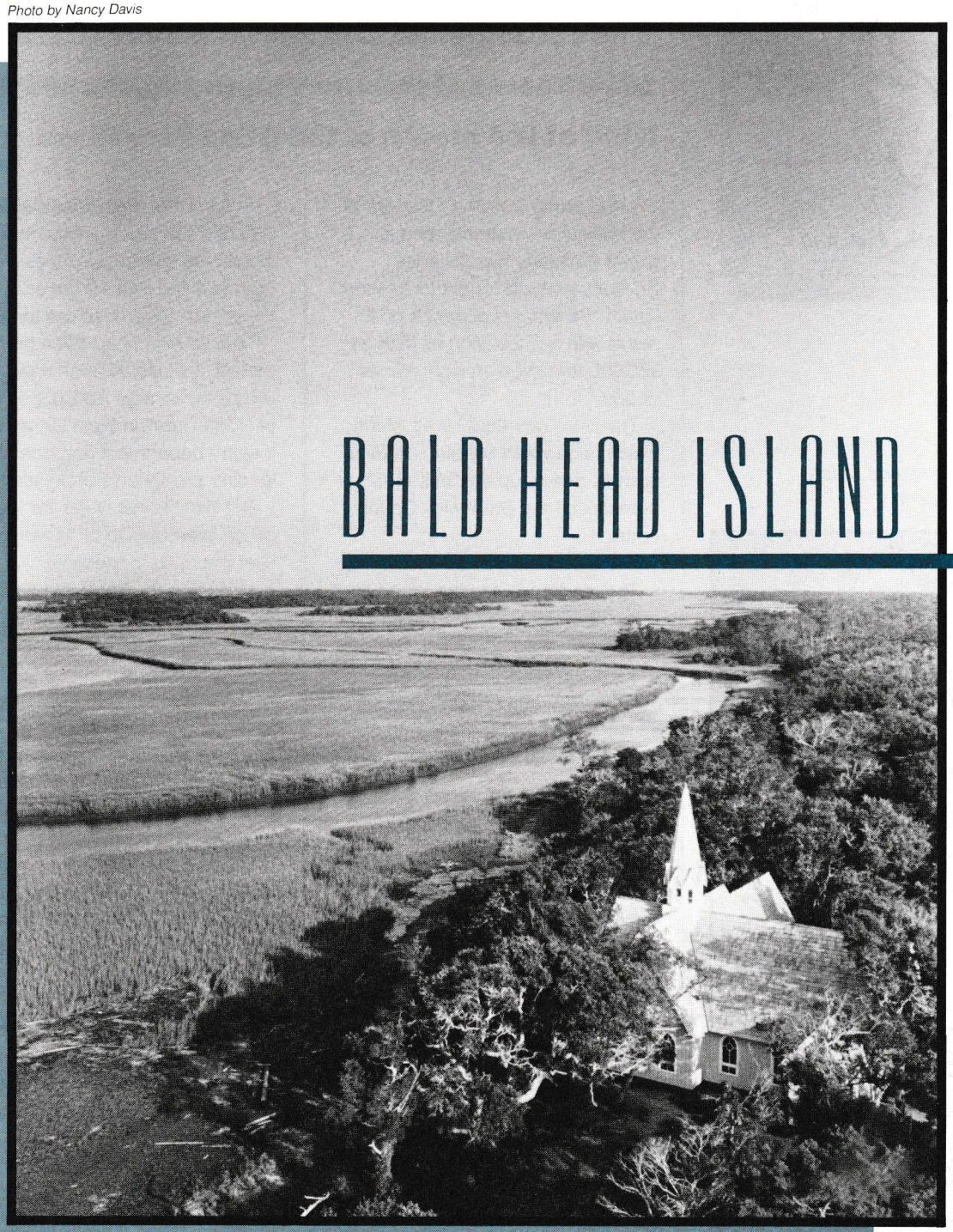
UNC Sea Grant

November 1987

COASTWATCH

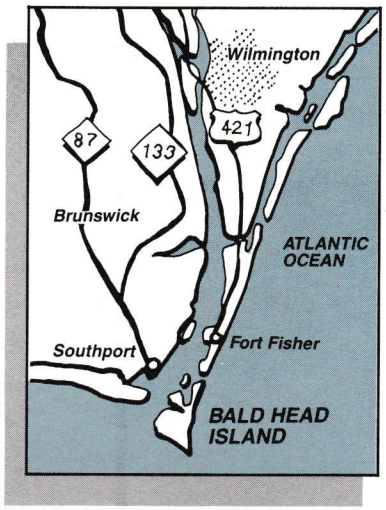
Photo by Nancy Davis



BALD HEAD ISLAND

Balancing development with conservation

BY NANCY DAVIS



The battleground was a small piece of paradise, 13,000 acres of sand, marsh and maritime forest lying at the mouth of the Cape Fear River.

It was North Carolina's first war of the coastal environment, and it raged for nearly two decades. Environmentalists fought for preservation. Developers sought a posh resort with a population as high as 180,000 and even an international airport.

The prize was Bald Head Island, which, along with Middle and Bluff islands, makes up the Smith Island complex off the Brunswick County coast.

In the end, neither side won.

Those who wanted the island to become a state park still shake their heads over a paradise lost. But there is a consolation, they say.

If the island had to be developed, its latest owner has created an acceptable blend of preservation and change.

The developer agrees.

"Bald Head Island should have been preserved," says Kent Mitchell. "But if it had to be developed, then I'm the best one to do it—without question."

On Bald Head, nature has united an odd combination of temperate and tropical life. Large stands of palm trees grow farther north than they're supposed to, and temperatures average several degrees warmer than on the mainland just three miles away.

At one time, Bald Head claimed the state's largest maritime forest. It is still the most popular nesting ground in the state for the endangered loggerhead sea turtle.

"If Bald Head had been preserved, it would be even more unique now," says Art Cooper, head of North Carolina State University's forestry department and one of the leading proponents of preservation.

But like the rest of the Tar Heel coast, pressures to build won out over the push to preserve.

Mitchell is the latest in a succession of owners, and his plans for the island are less ambitious than previous designs.

