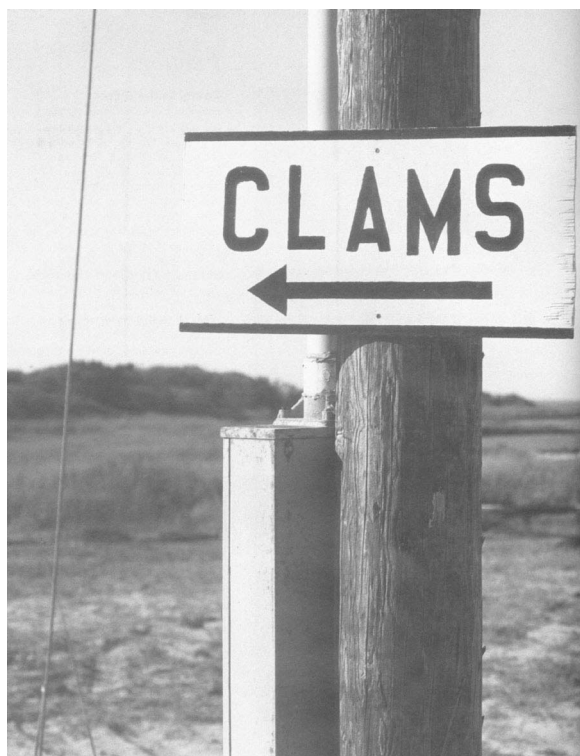


North Carolina Sea Grant
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RAKIN' IN THE CLAMS

By Jeannie Faris
Photos by Michael Halminski



Kevin Midgett has one of those old family names that seem to define commercial fishing in North Carolina. For 13 years, he's run the family-owned Hatteras Village Aqua Farm on Highway 12, growing and selling his own clams.

It's a good living for growers, who collectively raked \$850,000 worth of clams from North Carolina bottomlands in 1994.

But clamming is more than a livelihood—it's a way of life. It's a centuries-old tradition on the coast, a skill passed down for generations. There's a knack to knowing where clams can be found under acres of tidal flats, recognizing the telltale "keyholes" of clams in the sand, detecting the clink and pull of metal tongs on buried shell.

So how is a visitor to know any of this? The know-how of harvesting clams is much like the closely guarded secrets of a good fishing hole. Nobody's going to hand them over to virtual strangers. And increasingly, clamming grounds are off-limits to the public.

Well, get out your raking gloves. This year, there's a way, and you don't need Midgett, Daniels or Tillett tagged to the end of your name to catch a clam supper for yourself.

On May 1, Midgett opened a private clam bed to tourists to test the success of a "you-rake-it" style clamming business on the Outer Banks. This idea, unique to the East Coast, is based on the pick-your-own vegetable patches common to rural crossroads.

The project was funded by the National Coastal Resources Research and Development Institute (NCRI) to test the viability of a business that combines

competitively priced seafood, an outdoor activity for tourists and easier public access to a long-standing coastal tradition. The pick-your-own venture, if it succeeds on the East Coast, will enhance tourism and harness its power for commercial fishermen, who are searching for economic opportunities in the face of declining catches and tougher regulations. Many watermen lack the skills or inclination to enter the growing tourism economy. Likewise, most visitors to the coast don't participate in shellfishing, though they'd like to.

The idea took shape at the hands of Jim Murray, director of Sea Grant's Marine Advisory Service. Murray secured the NCRI grant for a rake-your-own project and teamed up with Midgett, a clam grower willing to test the business on his property. He was inspired by childhood memories of digging stocked clams from the surf where his family rented a beach cottage near Provincetown, Mass.



Clams are grown in a nursery until they're large enough to be planted on the shellfish lease.

"One of my favorite memories of those trips to the beach is that every year when we got there, usually about the first day, my brother and I would go out and dig up surf clams," Murray says. "And my dad would make a big batch of clam chowder that would last for most of the week."

The Outer Banks promises a healthy market for this type of activity, he says. Close to a million people come to Hatteras Point every year, and they're fishing, beachwalking, bird-watching and looking for other outdoor recreation.

"My guess is that many of the tourists who come to the Outer Banks from Tennessee, Kentucky and places inland or even in the Piedmont region of North Carolina don't want to make the investment in clamming equipment or don't know how to start," Murray says. "And this would be an inexpensive and painless way to experience recreational clamming."

Midgett knows this firsthand.

Even as Murray was starting the grant paperwork in Raleigh, Midgett was independently mulling the same idea for his Hatteras farm. Customers in his seafood shop are always interested in how he grows and harvests clams, he says. They crane for a look at the clam nursery behind his counter, and they ask a lot of questions .

