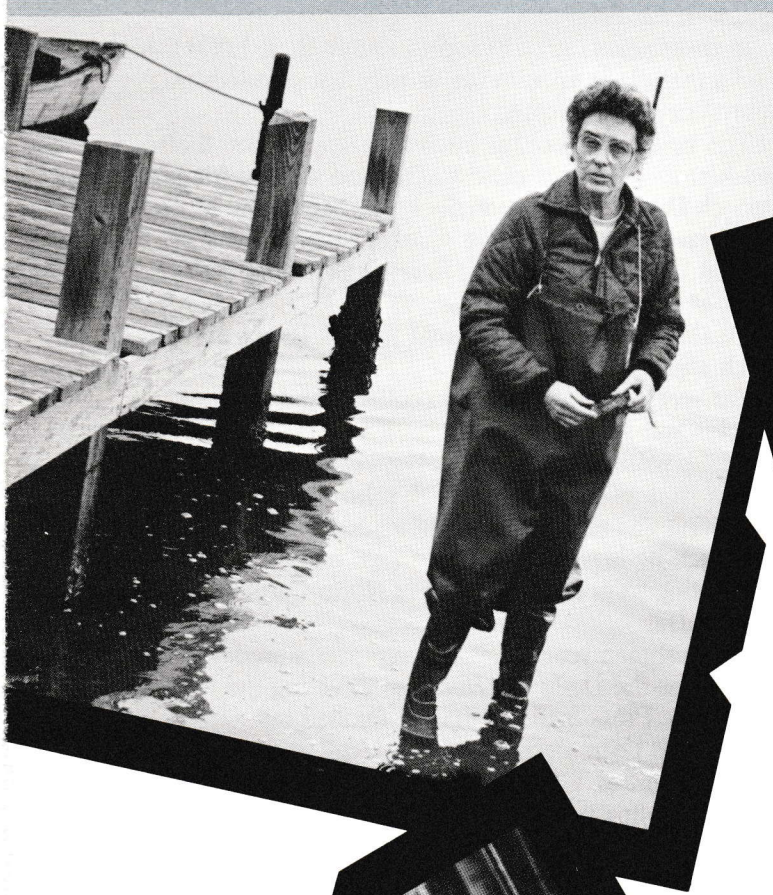
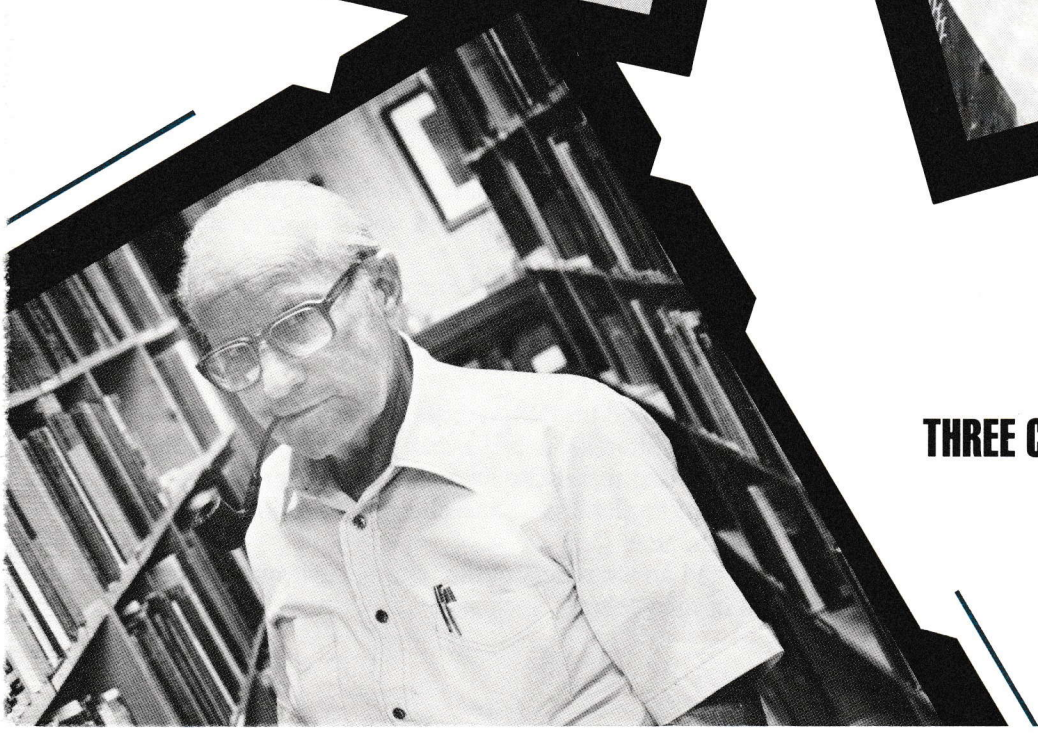
UNC Sea Grant