"My main overriding philosophy is, 'What is a place that I'd like to bring my kids back to in 20 years?'" Mitchell says. "There is a natural beauty that God gave this island," he says. "It is a wild, volatile environment, and I have a chance to preserve it."

In the 1960s, Smith Island complex owner Frank Sherrill proposed the most elaborate plans for a Bald Head Island resort.

But frustrated by state opposition to his plans, he offered the complex of islands to the state for about $5 million, a price the state considered too high.

So in 1970, Sherrill sold to

Old Baldy stands watch over the island

Photo by Scott Taylor

Carolina Cape Fear Corporation. That was the start of a 10-year battle with government agencies and environmental groups.

As a peace offering, Carolina Cape Fear gave Bluff Island and about six miles of oceanfront beach to the state. But by then, the company was drained. Mortgagors foreclosed, and Tar Heel native and Texas millionaire Walter Davis bought the island.

Davis continued the development, building a marina and Bald Head villas.

In 1983, Kent Mitchell and his brother visited the island. They convinced their father, another wealthy Texan, to buy the island. At the time, the senior Mitchell was described as one of the ten wealthiest men in the country.

Kent Mitchell, a Harvard architecture graduate, found himself caught almost immediately between his belief that the island should have been preserved and his desire to turn it into a model resort.

"We fell in love with the island before we bought it. We still love the island, and that's the tough battle," Mitchell says. "It's a tough compromise between making money and maintaining the balance with the environment."

The result has been Mitchell's own version of a beach community.

Bald Head lacks the characteristic bright lights, neon signs and high-rise condominiums of a typical resort.

Aside from the glow of two streetlights, the only night light on the island comes from the moon and stars. Neon is taboo, and height is scorned.

Visitors drive electric golf carts because gasoline-powered vehicles are forbidden. And the roads are narrow asphalt paths that wind through the lush canopy of live oaks.