"They can see where I am raising (clam) seed," Midgett says. "They get inquisitive and want to go through and have tours. It was getting to be a tourist attraction. It was becoming a draw."

After discovering a few tourists on his shellfish lease digging for clams, Midgett began to hatch an idea for tapping into this new market.

"When I dig clams, I always miss some. So, I go back on my free moments and get another bushel basket from every clam bed," Midgett says. "I thought I could let the tourists come in and dig what wasn't harvested. And that would be labor saved."

Here's how it works.

The rake-your-own clam beds are part of Midgett's aquatic farm about a mile north of Hatteras. He's reorganizing and roping off parts of his Pamlico Sound lease for tourists to dig their own catch. Customers pay an admission fee that covers the right to harvest clams (up to 100 clams per person per day), instructions and the equipment, such as a rake and mesh bag.



Midgett examines clams surrounded by mesh that protects them from predators.

What they're digging is actually a mixture of clams. Midgett supplies the homegrown littleneck hard clams from his nursery and he stocks the lease with larger clams—cherrystone, topcherry and chowder—that he buys from local dealers. All of these clams are the same genus, *Mercenaria*, but they are

distinguished by size. About 1/8 inch separates a littleneck from a cherrystone, a cherrystone from topcherry, or a topcherry from a chowder. The smallest, the littleneck, is about 7/8 to 1 inch thick: it's the top-quality clam because of its tenderness and mildness. But the larger clams will also be popular among recreational clammers, especially children, Murray says.

Prices for customer-raked clams are set between wholesale and retail. Wholesale is about 20 cents per clam — the price Midgett would get selling his clams to large seafood dealers. Retail is about 27 cents per clam — the price customers would pay for the same clams in a seafood shop. This way, grower and customer come out ahead, Midgett says. Visitors to the Outer Banks can experience clamming and get a fairly priced, fresh seafood dinner. Likewise, Midgett gets a good price on the clams he sells and his labor costs are lowered. If someone just wants to buy clams — or sunscreen, insect repellent, refreshments and T-shirts — the retail shop will have them. T-shirts are free to customers who rake up one of the goldpainted clams planted on the lease.

In every aspect of this business, from raking fees to T-shirt sales, accurate pricing will be necessary to pass the idea on to other growers, says Rich Novak, a marine extension agent for Sea Grant. Some start-up costs of this project were covered by the NCRI grant, including the salary of Harrison Bresee, an N.C. State University graduate student who is helping out and writing his master's thesis on the venture. But other growers who try this won't have the advantage of backing from a national funding agency. So it's important to correctly price this rake-your-own service to make it profitable for growers and attractive to tourists.



Midgett rakes clams from his Pamlico Sound lease.

For Midgett, recreational clamming is the latest turn in a business that is always evolving to keep an edge. He sold clams to wholesalers for about a decade. Then, a couple of years ago, he began selling to restaurants. Last July, he opened a retail seafood shop on the site.

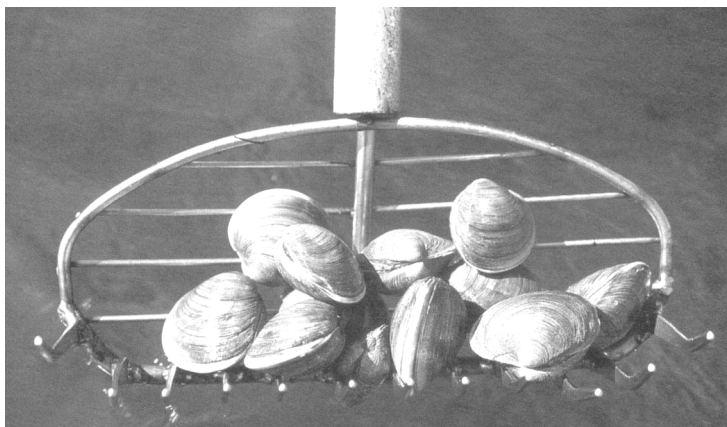
The change has been good, and business picked up with each adjustment.

What remains to be seen, however, is how the rake-your-own market affects Midgett's supply of homegrown clams. He spawns and raises between 2 million and 5 million littleneck clams a year. But this season, to meet new demands, he is supplementing his clams with seed from outside dealers. The clam seed is raised to about thumbnail size in a series of raceways and upwellers that deliver algae (their food) in a flow of water. At 8 to 15 millimeters long, they are put out on the lease and surrounded with mesh to keep crabs from eating them. They grow to market size in about three years.

Midgett says most people don't realize the amount of time and effort it takes to raise a bed of clams. In general, they don't have a good appreciation for aquaculture — the business of growing and raising seafood.