April 1987

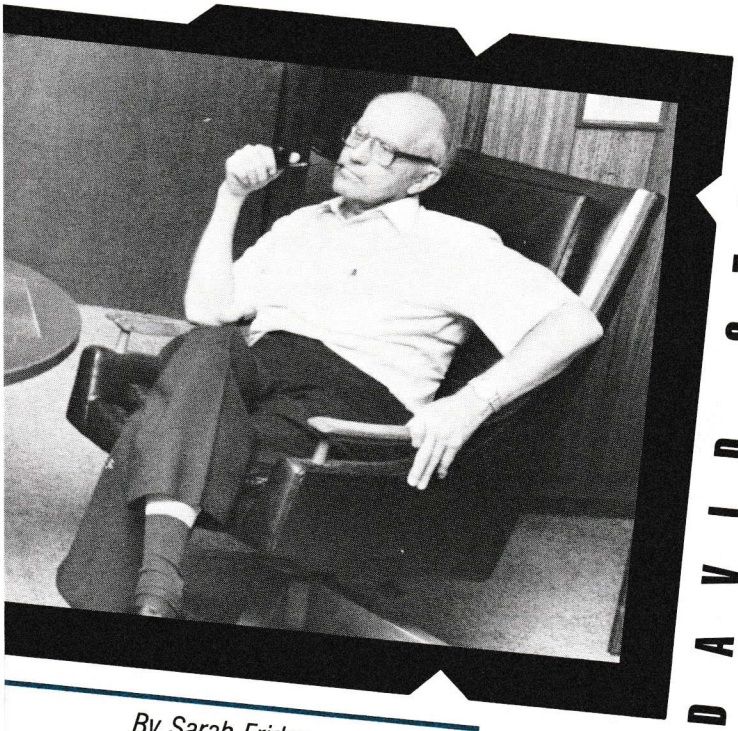
COAST WATCH





PROFILES OF PROGRESS: THREE COASTAL CAROLINA NEWSMAKERS

Editor's Note: This month ***Coastwatch*** *recognizes three outstanding coastal Carolinians. In their own ways, they have helped shape the North Carolina coast. Author David Stick recorded the coast's past and molded its future through his progressive thinking in coastal management. Fireball Lena Ritter incited shellfishermen to save their pristine harvesting waters from development. And fisherman Murray Bridges "busted" the soft-shell crab industry wide open.*



DAVID STICK

By Sarah Friday

David Stick must have a time filling out forms.

There's never much room for the North Carolina historian, businessman, developer, civic leader, coastal advocate, book lover and writer to fill in the line marked "Occupation."

As one of the state's most renowned coastal authorities, the trim, balding Stick is modest about his success.

He's really too busy to think about it.

He just published a book, you know. His eleventh. He's head of a local foundation in Kitty Hawk, on the America's 400th Committee, and as always, involved in land use planning.

He's moving from Southern Shores to Kitty Hawk. Then there's the history center going up in his honor—complete with 6,000 volumes from his own library.

And this is retirement.

Stick's progressive thinking, hard work and straight-shootin' style keep him ahead of the game.

A love of the coast and its resources incited him to play.

Born in 1919, Stick grew up on an Outer Banks few people know now. His father Frank, a conservationist and an illustrator, shared the sand and water with his son, instilling in him an appreciation that would endure.

He had "a love of the outdoors and the amazing ability to paint in a very realistic manner the animals he saw," Stick recalls.

Evidence hangs on nearly every wall in Stick's home.

Drawing on his pipe, Stick also remembers how much his father loved sports—and how much he hated them.

The younger Stick got bored fishing and cried when he shot a duck the first and last time he went hunting.

He liked boats, though, and gogglefishing.

Yes, gogglefishing.

When Stick was 14, a visiting Olympic athlete showed him how to wear the little wooden goggles made in Japan and to spear fish.

In three years, Stick brought in more than 1,000 fish and a first place prize in the world's first gogglefishing tournament in Beaufort.

The hobby sparked his interest in shipwrecks. It also led him to one of his closest allies and lifelong friends, Aycock Brown. The nationally known photographer publicized the Outer Banks for more than 30 years.

