreline access bills—some of which are now state law. They monitor unmarked rights-of-way, report property owners overstepping boundaries, and track local meeting agendas for shoreline issues.

They've packed town meetings from Warwick to Westerly, handed out copies of the state constitution at rallies, and even chartered a plane to fly a banner over the coast after the new lateral access law passed, declaring: "The Rhode Island shore is not private!"

Their grassroots efforts have led to real change. Towns like Jamestown, Westerly, and Narragansett have restored parking near rights-of-way, launched reviews of access records, and spurred investigations into disputed shoreline points. The group has also flagged misleading real estate listings claiming "private beaches," successfully pressuring agents to revise language to reflect Rhode Island's public access and disclosure laws.

"Saying a home has a private beach when the law says it doesn't creates false expectations. That invites conflict—and it's a failure to disclose," says Keely, who credits group members for spotting those ads, whether for Airbnbs or home sales.

Now, under Rhode Island's new disclosure law, shoreline property sellers must inform buyers of any public rights-of-way or shoreline access.

More Than Access

Real estate disclosures are just one of many issues shaping the shoreline access fight, says Woods. "We've seen bills on everything from footpath designations to deceptive signage. There's even a commission now studying beach erosion."

But for Ferla, who has a degree in economics, shoreline access is about more than beach days—it's about protecting the community's economic future.

"I work in every coastal town from Virginia Beach to Bar Harbor, and I've seen what the loss of shoreline access looks like in different towns, and how it can affect the economy," he says. He points to the Hamptons as a cautionary example, where extreme exclusivity has driven out working families and small businesses. "There are entire ghost towns where nobody lives. Just banks and property management companies."

He says he sees it happening in Narragansett, Charlestown, and Westerly, with rising property values and increased sales in second homes to out-of-state buyers.

"I'm surfing in front of a house where I've never seen a single person—ever," says Ferla, explaining how coastal property ownership has shifted from vacation homes to financial assets. For the very wealthy, Ferla says—"not 'doing well for Rhode Island' money, but *real* money"—buying coastal land is just a way to park cash.

When towns prioritize the coast as an asset class rather than a shared resource, they risk becoming economically exclusive, he says. This shift squeezes out working-class families and essential service providers who sustain local economies.

"It's subtle," says Ferla. "One day, you notice you can't park where you used to. Eventually, it's a whole different town."

Ferla calls it a "perfect storm"—rising seas, coastal development, and political inaction.

"Why do I suck?" he says, referencing the infamous sticker. "I don't. I just want the shoreline open to everyone and protected for future generations, too."

"The rest," he adds, "is just noise. If nobody stands up, nothing changes. I'm not going to stop."

MARINE ALGAE AS ART

Mary Jameson's Meandering Coastal View

by **Elaine Lembo** Photographs by **Jesse Burke**

ENTER THE WORLD OF MARY JAMESON AND PREPARE for a deep dive, a bottomless plunge into nature and science; creativity and culture; history and spirituality —and art.

Jameson's Saltwater Studio, on the outskirts of Newport, is a working artist's dream. Housed in an industrial building, it has high ceilings, a garage door to move bulky materials in and out, waist-high tables, bar stools, an office area, and lots of room for storage, where lumber and other raw materials for framing are neatly stacked, at the ready to showcase creative output. It's also a gallery, retail shop, and learning center. It's a hub of activity, offering sales of her framed prints and wood blocks, jewelry, stationery, dinnerware, and other home decorations.

On a sunny Saturday, a crowd of a dozen souls, myself among them, turns out for her hands-on workshop to learn how to press marine algae into collages.

Each marine botanical workshop participant is passionate about the coastal environment in ways that become apparent as we get to know each other. Some of us are personal friends of Jameson eager to learn from such a talented and experienced artist; others, like me, are sailors. There are also scientists, nature lovers, hobbyists, and outdoor swimmers. We open the packages containing the reusable, portable pressing kits she's perfected over a decade of trial and error, and in we go.