Before Carolina Power & Light Company brought electricity to the island in 1981, homeowners relied on individual generators for their power, prompting early residents to form a Generator Society.

Until recently, the only contact with the mainland was by CB radio. Phone service should be available by 1988, but some residents plan to do without the convenience. The idea, they say, is to get away from it all.

And that's not hard to do on an island whose only connection to the mainland is by private boat or a ferry from Southport run by the developer.

This is Mitchell's first big project, but such developments are nothing new for his family. In addition to building a planned city of 200,000 people outside of Houston, the Mitchells have been active in a push to restore a historic area of Galveston.

When Mitchell took over operations at Bald Head, much of the first stage of development was complete. He inherited an inn, a restaurant, an 18-hole golf course and 40 to 60 townhouses and villas. Some private homes had also been built.

With that stage nearly complete, Mitchell is ready to begin a second stage that will include 600 acres of the eastern portion of the island.

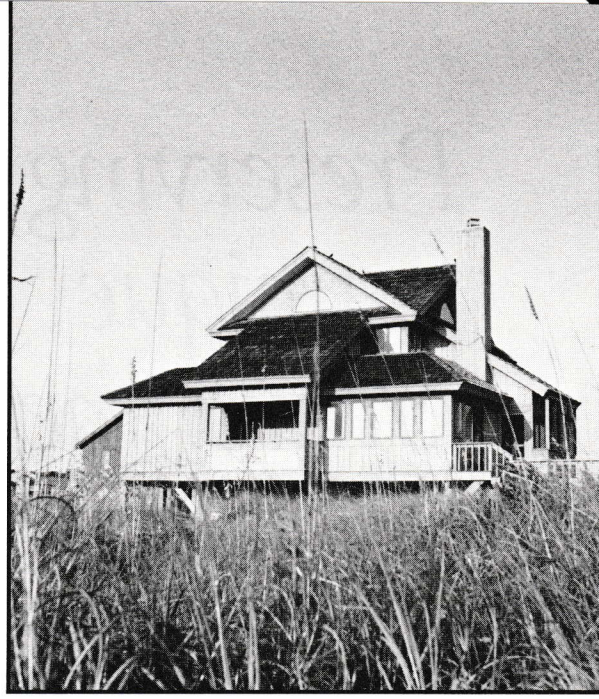
By the time the Bald Head project is complete in 15 years, about 1,600 acres of the 3,000-acre private tract will have been developed.

Although about a third of the first stage was condominiums, about 90 percent of the second stage will be single-family homes. And no high rises, Mitchell says.

"I have a personal aversion to high-rise garbage," he says.

"North Carolina and South Carolina have a tradition of nice beach communities. But in the last 10 to 20 years, you have seen the worst form of Florida, cheap high-rise development. I'm not sure if we can succeed, but I hope we can impart some of the character of a traditional beach community here," Mitchell says.

Strict guidelines mandate not only the size of a house, but also its appearance. Most homes are stained with a natural wood color, and all plans must be drawn by an architect.



Building on Bald Head is strictly regulated Photo by Nancy Davis

Bulldozing lots is forbidden. Many homes are tucked between the trees, and residents are encouraged to landscape with native plants. Manicured grass lawns are frowned upon.

It isn't easy for the average North Carolinian to appreciate Bald Head.

The residents are one indication of the costs of living there, Mitchell says. He estimates that 25 percent are doctors and 25 percent are lawyers.

Land isn't cheap. Lots average half an acre, but range from quarter-acre parcels to two-acre lots, Mitchell says. And the costs start at $30,000 and go up to $200,000 for a beachfront lot.

And once you buy a lot, you have to consider the cost of building. It is considerably higher than elsewhere on the Tar Heel coast because residents must absorb the cost of transporting materials from the mainland by barge.

Except for the occasional inconvenience of living on a remote island (see story, page 6), property owners are happy with their piece of paradise.