That included the world's first gogglefishing tournament.

"At that point, I realized what Aycock Brown could do," Stick says.

For years afterward, the two collaborated on books, articles and special projects.

Stick's writing career began two years after the tourney with a stint as editor of the high school newspaper.

Writing was all he ever really wanted to do.

In fact, he loved it so much it kept him from graduating from the University of North Carolina at Chapel Hill.

His freshman year, the young reporter stayed so busy writing for the *Daily Tar Heel* and directing the N.C. Scholastic Press Institute that he flunked out.

And he'd been elected to the student council, defeating Skipper Bowles, a classmate who became a prominent North Carolina politician.

But "I never regreted it," Stick says.

He later joined the U.S. Marine Corps as a combat correspondent during World War II, then returned to an editorship at *The American Legion Magazine* in New York.

By 1947, he had had enough of the big city. He returned to North Carolina and vowed to write only what he wanted.

In 1952, Stick published one of his first books, and probably his most famous, *Graveyard of the Atlantic.*

But he needed to do more to support his new wife and their family-to-be.

So he joined his father's business as a developer in Southern Shores, opened a craft shop and became the first licensed real estate broker on the Outer Banks.

Land was plentiful ... and cheap. Choice lots went for $100 an acre.

"I had an awareness of the natural environment, but not of the ecology," Stick says.

"I suppose we all shared the feeling that no action by a single individual or developer could possibly have an appreciable effect on the so-called balance of nature," he writes in *Striking a Balance,* a publication of the N.C. Division of Coastal Management.

But pretty soon Stick saw the folly of people building too close to the ocean. And he shook his head when property for sale frequently flooded.

He saw houses fall over because of erosion, and hurricanes create disaster.

Common sense and an inherited eye for conservation told him something could be done.

He began telling folks at meeting after meeting about respecting nature, the powers of storms and citizens' rights.

By the late 1950s, North Carolina and the nation began realizing the need to protect coastal resources. Stick heard the term "coastal zone management" for the first time about then.

In the 1960s, "when the environmental stuff was getting big anyway," Stick joined some Tar Heel legislators in a push for the Coastal Area Management Act.

Opposition abounded.

The new bill restricted development, banned bulkheads, outlined setbacks and called for planning.

It took more than 10 years, but in 1974, the largest coordinated land use planning effort ever undertaken in this country passed.

After the victory, Stick was appointed vice chairman, then chairman of the policy-making body created by CAMA.

Today Stick is proud to have been a part.

CAMA made local officials and developers take a closer look at what was happening to our coast, Stick says. Gains have been made to protect our economy as well as our natural resources.

But development pressures continue.

"These fragile islands can accommodate only a certain amount of people without losing the very things that made them attractive in the first place," Stick says.

"Nothing is wrong with development; it's overdevelopment." Stick believes the answer is in planning.

"People say Southern Shores is a well-developed community," he says. "As I developed each area of Southern Shores, I tried to envision the best I could when there was total build-out.

"Would there be trees? Would there be roads, and would there be adequate services?"

The mistake many planners made, he adds, is that they looked only five years ahead.

Stick also advocates better enforcement of the laws dealing with the coast, and improved ways to inform the public of the issues.

Newspapers, politicians or public hearings won't do, he says.

One-on-one discussion, neighbors discussing their problems, will bring about change. •

LENA RITTER

By Nancy Davis

There was a time when Lena Ritter couldn't name the Onslow County commissioners. She didn't attend public meetings, and she wouldn't have dreamed of making a speech.

Like the seven generations before her, Lena was a fisherman. She and her husband Graham lived 300 feet from where she was born and half a mile from the sound that had always fed and clothed her family.

She had only seen the mountains twice, and Graham was 50 before he ever spent a night in a motel.

But in December 1982, a newspaper article transformed Lena from a complacent fisherman to a civic activist.

The headline read, "Plans for new marina, condo project unveiled."

A developer wanted to turn pristine Permuda Island into a planned community of 383 condos, four tennis courts, two swimming pools and a marina.

The developer touted his plan as an Onslow County version of South Carolina's Hilton Head—a description that didn't appeal to Lena and other local fishermen.

Permuda Island is a slender, mile-long strip of undeveloped land nestled in Stump Sound between Topsail Island and mainland Onslow County.

The island is small, but it is surrounded by some of the state's most productive clam and oyster beds. Lena knows because she's spent the better part of her 51 years fishing those waters.

She and other local fishermen believed rainwater and silt running off the development's roofs, roads and parking lots would harm nearby shellfish beds.