"I have everyone do two collages," she says, "because there's a bit of anxiety doing something new. Little by little, you'll understand it better. Everybody will be able to make pressings that look like something you can frame. There is no right or wrong; all the collages

Mary Jameson became fascinated with the potential of seaweed when she attended a historical exhibit of marine botanicals.


SEA WEED BASKET.

look good. You get the anxiety out after the first one, and then you see that you can do it all day."

From two shallow tubs near our worktables, we use chopsticks and other thin, long probes to draw shiny, drippy, clumpy strands and tufts out of the sea water, then into individual basins containing about an inch of water. Suspended in air, hanging like spaghetti, the red, green and brown varieties of seaweed don't look particularly inspiring—and Jameson is prepared for that assessment.

"You need to see the seaweed in its beauty in the water, where it's fluffed out," she tells us. "There, you can see the shapes and colors. Take time, poke around—you'll see different textures and colors. If something looks brown or dark, it will look great next to greens and reds. Don't discount anything—you see things better when you mix the different tones and textures."

Back at the worktables, using our hands, paint brushes, toothpicks, tweezers, more sea water, and a little glue, we spread strands of Irish moss, sea lettuce, rockweed, sugar kelp (whose nicknames include Devil's Apron), feathery chenille weed, *Corallina officinalis*, and laver (of which nori is a variety) over watercolor paper in an arrangement that suits our individual inclinations.

Jameson checks our work, moving from table to table. After repeated blotting and pressing, a process that Jameson has engineered to make so simple that it can accommodate just about any misstep, and a two-week drying period beneath heavy items such as books, each of us will have created two pieces of marine art worthy of framing. Once the questions and exclamations and oohs and ahhs have settled into the silence of concentrated effort and total submersion in our task, I start to believe making art is possible, even for me.

A New Day for Seaweed

Jameson's own work is critically recognized. In 2014 her "Marine Botanicals" was a solo show at the Newport Art Museum. Her work was included in the award-winning "Cultures of Seaweed" Show in 2023 at the New Bedford Whaling Museum and the 2024 "Summer Crush" show at Air Studio Gallery in Westerly.

When she's not incorporating artistic processes such as eco-printing and cyanotyping into her collages and making the most of modern tools such as scanners and laser cutters, she spends a good deal of time on the move, wandering coasts domestic and foreign, ever alert to finding another way to develop, express, and share what inspires her.

Jameson has devised techniques for turning seaweed into art, and teaches them in her studio.

She holds workshops anywhere clients request, from a private club in Providence to the community center on Block Island. In good weather, she'll set workshops up right at the beach. Her latest foray was a weeklong spring 2025 seaweed and cyanotype art retreat at Mulranny Arts Center in County Mayo, Ireland. Her aspirations include hosting similar retreats in France and Japan.

While she marvels over the contrast from New England in seaweed species across the pond, when she's back home in Rhode Island she delves deep into the bounty she discovers here. "I like to collect from the ocean side and from the Sakonnet River; there's similar seaweed in both, but there's also different seaweed in both," she says. "Collecting gets me out in the environment, where I notice different things that are happening. I never know what I'm going to find."

Jameson is not the only one to take an interest in seaweed. In the U.S., the National Sea Grant's Seaweed Hub State of the States Report of 2024 records that seaweed farming in 11 states has emerged significantly over the last decade, in the Northeast, the Northwest, and Hawaii. According to the National Oceanic and Atmospheric Administration, it has become the country's fastest growing aquaculture sector, prized for its potential environmental and economic benefits.

Seaweed also turns up in other familiar and surprising ways: Sweaters are sewn from seaweed-based fibers and smoothies are blended from concoctions

that include everything from dried dulse flakes to Irish moss gel and kelp. We also unwittingly eat foods that contain seaweed—ice cream among them, where it acts as a stabilizer, keeping the treat from getting icy—and varied cuisines and cookbooks are based upon it. Seaweed byproducts are in shampoo, skin cream, and toothpaste. It's also well regarded as a nutrient-rich natural fertilizer for farmers and gardeners.

There's more: a new board game on the scene is "Phycoverse: A Game of Algae Adventure," produced by the Algae Foundation. Jameson is one of its artistic contributors.

