



Coastwatch

UNC SEA GRANT ■ JANUARY 1991

*Currituck:
The
Struggle
to
Move
Ahead
and
Remain
the
Same*

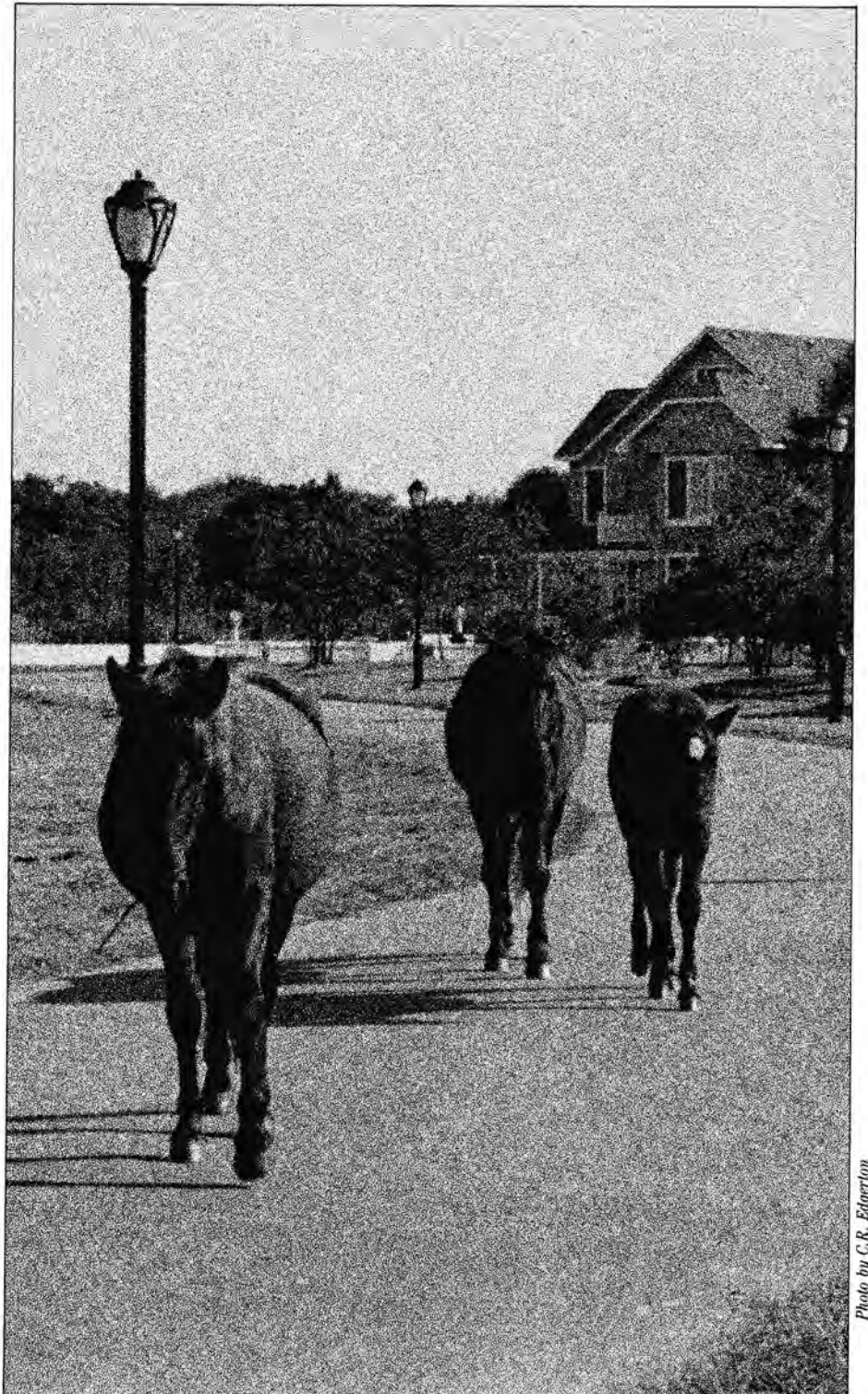


Photo by C.R. Edgerton

Will a Bridge Narrow the Gap?

By Kathy Hart

Currituck is a county divided.

Along the banks, planned communities of expensive beach houses line grid streets, forcing conformity on an environment that is otherwise wild and changeable.