"I wasn't going to stand by and let developers rob us of that," Lena says.

She didn't.

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She flung herself into a controversy that has repeated itself up and down the North Carolina coast for the past decade. It was tradition vs. change.

And Lena won.

In December, after a series of denied construction permits, the developer sold half the island to the N.C. Nature Conservancy and gave the conservancy an option to buy the remainder. In February, the N.C. Council of State approved the purchase of the conservancy's half of the island.

The state plans to preserve Permuda Island for teaching and laboratory work.

Lena's reward for her four-year struggle was more than seeing Permuda Island safe from development.

In November, the Z. Smith Reynolds Foundation awarded her one of three Nancy Susan Reynolds Awards. She received a $5,000 personal award and $20,000 for charitable contributions, which she donated to the N.C. Coastal Federation and to two local volunteer fire departments.

These days Lena would still rather talk about fishing than anything else. But you're just as likely to hear her discuss zoning issues, primary estuarine nurseries and stormwater runoff.

"I'm not opposed to development," she says. "I just want it done in a safe manner.

"The only attraction we've got to outside money is that water. People don't come down here to look at our woods. If we want them to keep coming, we've got to take care of our water," Lena says.

She is sifting through a clutter of scrapbooks, photo albums and a foot-high pile of newspaper clippings yet to be filed. The collection chronicles Lena's crusade to save Permuda Island.

"You work for four years, frustrated, aggravated, people staring down their noses at you. And then you get one phone call, and it's all over," Lena says, her ever-present cigarette filling the room with smoke.

At first, the high school graduate seemed an unlikely candidate for the job she took on. But the article in the newspaper scared Lena into action.

She wrote a letter to the editor and got the shellfish leaseholders around Permuda to sign it.

Then she called the reporter who had written the article and said, "Please get on the other side of the creek and find out what's going on."

The reporter agreed, and within 45 minutes, Lena had rounded up 17 fishermen to meet him in her living room.

She had managed to light a fire under folks not known for being joiners.

But they did join the fight. Over 200 fishermen banded together to call themselves the Stump Sound Shellfishermen Coalition.

"It was truly a grassroots movement, and people who were going to be affected really got behind it," says Todd Miller, executive director of the N.C. Coastal Federation.

"Lena is just a fireball. She doesn't admit to being able to arouse people. But she has an ability to stand up and speak for what she believes in. It's a natural leadership ability that she possesses," Miller says.

The coalition held bake sales, yard sales and auctions. They built a 16-foot wooden skiff, christened it the *Permuda I,* and sold raffle tickets for $5 apiece. With the money they raised, the coalition hired a lawyer to argue their case.

In her 1973 Chevrolet, Lena attended more public hearings and planning board meetings than she can remember.

"I've ridden to Raleigh in everything from a chartered bus to a pickup truck to a Cadillac. If my car wouldn't make it, a neighbor would take me," she says.

To help pay some of her costs, Lena took a job making boxes at a nearby factory. But every minute she spends inside, she hears the waters of Stump Sound calling.

"Sometimes when I'm in there, I just want to take my elbows and push the walls out. I like to be free and on the water," she says.

Even with all the organization, the coalition didn't win all the skirmishes in the battle. In fact, sometimes it seemed that everything was against them, Lena says.

Most of the county commissioners were sympathetic with the developer. But when the N.C. Division of Coastal Management refused to issue a construction permit in 1985, the owner sold the island to another developer.

The victory was temporary.