Workshop participants learn to overcome anxiety while finding the beauty in marine algae.

Beyond board games, Jameson's embrace of her artistic genre extends to seaweed-themed events. She attends symposiums led by seaweed scientists, known as phycologists, and has assisted in outreach programs and classes led by URI marine sciences Ph.D. candidate Rebecca Venezia.

Jameson's methods and work are sought out by scientists as an aesthetic bridge between two disciplines. "It takes away the stress," Jameson says. "It rounds out their education and it helps people feel more comfortable. It adds another perspective—less in the lab and on the page, more visual and beautiful."

According to Venezia, the goal of the events Jameson has participated in is to help the general public appreciate that seaweed is far more than a stinky, rotting, beach-flea-ridden weed.

On the day I attend Jameson's workshop, Venezia also participates for the first time, and she helps Jameson answer questions as they arise, while making art. "Most people see seaweed dry on the beach and that's not the best way to see it," Venezia says. "When you see it in water like in the tubs at this workshop, it's absolutely gorgeous." When Venezia is out in the field, she believes that helping people identify seaweed, learn individual species names, and exploring it in nature results in a better appreciation of the role it plays in the ecosystem of the bay and understanding its importance.

The Gravitas of Seaweed

Way before Instagram, seaweed was trending. Its popularity just looked different back then—really different.

In her workshop handout package, Jameson stresses to participants that the collection of seaweed is protected by law in Rhode Island. The clause she provides paper copies of ensuring the constitutional right of Rhode Island citizens to gather seaweed was approved by voters in 1986. Yet it only skims the surface of a prodigious reference library and early 20th century scrapbooks and dioramas Jameson has acquired over the decade. She generously lends some works to me so I can bone up on seaweed, and I dig in.

Among the works is Mary Howard's 1846 album of British seaweed, *Ocean Flowers and Their Teachings*. Howard's work emphasized the perspective of the seaweed upon its gatherers, and how spending time in nature is a link to the divine, a concept that Jameson, who considers herself more spiritual than religious, concurs with.

"It slows me down," she says. "My days are busy, and I know I've got to fit collecting in when it's low tide, when it's great to see things in the water. Then I come back to my studio and do workshops."

Epiphany in Newport

How Jameson arrived at this creative and personal period of her life is an odyssey of rich dimensions. It's a story that percolates along with the expected twists and turns of a large Navy family with roots in the Ocean State moving around the country, then coming back.

While Jameson considers herself a Rhode Islander, her father's military postings sent them to various places, including Key West, Florida, which led her to earn a degree in graphic design and illustration at the University of Miami. She later signed on as mate aboard a charter sailboat doing a stint in the Caribbean.

A few years later, she returned to the United States and moved to the Jamaica Plain neighborhood of Boston, taking a job in a fine art services and portrait framing business. It was there she met her husband, Dwight Jameson, the owner. In addition to helping her husband's business, she worked in the corporate world, handling fine art displays and exhibits and became a certified art appraiser.

Family ties and a desire to be close to nature led the couple to buy a home and rent a studio in Newport. They found a house, and what is now Saltwater Studio, right around the corner. Shortly after, they welcomed their son, Kieran, into the world.

While taking toddler Kieran on walks around Third Beach, in Middletown, she'd notice healthy amounts of seaweed. It was 2014, and that year, the Newport Historical Society hosted the fascinating exhibit "Flowers from the Ocean," which included scrapbooks of Aquidneck Island seaweed specimens produced by summer visitors and residents in the 1800s. She decided to attend.

"I had never seen it used decoratively before," Jameson recalls. "It was intriguing, and I was taking my son who was small to Third Beach to look at the seaweed and so, I said, let me learn this technique."

And the rest, as they say, is history.

A couple of weeks after the workshop, I lift the collages I made out from under the pile of hefty reference books Jameson lent me. I can certainly mount each of them—they are interesting looking and varied. I take the measurements of the two watercolor sheets and plan a trip to a local arts and crafts shop.

I may not be an artist, but, inspired by our coast, I have learned to create art from the sea.