Manicured lawns roll up to ornate brick entrance signs that proclaim these suburban outposts—Monterey Shores, Ocean Sands and Corolla Light.

Stores selling T-shirts and tanning lotion are spelled s-h-o-p-p-e-s, and residents are weekenders who have fled crowded northern beaches for the cheaper, more isolated shores of Currituck.

Between these communities are stretches of uninhabited beach and marsh owned by the federal and state government, the National Audubon Society and a remaining hunt club.

Here and there, mostly in the old Corolla village, you'll see an older home without yards of decking, skylights or stained glass portholes. Here, native Currituckers maintain residence on their home sands.

But they are few.

Across the shallow expanse of sound lies mainland Currituck County. Here the

names of communities are simple—Barco, Coinjock, Grandy, Maple and Sligo—names not designed to roll glibly off the tongues of realtors.

Here, communities are marked by green highway signs and clusters of wood-sided houses. Stores are called stores, and neighbors are folks who know your grandmother's name on your father's side.

Here, hunting was a livelihood not a pastime, and ducks were tomorrow's dinner not a mounting on the wall.

They're different, mainland and beach-front Currituck County, as different as homemade and store-bought bread.

And for now, each is isolated from the other.

To reach the beaches of Currituck, you can boat across a sound that changes depths faster than a fly changes direction.

Or you can take Highway 158 down the length of the mainland; cross the bridge that spans the tip end of the sound; take Highway 12 north through the Dare County communities of Southern Shores, Duck and Sanderling; and finally reach the Currituck shore.

The trip from Currituck, the county seat, to Corolla, the stopping point for Highway 12, can take an hour or more.

But if you own a house at Swan, North Swan or Carova beaches, then the beach and a low tide offers the only road home.

Two wildlife refuges north of Corolla have denied access through their boundaries and forced residents to consider the beach their link to others.

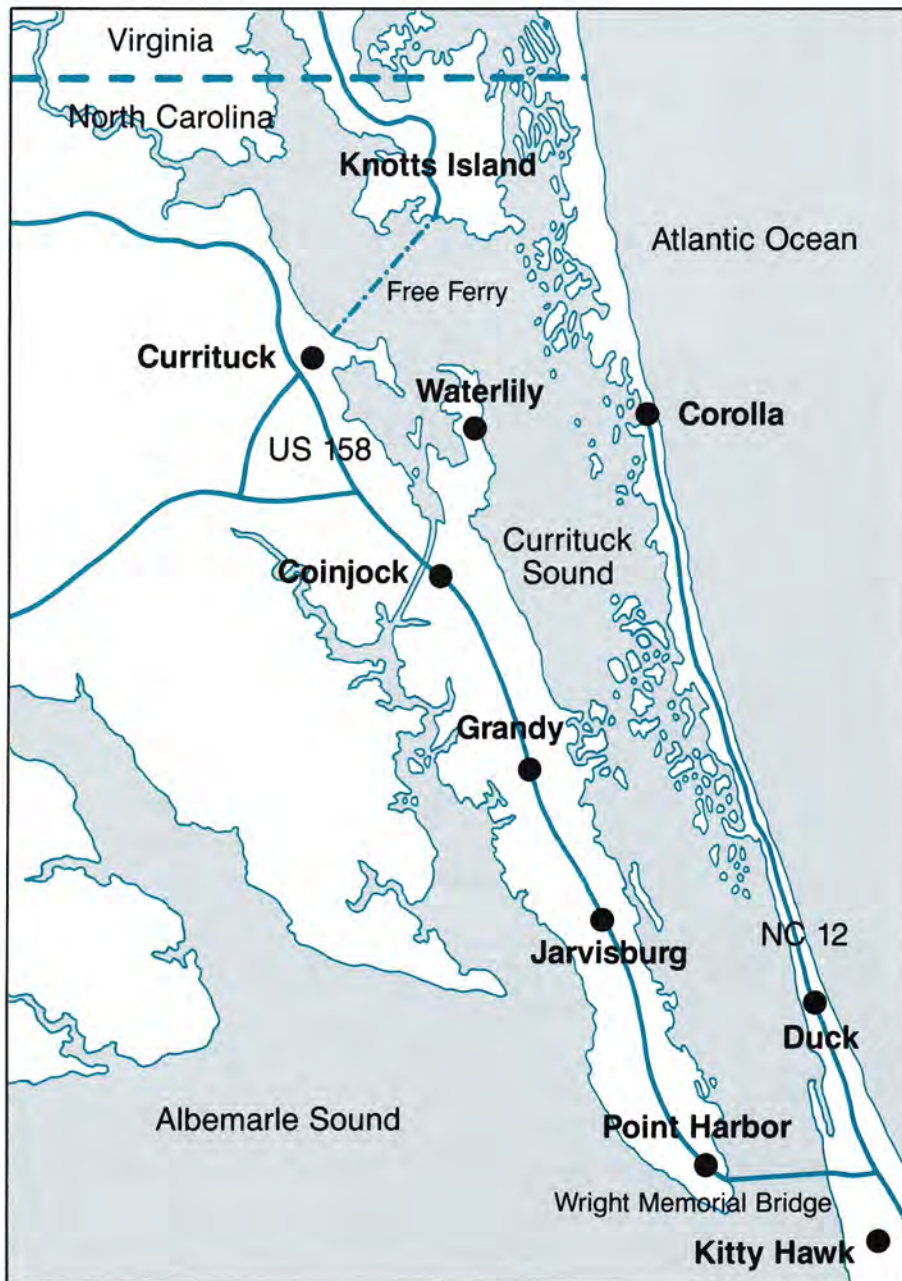
Developers still talk of negotiating an easement through the government property, but most consider the topic moot.