But a little marketing can go a long way toward improving public perceptions, Murray says. By promoting clamming as a recreational activity, growers can educate people and cash in on the booming tourism industry, now the fastest growing segment of the state's economy. It makes good business sense for commercial fishermen to teach tourists how seafood arrives at the dinner table, he says.

In fact, this new twist on nature-based tourism — merging fishing and tourism businesses — is being promoted by Partnership for the Sounds, which also received NCRI funding to plan for sustainable economic development in the Albemarle-Pamlico region. Involving visitors in commercial fishing is one way to expand tourism, provide extra income for watermen and educate people about the importance of the fishery and the estuary.



Tourists are able to rake their own clam dinner for a fee.

The concept is similar to fee-fishing in the North Carolina mountains. These businesses blend fee-fishing for rainbow trout with other markets for farm-raised fish. They offer a less expensive way of catching fish, bring growers higher-than-wholesale prices, increase fish sales to customers and give novices a reasonable chance of hooking a catch. Likewise, in agriculture, pick-your-own methods have provided a market niche for farmers willing to diversify.

THE BUSINESS OF COMMERCIAL CLAMMING

Clam growers like Kevin Midgett can be found farming the salty, nearshore waters of coasts from Maine to Florida.

Midgett is one of about 60 small-scale clam growers who tend 285 shellfish leases in North Carolina. He's among fewer still — only three or four — who raise clams from their own hatchery larvae. Many others, however, grow from seed that they purchase from dealers.

In 1994, leases such as Midgett's produced 12,103 bushels (about 1.2 million pounds with shell) of clams in North Carolina. Over the past decade, the number of clams harvested from these leases has averaged about 10 percent of the total state harvest.

But access to this way of living is limited. The state grants people the right to use public bottomland when they petition for a lease to grow clams or other shellfish. In essence, that person has exclusive rights to the bottom—nobody else can harvest the shellfish there. On Midgett's lease, every customer who rakes will receive a signed, dated permission slip.

Leases are approved only after they meet certain criteria: The area must be biologically suited to grow shellfish, and conflicts with fishing, navigation or recreational uses must be minimal. Although leases are still available in North Carolina, they're harder to get in areas with natural populations of shellfish or those heavily used for recreation or other fishing activities. North Carolina now has a moratorium on the sale of new shellfish harvester licenses.

In large part, the reason for limiting the availability of leases is concern about setting aside public trust resources for the sole use of an individual. The public is prevented from using a plot that's being leased by someone else. So, there needs to be a compelling reason for leasing the public land to an individual.

Seafood production is one.

In the shellfishing industry, large scale growers have been increasing the size of their businesses. So small growers have been pressed to find ways to widen their profit margin. The rake-your-own concept may not be an option or panacea for all small growers, but it can help increase profit margins, Murray says.

Of course, for those who want to try, a good location is critical to the success of a tourism-oriented business, says Rebecca Dunning, an aquaculture economist working on the project. And similarly, growers will need good

customer service skills to deal with people wandering around on their leases.

"A lot of people just want to grow clams. They don't want to deal with the people aspect of it," Dunning says. "But I think a lot of (growers) will be interested. It depends on how profitable it is."



Tiny clams are raised in raceways and protective mesh before they're placed on shellfish leases to grow to market size.

At the end of the 1996 tourist season, Dunning will examine the success of the business and indicate its feasibility for other East Coast locations. Profitability will be her measure of success. For instance, she'll look at whether the business made money and how it made money. She'll scrutinize business records to learn whether Midgett sold more clams, lowered his labor costs, or profited from sales of sunscreen, drinks or footwear.

By October, she hopes to know how the project fared at the cash register.

Murray is optimistic. He predicts that Hatteras Village Aqua Farm will increase net profits by 20 percent. And if it does this well, he anticipates 10 to 15 new businesses in North Carolina and at least one new business per state from Texas to Maine within three years.

But income won't be the sole standard of success — there's also customer satisfaction. A marketing survey will test the waters.

As customers are leaving, Bresee will ask them to answer some questions. How did they hear about the business? Why did they come? Did they consider it a family activity? Did it enhance their vacation? Would they recommend it to friends? What improvements would they suggest?

From this information, a mailing list will be compiled and used a couple of months later to randomly survey 300 customers. They'll be asked whether the experience made a long-lasting impression on them, whether they told their friends or bought more clams as a result, whether it had any influence on their decision to return to the Outer Banks and how it compared to other vacation

activities. They'll also be asked whether they raked clams for the experience or just for the seafood.



Only 7/8 to 1 inch thick at market size, the littleneck hard clams are valued for their mild flavor and tender texture.

"There's a lot of interest nationally in ecotourism or nature-based tourism," Murray says. "The surveys will give a better handle on who the market is for this type of service. And it will add to the growing body of literature on understanding a nature-based tourism market."