Saltwater Studio
saltwaterstudionewport.com

Start to finish

Chef Sherry Pocknett illuminates the art of Indigenous hunting, gathering, and cooking.

by **Annie Sherman** Photographs by **Jesse Burke**

WHEN 8-YEAR-OLD SHERRY POCKNETT'S FATHER and brothers would return to shore in Mashpee, Massachusetts, with bushels of writhing eels, Sherry would collect their spears and hustle their catch home, where she'd help her mother peel off the skin and prepare the meat for dinner.

The day before, she would have cleaned and sorted 2 to 3 pounds of beans with her mother, removing all the dirt and grit, set them to soak overnight and then baked them for five hours with molasses, sugar, and salt pork the next day. Baked beans were the first dish she learned to cook, and she recalls this process of preparation was a normal part of growing up in the Wampanoag Tribe. They only ate what they grew or caught, she says, so she planted, tended, and harvested beans, squash, corn, tomatoes, herbs, and much more, while helping prepare meals for the family of six.

"Growing up here on the Cape in the '60s, my father was a potato farmer, and with a big family, we foraged for everything," she says. "And at the end of March, the herring came back from the north. So we caught herring, and that was the first fish I knew how to catch. We learned the difference between male and female, learned about the roe and how to take it out, and save the head and tail for garden fertilizer."

Chef Sherry Pocknett
© Steve Heaslip – USA TODAY NETWORK via Imagn Images

These were important lessons for the young girl who went on to be co-owner and chef of the former Sly Fox Den Too in Charlestown, Rhode Island. She named it for her late father, Wampanoag leader Vernon "Chief Sly Fox" Pocknett, and co-owned it with her daughters Jade Pocknett-Galvin and Cheyenne Pocknett-Galvin. A year before they closed it last December to prepare to open another location in Cape Cod, Pocknett won the James Beard Award for Best Chef Northeast in 2023, which she views as a recognition of her hard work and a hope that the public will acknowledge Indigenous foods.

But Pocknett is so much more than this accolade. She knows that those roots—in family and in the land—are a cherished foundation, as well as her road map to her future in food. So she continues to fish for herring and tend a garden at home, makes home-grown sassafras root tea sweetened with maple syrup, Cape Cod cranberry chutney, and roast deer that her nephew Cheenulka Pocknett hunts.

"I always knew I wanted to be a chef," Pocknett says, affectionately recalling her Suzy Homemaker oven. "I was maybe 5, 6, even 7 or 8. I put everything in that little machine, whatever was in the refrigerator, whatever my dad brought home, either from the bay or hunting." It took hours cooking rabbit, deer meat, eels, or quahogs under a 60-watt lightbulb, she laughs, but they ate it.

"WE TRY TO HUNT AND FISH FOR MOST OF OUR FOOD."

She continued to be surrounded by food for her entire adolescence, waiting tables at the former Wigwam restaurant in Mashpee, Massachusetts, and washing dishes at The Flume restaurant that her uncle owned for three decades, where "all of us in our family worked at one point in our lives," she says.

Now Pocknett and her daughters cater public events around Southern New England and serve Indigenous dishes at the Mashpee Wampanoag Powwow, Narragansett Powwow, and the Mohegan Wigwam Festival each summer on the tribal reservations.

She also teaches Indigenous hunter-gatherer techniques and cooking to her daughters and grandchildren, as well as to the public, which is vital to preserve Indigenous culture and traditions, she insists. Illuminating the natural Indigenous culture that has subsisted in New England for centuries "is a dream. That's all I want, is to keep teaching, keep our legacy going. Cooking with me is teaching the kids and keeping the traditions alive," she says. "Going strawberry picking

and blueberry picking and harvesting everything that's in season is what we do. That's the lifeways of a Wampanoag person."