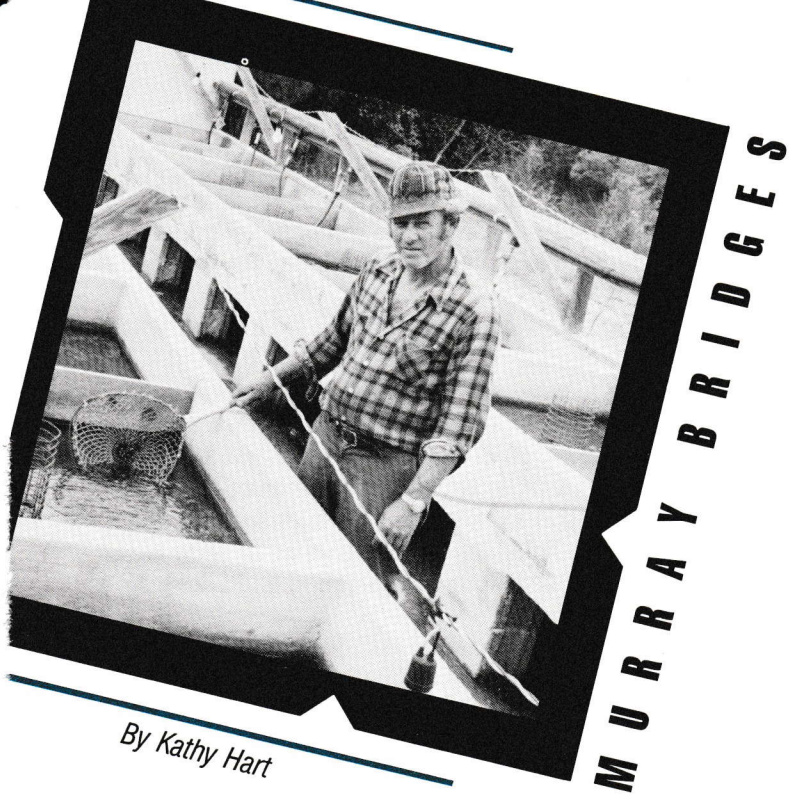
The new developer announced plans for another housing development.

In September 1986, the state denied him construction permits.

But Lena didn't feel victorious until she got a call from the director of the Nature Conservancy.

Lena's battle was over, and Permuda Island was safe.

"But how many more Permuda Islands are there up and down the coast?" Lena says. "Our heritage, our culture, our environment, our clean water—it's not for sale at no price. I tell people, 'Don't sit down and let 'em take it away from you.' " •



MURRAY BRIDGES

By Kathy Hart

Normally on a sunny June morning Murray Bridges is either tending the crab shedders behind his house or on the water in his boat.

But this morning, Bridges' sons, Otto and Scott, insisted that he leave work behind and take a seat in front of the television. They set the channel for NBC's "Today" show and left Bridges to watch.

For nearly two hours Bridges gazed at the set as "Today" show hosts Bryant Gumbel and Jane Pauley intermittently discussed the North Carolina coast from their shipboard location near Wilmington.

Finally about a quarter until nine, the words "soft crabs" rolled off Gumbel's lips, and Bridges hollered for the family to join him.

Seconds later, the program cut to a prerecorded spot.

There, before several million viewers, was Colington's own Murray Bridges and his wife, Brady, shedding crabs.

Today Bridges chuckles about his network appearance and admits shyly that he "had fun" watching the morning program.

But nationwide television exposure wasn't one of Bridges' goals 12 years ago when he began to hold blue crabs for their impending molt.

Making a living was.

Employing ingenuity, hard work and good common business sense, Bridges made a living and a reputation as one of the biggest, best and most innovative soft crabbers in the business.

No doubt about it, it's a business that's cracking out of its shell.

Soft crab landings in North Carolina have increased over 600 percent in just four years. And it's all because people are biting at the chance to sink their teeth into the sweet, soft blue crab.

In fact, "Today" show researchers learned about Bridges from an article in an airline magazine about soft crabbing.

Newspapers and magazines have touted Bridges' success, often placing a portion of the responsibility for Dare County's $1 million soft crab industry on the shoulders of this unassuming fisherman in the striped cap and flannel shirt.

Undoubtedly, Bridges opened a lot of fishermen's eyes to the profits gained from and the skills needed for shedding crabs.

He's led seminars in the state and out. And he's answered hundreds of questions from callers and visitors.

"If I can help somebody I will," drawls Bridges in his High Tider accent. "People helped me.

"People get worried with me around here for being so open. But I tell them they wouldn't have done it (soft crabbing) if I hadn't been here."

When Bridges began shedding crabs, he was one of only a handful of crabbers in Dare County willing to fool with the ornery crustaceans.

"I learned about shedding crabs from my wife and her mother," he says. "They've always shed crabs in Colington."

The first years for his family-operated business were lean ones, Bridges admits. In fact, Brady Bridges named the shedding operation Endurance Seafood Co. in remembrance of the hard times.

But gradually from Sea Grant, other crabbers, publications and trial-and-error efforts, Bridges learned about the business and the biology of shedding crabs.

At first, Bridges detected a crab's impending molt by watching for the crustacean's abdominal apron, or flap, to turn pink. But only female crabs' aprons changed color.

"In those days, we probably threw 90 percent of the male peelers (crabs about to shed) away," he says.

But not so today. At a Sea Grant workshop, Bridges was taught to read, or sign, peelers by detecting the color change in the last joints of the paddler fin.

And through experimentation, Bridges became the first crabber in North Carolina to move his shedder trays from the sound to the shore.