To alleviate some of the problems of access, many in the county and the region would like to marry the beach and the mainland with a bridge that would span the middle of Currituck Sound.

State Senator Marc Basnight, who represents the county, says the bridge is 13 years deep in the state Department of Transportation's long-range plan. Developers and some county residents are pushing for an earlier start.

Many county natives support the bridge, hoping to inject some prosperity into a mainland that can no longer count on clouds of waterfowl and stringers of largemouth bass to sustain it.

Man-made and natural factors have reduced the populations of ducks and fish



that inhabit the sound that brushes the shore at Barry Nelms' soundfront restaurant and hotel in Grandy.

When he bought the place four years ago, hunters and fishermen from across the country booked reservations months in advance.

"In October 1986, we did \$36,000 in business," Nelms says. "This year, I'll be lucky if we do \$8,000."

But if economies are floundering on the mainland, they're booming on the beach.

Property values have appreciated 30 percent a year since the mid 1970s, says developer Larry Riggs. Riggs' father, Samuel N. Riggs, spearheaded much of Currituck's early growth.

"A lot that sold for \$30,000 in 1976 would easily sell for \$175,000 today," Riggs says.

And even at that price, lots are selling like umbrellas on a rainy day to the new rich from Virginia and points north.

"Why not," says Nelms. "They can buy a house and a lot here for what they pay for a lot on the Jersey shore."

And every time the cash register rings up another lot sale, rental or property tax payment, coins drop into county coffers. But so far the county offers little in return, Riggs says.

The isolation of the beach communities and the self-contained style in which they were developed has created little need for services.

But that's changing, Riggs says.

With the addition of a health club, swimming pools and tennis courts and plans for a golf course, realtors are trying to entice year-round residents to the Cur-

Along the Currituck banks, travel has always been troublesome.

In the 1960s, the road north along the banks stopped in Duck. To reach Corolla, folks had to put their four-wheel drive in gear and bump along a sand "pole road" that ran beneath the power lines.

When it came time to stock supplies, most residents hit the beach at low tide for a ride north to the Virginia communities of Sandbridge and Virginia Beach. But to reach these areas, folks wheeled along Virginia beaches owned by the Back Bay National Wildlife Refuge and False Cape State Park.

That was fine in the early 60s when there weren't too many people making the trip. But when developers started snapping up the Currituck banks, carving it into subdivisions and launching hard-sell advertising campaigns, there were more dune buggies on the beach than ants at a picnic.

Between 1961 and 1971, the number of vehicles trekking across the Back Bay refuge skyrocketed from 10,000 to 348,000 a year.

Concerned about the effect of the traffic on the environment, the Interior Department in 1973 closed the refuge beach to everyone except those with a permit.

To receive a permit today, Currituck banks residents must meet certain boundary stipulations, residency dates, prior access requirements or work needs. The refuge issues about 30 permits, says refuge manager Tony Leger.

Most permit holders are limited to two round trips a day. A few folks, mostly commercial fishermen, have commercial permits that allow them unlimited access, Leger says.