Making it her life's work to teach the foundations and preparation of Indigenous cuisine, she offered demonstrations at institutions including Harvard College (the undergraduate school of Harvard University), sharing knowledge just as her father taught her and her siblings. Her stories, lessons, and passions have a lasting impact, so much so that her daughter and business partner, Jade Pocknett-Galvin, remembers growing up fishing, tending herbs and vegetables in a big garden, and making fry bread with a recipe shared by a Navajo chef. She says her mother taught her how to do all of this, about everything related to food, and instilled a love that she also fosters in her own five children, even though they cook less than she did as a kid, she laughs.

"I remember being younger, the river would be so full of herring we could stick our hands right in and catch them with our hands. (We'd give them to) our different elders, aunts and uncles … and catch extra for our garden," Pocknett-Galvin says. "Herring are multipurpose—we eat them, we hunt them, grow with them—they are definitely a big part of our culture and lifeways."

That connection to nature and sharing of generational knowledge is integral to their lifestyles as well as to their past and future restaurant cuisine. Indigenous food mainstays like venison, fish, and shellfish, and the Three Sisters—beans, corn, and squash—will continue to be part of their menu, she explains, and they will plant a culinary garden where they'll grow what they serve.

"Traditionally, we grew up eating seafood, fishing for herring, mussels, and quahogs. We always make chowder, quahog cakes, or anything with seafood," Pocknett-Galvin says. "We're a big seafood family, living on the Cape, and we try to hunt and fish for most of our food."

Seafood is such a staple that Pocknett-Galvin taught a "Cook A Fish, Give A Fish" cooking class with Eating with the Ecosystem two years ago. Accompanied by her mother, who was battling cancer, Pocknett-Galvin taught students to make a fish stew, just like her mother made when she was growing up, with quahog, cod, clams, lobster, potatoes, corn, and a delicious homemade broth.

Eating with the Ecosystem is a nonprofit organization that promotes sustaining New England's wild seafood system. Executive director Kate Masury recalls that class was an important introduction to Indigenous food preparation and traditions. The mother-daughter team discussed the spring herring migration (specifically alewives), which is an important part of New England's ecosystem, Masury says, and how that is a sign

that animals are returning to the area and flora are coming back to life. With the alewives come other fish, like striped bass, that the tribes would then harvest.

"The stew used a number of different species that were important and local to the region … and is important culturally. Home cooks could very easily incorporate it into their own home kitchens, and people can come together around it and enjoy a warming meal," Masury says.

"The native people, whether it's the Wampanoag tribe or the Narragansett tribe, have a lot of connections to these same species, just in different rivers. And I think that's such a great example of eating with the ecosystem, really. That's exactly what this is all about—respecting the resource and harvesting only what you need, while making sure that those habitats are healthy, eating seasonally and what's available, and changing what you eat with the seasons. They can speak to that so eloquently and come from a history of actually living that way."

Contemporizing Indigenous cuisine is not solely about ingredients, however. Sherry Pocknett's nephew Cheenulka Pocknett, a Mashpee Wampanoag Tribal citizen, offers curriculum development, speaking/lectures, arts and crafts, and cooking demonstrations to share the valuable traditions of his people. He's also a chef, and helps operate an oyster and quahog farm on Cape Cod, while actively hunting and fishing to feed his extended family. He often will hunt with Jade's husband, Pe'Co, and they'll bring back as many as

seven deer, which they'll butcher and share with the rest of the Pocknett clan.

"For us, hunting and fishing is a necessity. It's not just a birthright. It's actually a necessity for survival, whether we use it for trade, for money, or for food for the immediate time," Cheenulka Pocknett says. "Ever since I can remember, I've been hunting, or in the water with my family, sometimes my uncles and aunties, sometimes my parents or older brothers. And we continue to bring out younger kids with us and teach different family members."

Access to their hunting grounds and legal ramifications remain an issue that the Pocknett family continues to fight for. Cheenulka Pocknett says he has to travel as far as Virginia or New York to hunt for deer because local residents make noise in the woods to scare away animals, call the police, or "find sneaky ways to impede our rights," he says. "They shut us down, shut down economic sustainability, and it's a horrible thing. It forces me to stay below the poverty line in the richest place in America, and the fight just continues. But we're not going to quit fighting. We're going to continue doing what we do."