Crabbers traditionally floated wood-slat trays along

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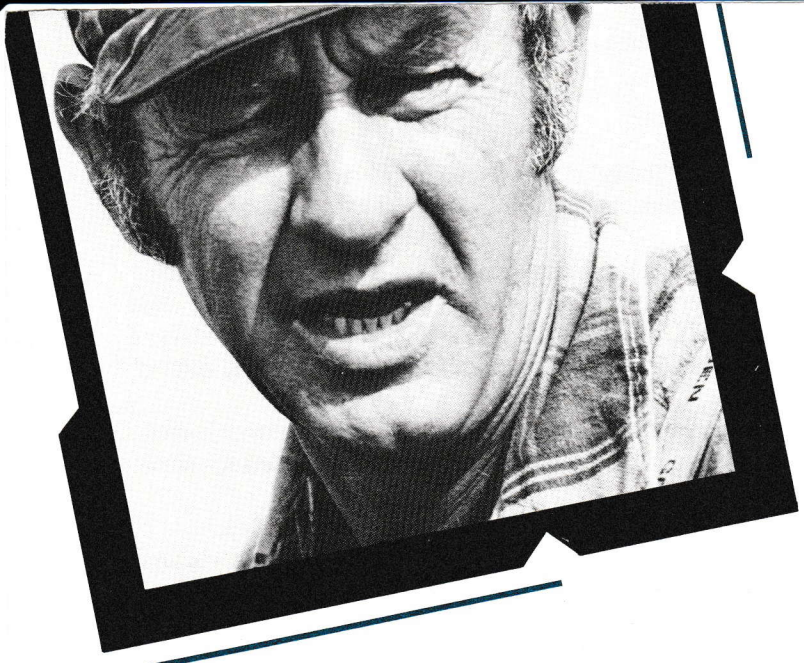


creek and sound edges. But netting the soft-bodied crustaceans was back-breaking labor.

Bridges substituted concrete vats for wooden trays, placed the vats on concrete block legs and filled them with brackish water pumped from a nearby creek.

"Everybody said it wouldn't work," he says. "But I couldn't see why it wouldn't."

The onshore system worked fine, and it wasn't long before Bridges began to expand his operation—six shedder bins, 10, 16. . . .

Today, Bridges fills 145 vats with peelers during May, the prime shedding month.

And with so many vats to fill, Bridges no longer has time to catch his own peelers during May. He buys peelers for 30 cents apiece from crabbers within a 100-mile radius.

Single-handedly, Bridges has created a market for peeler crabs in Dare County.

In one day last year, Endurance Seafood Co. handled over 23,000 peelers; in one week, over 120,000.

When the vats brim with peelers, the hands of Bridges, his wife, his two sons, his daughter, his sister-in-law and his children's spouses work feverishly to handle peelers and soft crabs.

During May, the family works 24 hours a day.

Crabs can shed at any time but seem to prefer the night. And they're at their peak softness for just a few hours. If not removed from the water then, their shells will harden and their value decreases.

So Bridges and his family maintain a 24-hour vigil over the shedder vats, waiting to scoop up the spongy crustaceans. Some nights the crabs molt as fast as the family can scoop.

Bridges says he shed over 1,100 dozen crabs in one night last spring.

"During May you don't talk to nobody around here," he says. "They'll bite your head off.

"It takes the long hours though. That's why everybody doesn't get into it."

But if the hours are long, at least the profits are good.

During the last weeks of April before crabs shed on the Chesapeake, Bridges can receive $17 to $18 a dozen for soft crabs. But when the Chesapeake supplies arrive at market, prices drop as low as $8.50 a dozen for jumbo soft crabs.

But before you start multiplying $8.50 by 1,100 dozen, Bridges says to consider the costs.

They include peelers, electricity, packing materials and salaries. And, of course, there were the investments he made in vats, pumps, PVC pipe, hose, lights and a freezer. "You have to turn a lot of crabs to make money," he says.

But for prospective soft crabbers, Bridges spells out the costs and benefits. Folks have come from as far away as Mississippi and Texas to view his operation and take his advice.