"For those who have found Bald Head, they can't go anywhere else. Nowhere compares to it. It's for a special breed of person," Mitchell says. ■

Preserving a unique environment

BY SARAH FRIDAY

Carol Mayes turned just in time to see an alligator facing her on the other side of the creek. She'd been collecting plants when a sudden splash diverted her attention.

Photo by Scott Taylor

Salt marsh makes up 9,000 acres of the Smith Island complex

Luckily, the reptile had another meal on its mind. The legs of a raccoon were wriggling in its mouth.

Such incidents on Bald Head were rare for Mayes, director of stewardship for the N.C. Nature Conservancy. But the balancing acts of nature continue there everyday.

Now people who want to preserve the wildlife and natural surroundings of Bald Head have become part of another kind of balancing act. Naturalists, developers, homeowners and tourists are weighing the need for change against the need for conservation.

To them, Bald Head's environment is like no other—so different that some people believe it's a mistake.

"South Carolina should have started just north of Bald Head," says Lundie Spence, Sea Grant's marine education specialist. "Bald Head represents a subtropical environment in a temperate state. The obvious evidence for this is palm trees."

Temperatures range from 25 F to 92 F, mirroring the climate of Myrtle Beach. And there's a reason. Bald Head is the northernmost of a chain of islands, the Sea Islands, that lie off the coasts of northern Florida, Georgia and South Carolina.

And since water surrounds Bald Head, the ocean moderates the weather so it's cooler in the summer and warmer in the winter. The nearby Gulf Stream also warms the air.

Bald Head's balmy climate—and a clever entrepreneur—lured tourists to the rustic resort in the 1930s. Before that, the island was a hideout for pirates and a lookout for Civil War troops. And it made fertile ground for pig farms and logging camps.

Years later, the setting is much the same.

A maritime forest, shrub thickets, salt marshes, tidal creeks, ponds and dunes make up the highest quality maritime system remaining in North Carolina, Mayes says.

The combination is a treasure to naturalists such as Mayes. And the crown jewel is the maritime forest.

The thick woodland has survived centuries of salt spray, hurricanes and other harsh oceanic conditions. Today it covers 1,126 acres of the Smith Island complex. The major part of the forest lies behind the dune ridge on Bald Head, but portions also grow on Middle and Bluff islands.

As one of the largest and oldest maritime forests in the state, the woodland stands as evidence of the island's stability. One live oak measuring 17 feet 6 inches around is estimated to be more than 300 years old.

The forest also supports trees and plants from two different regions. Southern species such as the sabal palm grow alongside Northern species such as the live oak.

The thick canopy they create protects the interior of the forest from salt spray and allows other plants to thrive. Loblolly pine, dogwood, wax myrtle and yaupon provide additional cover for the island's abundant wildlife.

It's not unusual to see a gray fox darting in front of your golf cart at night. Or a raccoon munching on berries.

And someone recently reported seeing a bobcat, but island naturalist Bill Brooks is waiting for proof.

Outside the forest, Brooks spends most of his time tracking turtles.

In 1981, naturalists from the Wildlife Resources Commission and the N.C. Heritage Program discovered that Bald Head hosted the state's largest population of nesting loggerhead turtles. They soon realized, however, that 90 percent of the eggs were eaten by foxes and raccoons.

To remedy the problem, naturalists Debbie Crouse and Joe Newman founded the sea turtle conservation project. They devised a wire screen to protect the nests and began monitoring them closely.

Interns from the N.C. Nature Conservancy helped out in the summer, but by 1983 the project had become too big for the inland agency to supervise.

In November, the Bald Head Island property owners' association passed a charter creating the the island's own non-profit conservancy. And they employed a naturalist to keep watch over the loggerheads.

Today 95 percent of the turtle eggs hatch.

Like the beach and the forest, each ecosystem on Bald Head supports a unique collection of plants and animals. Together they seem to form an open-air natural history museum.

Maintaining the museum takes effort.

The developers must build. Buyers and renters want peace and tranquility. Naturalists need to preserve the integrity of the island.