Pocknett-Galvin explains that it's important to discuss these challenges, share their hunter-gatherer methods, and illuminate cultural traditions because people should know about their lifeways and that the Indigenous tribes remain active here.

"That is why we teach and do the cooking that we do," she says. "It's not 'Native Americans used to live here,' or 'the Wampanoag Nation lived in another time.' No, we still live in 2025, we are still here. We still hunt and still fish, and it's not 'used to.' We're still here, and this is still our land."

As they remain connected to the land and their tribal ways, these devoted chefs, educators, and advocates have given back much more than they have taken to feed themselves and others. Pocknett, who is now cancer free, says she would have it no other way than eating with the seasons and hopes her lessons sink in with home cooks and food lovers alike.

To ensure that persists, and that she returns to cooking as quickly as possible, she is feverishly getting the new restaurant ready to serve venison skewers and sausage, Three Sisters succotash, quahog chowder, Indian tacos with hot pepper chili, Johnnycakes, and her famous Fig-N-Pig with pulled pork and a fig spread atop fry bread. She also plans to create a living museum and classroom so people can learn the history of her tribe and ancestors from the 1600s to today.

"Then they can get the feel of how we used to live, how we survived," Pocknett explains. "Whatever you eat from around here, whatever is harvested from around here, when you eat local, those are foods that we've been eating for a very, very long time."

Recipe

LOCAL SEAFOOD STEW

Chefs Sherry Pocknett and Jade Pocknett-Galvin

Serves 4-6 people

Ingredients

1 large yellow onion, medium diced or chopped to your liking

3 cloves garlic, minced

3 tbsp. garlic powder

1 tbsp. onion powder

3 sprigs thyme

2 tbsp. salt

1 tbsp. Old Bay Seasoning

2 lb. local fish fillet, such as monkfish, black sea bass, haddock, pollock, hake, etc.

2 dozen littlenecks

2 lb. mussels

2 lobsters

6-8 cubed yellow potatoes

4 tbsp. olive oil

5 cups water, plus more to cover the seafood

Tools

Knives, cutting board, large soup pot, measuring cups/spoons, stirring spoons, ladle

Instructions

Sauté chopped onion in 2 tbsp. oil until translucent. Add minced garlic, thyme, and all seasonings.

Add 2 tbsp. oil and small piece of fish. Cook 4-6 minutes, stirring occasionally.

Add water, and simmer.

Cut lobster in half down the middle. Remove claws and add a crack to each claw and knuckles. Remove tails. Add all lobster parts to the pot.

Add potatoes and littlenecks.

Bring to a boil and cook about 10 minutes, then add more water to just cover all ingredients. Simmer for about 6 minutes.

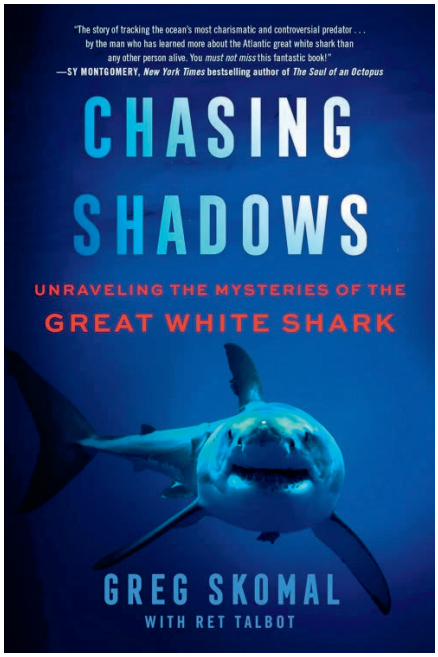
Add mussels. Chunk the remaining pieces of fish and add on top. Cook covered for about 15 minutes, (your shellfish should have opened).

Adding the ingredients in layers allows the flavors to be released gradually, which increases the flavor profile.

Serve and enjoy!

Chasing Shadows

MY LIFE TRACKING THE GREAT WHITE SHARK by Greg Skomal with Ret Talbot



Reviewed by **Monica Allard Cox**

GREG SKOMAL wants to get one thing out of the way at the beginning of his shark memoir. Yes, he may be the celebrity scientist you've seen on *Shark Week*, "but I'm still just a biologist with the Massachusetts Division of Marine Fisheries."