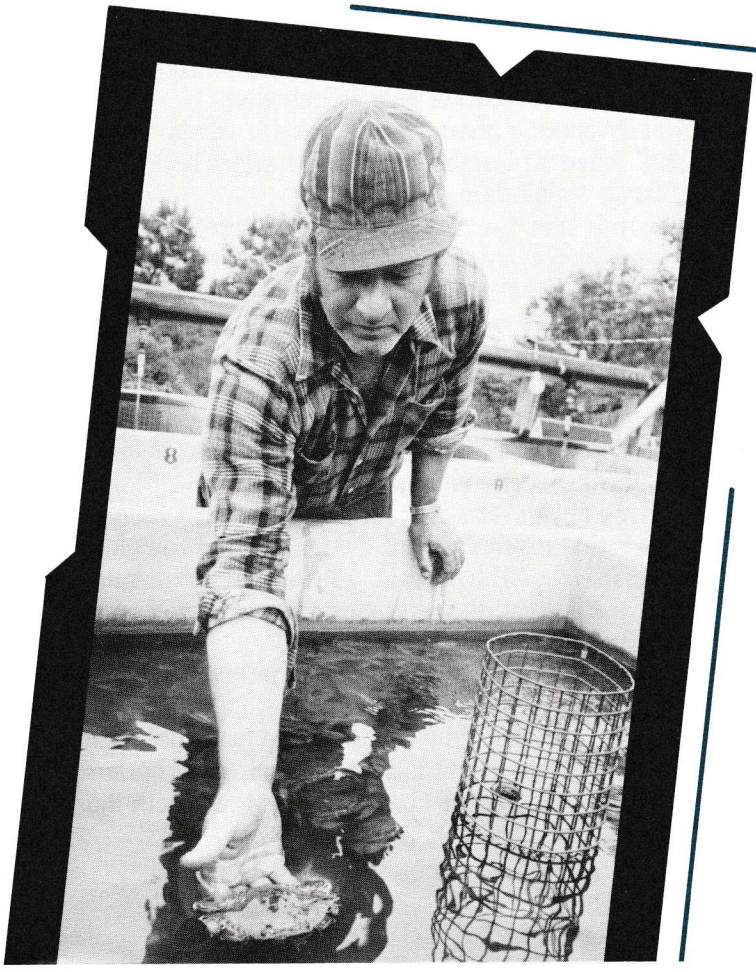
"So often people think you have to have just the right water, just the right temperature," he says. "They're intimidated.

"But when they see what I got here they know they can do it too. You can shed crabs in bathtubs, buckets or tubs if you have to."

As long as Bridges can draw a breath, he'll be interested in the blue crab. He admits that watching the clawed crustaceans shed their shells holds a special fascination.

"I'll shed crabs until I die," Bridges says. "I want to gradually turn the business over to the boys. But my wife says I'm too nosy to stay away from the shedder trays.

"The boys want me to devote all my time to selling. But I tell them that I want to see those crabs shed." •



THE BACK PAGE

"The Back Page" is an update on Sea Grant activities — on research, marine education and advisory services. It's also a good place to find out about meetings, workshops and new publications. For more information on any of the projects described, contact the Sea Grant offices in Raleigh (919/737-2454). For copies of publications, write UNC Sea Grant, NCSU, Box 8605, Raleigh, N.C. 27695-8605.

In February, Sea Grant randomly surveyed 577 of its *Coastwatch* readers. We wanted to find out about our subscribers and what they thought of our newsletter.

We learned that 55 percent of our subscribers have been reading *Coastwatch* for three or more years. Another 35 percent had subscribed for one to three years; 10 percent, for less than one year.

Each copy of *Coastwatch* is read by 2.6 people. Sea Grant has 14,633 subscribers on its mailing list. That means over 38,000 people read *Coastwatch* each month.

We add 25 to 75 new subscribers to our list each week.

Readers voted (87 percent) overwhelmingly in favor of our single-topic approach to *Coastwatch*. And over 95 percent of those surveyed read "The Back Page" and found it helpful.

The survey also indicated that 58 percent of our readers have ordered other publications from the program.

On a scale of 1 (best) to 5 (worst), readers gave *Coastwatch* the following ratings: attractiveness, 1.98; timeliness, 1.75; informativeness, 1.34; ease in reading, 1.11; and helpfulness, 1.61.

Today, it costs about 15 cents to write, edit, design, print and mail each copy of *Coastwatch*.

Although we'd like to look as slick as *Time* or as colorful as *Southern Living*, we keep production costs down by printing in just two colors, using non-glossy paper and taking some of our own photographs.

A special thanks to those of you who participated in the survey. We read every survey form and will take into consideration all of your suggestions.

The catch of the day off North Carolina's northern shore is often tuna. Commercial and charter-boat fishermen have increasingly targeted this pelagic fish.

Sea Grant would like to help fishermen sell their catch by providing them with information about handling and marketing their fish.