From Oct. 1 until April 30, bankers can make the trip any time of day. But during sea turtle nesting season, everyone must stay off the beach between midnight and 5 a.m.

Permit holders cannot sell or transfer their passes to their children if they move away or die. And all permits will be withdrawn if other access, a bridge or ferry for example, becomes available.

Meanwhile, for the hundreds of new banks residents, the only way north is a trip south to Dare County, west over the bridge and finally north up the mainland to Virginia.

rituck banks—residents who would like county services such as water and trash pickup, residents who want quicker access to medical facilities and shopping meccas, residents who want a better evacuation route if a hurricane threatens, residents who want a bridge.

And many mainlanders are just as anxious for a connection. They would welcome the added job possibilities. As it stands now, any labor force needed along the Currituck banks, be it construction

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Photo by C.R. Edgerton



Photo by C.R. Edgerton

workers or shopkeepers, is drawn from Dare County.

"A bridge would be good for all of us," says Norris Austin, the Corolla postmaster and a Currituck native. "It's a golden opportunity to really make employment for the native people.

"Once development has come, I don't see why rural and coastal North Carolina can't jump on the bandwagon," he says.

Others aren't so excited.

Some folks are weary of servicing the rich out-of-staters who live on the beach. They've been catering to the beach folks, acting as maids, cooks, guides and groundskeepers, since the days when the hunt clubs were masters of the banks.

They're dubious of further growth that could turn isolated Currituck County into the hodgepodge of commercial and residential development seen along the Dare County beaches.

Riggs says that won't happen.

"Commercial holdings are probably five percent or less along the beach," says the developer. "We have taken the position to work together for quality development.

"We're selling ocean, sand, beach, hunting, fishing, surfing and sun. We want to maintain a healthy environment."

But some folks don't buy his sales pitch.

"I liked Corolla like it was," says Shirley Austin, a Currituck banks native. "I realize that it couldn't stay that way, and I really thought the development would not go this fast.

"As long as it stayed residential, I didn't

Norris Austin

mind too badly. I don't want to see hotels and motels and all the businesses."

Across the sound in Waterlily and Poplar Branch, mainlanders are worried too. They question the effect the bridge and further development will have on the sound, the waterfowl and the fish that

have meant their livelihood.

For now, Currituck remains divided. Some like it, others don't. But most seem caught—caught between the promise of opportunity and the tug of a heritage founded on ducks, decoys and a shallow sound called Currituck. •