Still, *Chasing Shadows: My Life Tracking the Great White Shark*, written with Ret Talbot, dramatically recounts how Skomal went from a shy research assistant at the Apex Predators Program right here in Narragansett to becoming "the Paul McCartney of marine biology."

The story begins in 2018, with Skomal leading a shark-watching tour out of Plymouth, Massachusetts. At the same time, we meet Arthur Medici and Isaac Rocha, two boogie boarders who have come to surf the Cape Cod National Seashore. We also meet the young shark swimming along the beaches of the outer Cape, hunting for seals in the same area where the men are surfing. The stories alternate, with Skomal's sharkophiles impatient to see their first white shark, while a few miles away, Arthur coaches his young protégé. Soon, Skomal points out a white shark to the delight of the passengers, just as his cell phone begins to vibrate. It's the media, calling to ask about the fatal shark attack that just took Arthur's life.

That moment—where Skomal has to balance his enthusiasm for white sharks with his responsibility to keep the public safe—underscores the primary tension of the book. Over the course of Skomal's career, white sharks went from feared but rarely seen "man eaters" to a beloved and protected species. Recently, however, increasing attacks on humans in Cape Cod waters have put him in the midst of controversy fueled by these competing views of sharks.

Skomal, who had cultivated media deals to supplement his limited government research funding in return for footage of him tagging sharks, was now being accused by some of caring more about sharks than human life.

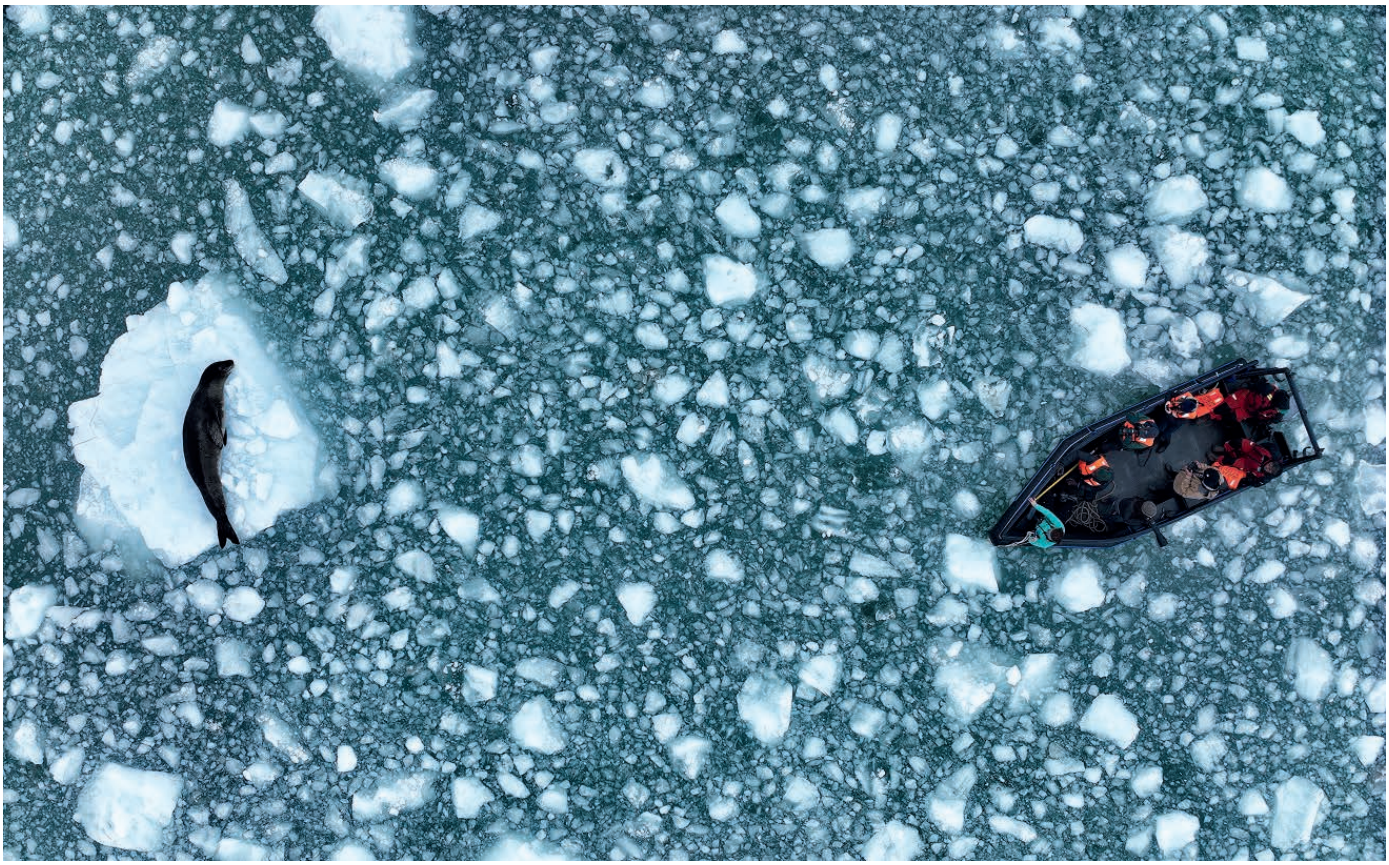
While local government leaders debated the merits of shark deterrents and ultimately spend $50,000 to find out what Skomal already knew—i.e., that the deterrents were expensive and unreliable—Skomal forges a plan to study sharks even more deeply, getting near real-time data that he hopes will give scientists a fine-scale understanding of shark behavior so they can better predict when sharks may pose a danger to humans.