Harmony is sometimes elusive.

During the first stage of building in the 1970s, developers cut down large portions of the maritime forest, weakening the canopy, says Cindy Meekins, board member of the Bald Head Conservancy Inc. and former island naturalist.

Their mistake was evident, Meekins says, when Hurricane Diana swept through Bald Head in 1984 and damaged 70 percent of the forest and most of the golf course fairways.

"It took them months to fix that," Meekins adds.

The current developers, Bald Head Island Limited, took a different approach. After working with conservationists, the group devised a blueprint for construction that left much of the environment intact and did not include another golf course.

They also compiled a 62-page book outlining specific landscaping recommendations and standards for prospective Bald Head residents.

And they contributed 100 percent matching funds to the Bald Head Island Conservancy in its first two years. They still match half of the group's contributions.

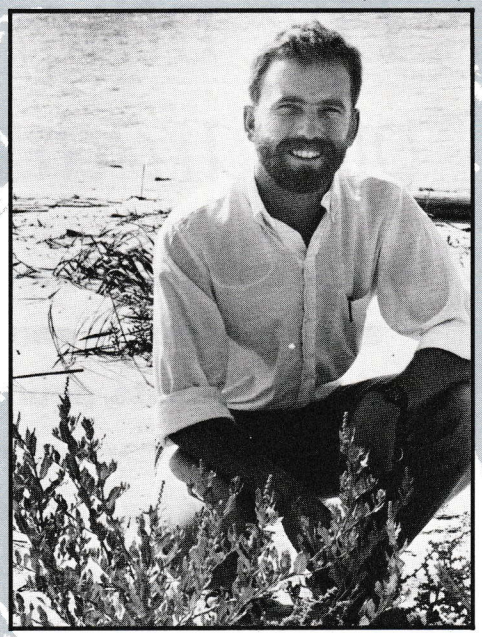
"They want to make sure our efforts succeed," Meekins says. "They realize that if we work together we'll get a lot more done."

So far, so good, according to Brooks.

"Overall, people are happy with how it's been developed," he says. And the effects of building haven't been all bad in regard to plants and animals.

For small animals, development increases habitat, because it creates more diversity around the forest edges, he adds. But for animals that use the deep forest, development decreases living room.

Photo by Sarah Friday



Bald Head Island naturalist Bill Brooks

Saving habitat is one of the conservancy's priorities. The sea turtle project is another. But the group also offers educational programs, landscaping advice, a day camp and nature hikes.

And Brooks hopes that in the next two years the conservancy can expand its role as landscape consultant, helping residents pinpoint important vegetation on their property and relocating any rare or endangered plants.

Homeowners are receptive to the idea, as many share an appreciation for nature. About 250 of the 900 property owners are members of the Bald Head Conservancy.

Like the three branches of government, the conservancy, the property owners' association and the development organization operate their own informal system of checks and balances. Each appoints members to sit on the boards of the other groups.

The state keeps a watchful eye on Bald Head's unique environment, too. The Museum of Natural Sciences, Zoological Park, Wildlife Resources Commission, Nature Conservancy and divisions of Marine Fisheries and Parks and Recreation monitor many of the natural areas. ■

Photo by Nancy Davis

The other side of paradise

BY NANCY DAVIS

Life on Bald Head Island is everything it's cracked up to be...and more. Along with the stunning sunsets, pounding surf and soothing silence come monstrous mosquitoes, hungry alligators and, read carefully, NO BRIDGE.

We're not trying to be negative, mind you. We just want to point out that island life isn't for everybody.

Residents who pay a healthy price for the beauty and serenity of the remote island also get an expensive dose of inconveniences.

And the emphasis is on remote.

There is no bridge from the mainland to Bald Head. Residents say that after a week, they quit worrying about it.

For newcomers, that three-mile span of water makes the island seem as though it's 300 miles from the mainland.

But what if I have to get off of here?

If you have your own boat, it's simple.