This information will be provided at an April 22 seminar, "Tuna Quality: What's in it for me?" The seminar will be held at 7:30 p.m. at the N.C. Aquarium on Roanoke Island.

David Green, Sea Grant's seafood extension specialist, will discuss the quality and handling aspects of tuna. Skip Kemp, the program's seafood marketing specialist, will talk about market supplies and demands for the pelagics.

For more information about the seminar, call 919/473-3937.

Carteret County oystermen say this winter's fishing was some of the best they can remember. Statistics verified their claim.

In December 1986, fishermen collected 250,000 pounds of oyster meat. A year before, they harvested 140,000 pounds.

North Carolina's oystermen have been lucky, says Mike Marshall, a shellfish biologist with the N.C. Division of Marine Fisheries.

Low rainfall and high salinities created near-perfect conditions for young oysters in 1984 and 1985.

And no cases of oyster diseases have been documented in the state in the past few years.

Oyster harvests in Virginia, South Carolina and some Gulf states declined drastically because of two diseases. Their low supplies created a high demand for North Carolina oysters.

In addition, some areas have been more productive because of DMF's oyster bed management program, which was expanded in 1980.

DMF replants tons of shell material to provide beds for larval oyster attachment. And in the off-season, the division pays fishermen to move oysters from polluted areas to cleaner beds.

If you want to harvest a meal of blue crabs, all you really need is a baited string, a net and plenty of time and patience.

But with your own crab pot, you can make the fishing easier and catch as many as a dozen crabs in a few hours. Best of all, the pot doesn't have to be tended.

Building your own crab pot is simple. Constructed of wire mesh and baited with fish heads or fish remains, the trap is designed to allow an easy entrance, but a difficult escape, for the crab.

For the project, you'll need a few materials from the hardware store and a copy of Sea Grant's *How to Build a Crab Pot*.

The 14-page booklet guides you through a step-by-step method for constructing a crab pot and advises you of regulations you'll need to know.

For a free copy of *How to Build a Crab Pot*, write Sea Grant. Ask for UNC-SG-80-03.

For fishing, fun and friendly rivalry, attend one of the state's 30 saltwater sportfishing tournaments.

From Currituck to Calabash, fishing clubs, marinas and civic groups sponsor these fishing frenzies. They last from one day to one week. And depending on the type of tournament, anglers may vie for croaker, flounder, mackerel or marlin.

Many sportfishermen plan their vacations and weekends around these fishing contests. That's why Sea Grant publishes a brochure that lists the dates

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and sponsors for these competitions.

The brochure also provides information about the year-long North Carolina Saltwater Fishing Tournament sponsored by the N.C. Division of Marine Fisheries.

For a copy of this free tournament brochure, write Sea Grant. Ask for UNC-SG-87-02.

The Atlantic blue crab is making an unwelcome splash in Pacific waters. It seems that West Coast seafood lovers are buying the blue crabs at fish markets. But instead of serving them up as a feast, the nature lovers are releasing the crabs.

Before you cheer their liberation, consider this. The feisty blue crabs may be threatening the lives of the native species, including the Dungeness crab.

The blue crab is fast, voracious and capable of beating the Dungeness to a meal. Biologists are warning that the non-native blue crab could make life difficult for the Dungeness.

In fact, the blue crab has already made itself at home in the foreign waters. Fishermen have even reported catching a few in the waters around San Francisco.

When stories of the unusual catches made the news, folks started fessing up. The *Chicago Tribune* reported that one liberator confessed that he had released 40 Atlantic blue crabs.

The N.C. Marine Fisheries Commission will hold public hearings across the state in May to present 28 proposed fisheries regulation changes. Commercial and recreational fishermen are encouraged to attend.

The hearings will be held at 7:30 p.m. at the following locations: Hatteras, Hatteras Civic Center, May 18; Manteo, N.C. Aquarium on Roanoke Island, May 19; Washington, District Courthouse, May 20; Morehead City, Carteret Technical College, May 21; Wilmington, New Hanover County Courthouse, May 26; Raleigh, McKimmon Center at North Carolina State University, May 27; and Winston-Salem, Agricultural Extension Center, May 28.

The Marine Fisheries Commission will meet in June to make final decisions on the proposed changes.

For more information, contact Jim Tyler at the N.C. Division of Marine Fisheries. The toll-free number is 1-800-682-2632.

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COASTWATCH

105 1911 Building
Box 8605
North Carolina State University
Raleigh, NC 27695-8605

Address correction requested