Those studies are ongoing now, the culmination of Skomal's years of tagging sharks with progressively more high-tech tags that have given researchers unprecedented insights into how and where sharks migrate, feed, and reproduce.

The book takes us back to the beginning for Skomal, when watching *Jaws* set him on his life's course. We learn about his development as a shark researcher, his reverence for his mentors and colleagues, and how, despite years on the ocean tagging over 300 sharks, he never loses his sense of awe at these encounters.

Skomal, the shark-scientist-next-door, writes, "I'd rather be the kind of guy you just want to grab a beer with." And while you're at it, he might tell you about how he survived a near drowning when a white shark entangled in the buoys supporting his diving cage, or tracked sharks with an underwater SharkCam, or took blood samples from a 2,000-pound, live shark writhing on the platform of a ship.

UNIVERSITY OF RHODE ISLAND RESEARCH & SCHOLARSHIP PHOTO CONTEST



Working Hard–Hardly Working, first place
Renato Borras-Chavez, postdoctoral researcher, natural resources science

Renato Borras-Chavez was part of a team conducting fieldwork in Parry Fjord, an isolated part of Patagonia, Chile, to study the ecology of leopard seals and their genetic connection to Antarctic populations. The fieldwork was supported by a National Science Foundation grant, led by Sarah Kienle, assistant professor of natural resources science.

The image captures a critical moment from the expedition. After hours of patrolling the freezing waters looking for animals, the team came across a female leopard seal resting on an iceberg. "We were focused, pressured—piloting a drone, collecting data, and preparing to take a sample—but she was undisturbed, basking in the icy stillness. The contrast was clear: We were working hard, while she was hardly working," says Borras-Chavez.

41° N
A PUBLICATION OF RHODE ISLAND SEA GRANT
AT THE UNIVERSITY OF RHODE ISLAND
A SEA GRANT INSTITUTION

NONPROFIT ORG.
U.S. POSTAGE
PAID
WAKEFIELD, RI
PERMIT NO. 19

Amirali Momeni's photo of the aurora borealis, taken at the URI Bay Campus beach in Narragansett in October 2024, was a way to put his studies into practice. Momeni, a doctoral student in biological and environmental sciences, focuses on science communication, specifically how astronomy influencers use social media to engage the public.
This photo won second place in the URI Research & Scholarship Photo Contest.