If not, you'll have to wait for the ferry. It leaves every hour on the half-hour from the island and on the hour from the mainland. And it's just a 15-minute ride.

But what happens late at night when the ferry stops running and I'm sick and I need to get to the hospital?

The village employs four public safety officers who serve as emergency medical technicians, firemen and police.

If you need to get to a hospital, just pick up your CB and call them. They can have you to the Southport hospital within 28 minutes, says Wallace Martin, village manager.

What's this about CBs? When can I phone home?

Well, phones will be available by the first of the year, but some residents still plan to do without.

There are about five phones on the island now. But they're operated by a microwave system set up in the Bald Head lighthouse. On foggy days or when a tall ship passes, calls are likely to be cut off.

So you'll just have to learn to pick up your CB, good buddy.

Where can I eat on the island?

Your choices are limited. There's one restaurant and one deli.

What about groceries?

There is a small store on the island. And it's even stocked with items such as fresh gourmet coffee beans, a good selection of wines and an assortment of caviar.

But for a week's worth of groceries, you may want to go to the mainland.

Plan your trip carefully. It will require close scrutiny of your remaining rations, a detailed list of next week's meals and plenty of travel time.

Suppose you take the 10:30 a.m. ferry from the island. Depending on where you live, allow yourself extra time to get to the ferry. Remember, only 18 mph in your electric golf cart.

By the time you get to Southport and do your shopping, it will be after noon. You drive back to the dock just in time to reserve your place on the 1 p.m. ferry. Another 15 minutes, and you're back on the island.

What about my ice cream and milk?

If you were smart, you remembered to bring along the cooler. Better yet, just buy your ice cream from the island's store.

I'm not discouraged by those little inconveniences. I'm ready to build my dream vacation home. But where do I get my supplies?

The mainland, of course. All the construction materials have to be shipped to the island by barge.

Everything has to be carefully scheduled so that crews and materials arrive on the island at the same time, Martin says.

"You get the workers over here and find out they need three 2-by-4s," Martin says. "So they're sitting there twiddling their thumbs until the next barge comes."

One contractor estimates that shipping building supplies by barge adds as much as 25 percent to construction bills. ■

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.

Christmas is just weeks away. If you haven't finished your shopping, how about a browse through the Sea Grant shelves. We've got a book for just about everyone.

Here's a sampling from our catalog. To ensure delivery by Christmas, send in your order and payment promptly and indicate the publication number.

Seashells Common to North Carolina is one of our most popular publications and sure to please any beachgoer. The 36-page booklet provides detailed descriptions and photographs of shells you're likely to find on Tar Heel beaches. Ask for UNC-SG-72-09. The cost is 75 cents.

If there's a coastal property owner on your list, he'll be sure to enjoy *Seacoast Plants of the Carolinas.* It's a valuable tool for landscaping or just for identifying various plants. Ask for UNC-SG-73-06. The cost is $2.

And how about a copy of *Coastal Capers: A Marine Education Primer?* This 76-page booklet is full of activities for parents and young children. The "capers" are fun and educational. Ask for UNC-SG-84-05. The cost is $3.50.

For sportsmen, Sea Grant has a variety of publications. One of the most popular is a cookbook. *Recipes with a New Catch* contains instructions for handling and preparing 16 species of non-traditional fish. You'll find recipes for shark, triggerfish, bluefish, amberjack and more. Ask for UNC-SG-86-06. The cost is $2.

A Guide to Recreational Shrimping provides tips for rigging small boats for catching the tasty crustaceans. Ask for UNC-SG-86-07. The cost is $4.

When a single clam brings 10 cents to 20 cents at the seafood dealer, coastal folks start talking about raising or culturing the valuable mollusks. People want to know how to handle the young "seed" clams and how to rear their older counterparts in beds, or gardens.

That's why Skip Kemp, a Sea Grant specialist, has set up a clam nursery demonstration site behind the N.C. Aquarium at Pine Knoll Shores. In a cooperative project with the aquarium, Kemp has built a mini-nursery to show prospective clam gardeners different clam rearing techniques.

If you'd like to visit the demonstration site, call Kemp at 919/247-4007.

Kemp also has up-to-date supplier lists for shellfish seed and plastic mesh. The mesh is used to protect the clams from predation once they're put to bed.

And, prospective gardeners may want to mark their calendars for Feb. 6. Sea Grant is cosponsoring an all-day clam grow-out conference at the Duke University Marine Laboratory in Beaufort. Further details about the conference will be announced in the January *Coastwatch.*

Sea Grant is sponsoring a national technical conference on surimi, a minced fish product used in restructured seafoods.

Until recently, most surimi was made from Alaska pollock. But Sea Grant researcher Tyre Lanier has proved that fatty fish, such as menhaden, are also acceptable in making surimi.

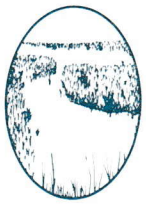
The conference, to be held in Raleigh Dec. 10 and 11, will examine the use of fatty fish in surimi. It will attract industry leaders and international experts in surimi research.

Write Sea Grant for more information on the conference.

Sea Grant and the Carteret County Waterman's Association are hosting the eighth annual N.C. Commercial Fishing Show March 12 and 13.

Last year more than 5,000 people attended the boat and gear show in Morehead City. And even more are expected this year for the show that will feature boats, engines, electronics, fishing gear and accessory equipment. Workshops and seminars on fisheries topics also will be offered.

Dealers and manufacturers interested in securing a booth at the show may call Sea Grant agent Bob Hines at 919/247-4007.



Fall is a time for moving south. Wild swans, geese and ducks fly to North Carolina sounds to avoid the bitter northern winter.

But birds aren't the only southbound creatures.

In October and November, migrating fish such as bluefish cruise through North Carolina's coastal waters on a trek to warmer waters.

Schools of bluefish often concentrate at Cape Hatteras. And when bait fish are close to the beaches and conditions are just right, a bluefish blitz is likely.

Lundie Spence, Sea Grant's education specialist, describes a blitz.

"Small bait fish are driven to the water's surface with bluefish slicing through them. Sometimes the small fish are driven onto the beach. Gulls and terns cash in on the blitz as they dive for loose scraps," Spence says.

Word of a blitz travels quickly. Soon a crowd appears, and everyone is casting and reeling in blues.

But Spence urges fishermen not to get so caught up in the action that fish are wasted.

Gut and ice your catch immediately, and freeze what you can't eat in a short time. Because bluefish are oily, their freezer shelf life is only about three months.

Coastwatch is published monthly except July and December by the University of North Carolina Sea Grant College Program, 105 1911 Building, Box 8605, North Carolina State University, Raleigh, N.C. 27695-8605. Vol. 14, No. 10, November/December 1987. Dr. B.J. Copeland, director. Kathy Hart, editor. Nancy Davis and Sarah Friday, staff writers.

To our readers,

Federal budget cuts are making for tough times in the Sea Grant communications office. Since 1980, our budget has remained the same while inflation has gotten the best of us.

The cost of producing publications—printing, design, mailing—continued to increase and buying power decreased.

But we scrimped and saved and continued to send more than 18,000 of you a free *Coastwatch* at a cost of about $4,500 each month.

With no extra funding to meet these increases, Sea Grant is faced with some tough decisions. We are considering cutting *Coastwatch* from 10 issues a year to five and eliminating the newsletters produced by the Marine Advisory Service agents and specialists. That includes *Conchshell, MAS News* and *Legal Tides.*

Many of you have told us how much you appreciate *Coastwatch* and look forward to its arrival each month. We'd like to continue to provide you with this informative newsletter 10 times a year, but we can't without some extra dollars.

If you'd like to help the program with its publishing plight, we'll thankfully accept contributions. Send your tax-deductible donation to Sea Grant Communications, Box 8605, North Carolina State University, Raleigh, N.C. 27695-8605. Please make checks payable to North Carolina State University.

Thank you,

Kathy Hart
The Editor

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