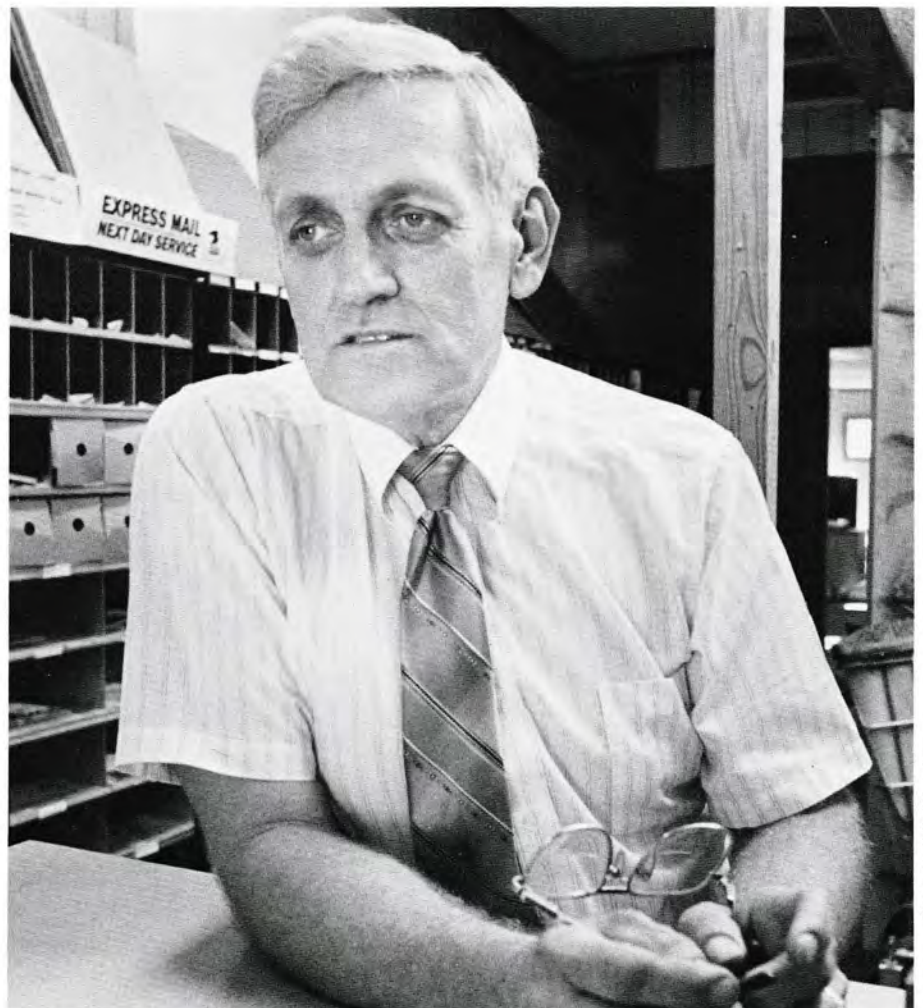


Photo by C.R. Edgerton

Fishing for Answers in Currituck Sound

By C.R. Edgerton

He raises the tip of his fishing rod and, with an experienced flip of the wrist, tosses a Texas-rigged plastic worm into the floating grass.

Jim Easley knows bass fishing among the marsh islands of Currituck Sound isn't what it used to be, but he comes back every year, hoping for a miracle.

The lure flies and the reel zings, breaking the silence of this desolate place. But no fish bites. After a few dozen casts, Easley gives up and moves on.

He laments the decline of the largemouth bass in Currituck and wonders if the right people are doing the right things to maintain the fishery. He wonders just where the problem lies.

"I've been coming here for at least 14 years," he says. "Used to, you could go out there and catch lots of fish in no time, and big ones too. But now, you're lucky to even see one break the water."

Easley, an economist at North Carolina State University, says the largemouth bass fishery means big business to North Carolina. In 1985, the last year figures were available, fishermen spent just under 11 million man-days trying to get largemouth bass to bite.

"That's just over half the total hours spent on all freshwater fishing in the state," he says. "This says something about the role of that critter in attracting fishing for North Carolina."

Jarvisburg native William Wright, a fishing and hunting guide for about 50 years, recalls the last time he or anyone had a great day fishing in Currituck Sound.

"It was the first day of May in 1983," he says. "I remember it so well because we caught 36 fish. But these days, boy it's tight. There haven't been that many fish here in a long time."

Wright doesn't have any pat answers about why the largemouth bass population in Currituck—once one of the most productive in the world—has declined so rapidly. He's no biologist either, but his experience tells him that the primary problem is people.

Back in 1983, 1984 and 1985, fishing pressure was the highest he'd ever seen it. "The fishermen came and they took millions of fish out of here, the breeding ones

included," he says. "And when you take the breeding ones out, they're gone."

"There's some little bass in there," he says. "We've watched the shoreline and seen them. But what we can't see is where they lay their eggs."

He says the sportfishermen aren't entirely to blame. Men who set and drag gill nets for other types of fish catch their share of largemouths. They're required by law to release them, but most of them are damaged and don't survive.

Warren Austin of Barco, who retired from the Coast Guard 12 years ago to work as a fishing and hunting guide, has his own theories about the decline of the bass fishery in Currituck Sound.

"It's dirty water, pollution, pure and simple," he says. "Mankind's destroyed it. There's too much building around the sound. What we need is some salt water to come in here and flush it out and then let the fresh water come back in and start all over again."

But only nature could allow that to happen. "The only way to get an inlet is to have a hurricane open one up," Austin says. "I don't think the state is interested in cutting an inlet into Currituck from the ocean."

Every Garden of Eden has its serpent.

In Currituck it's the cottonmouth.

"The cottonmouth is about the meanest thing they is," says hunting and fishing guide William Wright. He recently killed a moccasin that measured nine inches around and 67 inches long.

"The local people tell stories of water moccasins chasing people for miles," says one Currituck observer.

But they don't mention snakes when they're trying to sell sound-front property on the banks.

Prospective property buyers don't realize that Currituck is a fresh water sound. It has the appeal of a lake but the soul, and creatures, of a swamp.

Wright and fellow guide Warren Austin swear to the truth of local snake stories.

Both men say it's not unusual for a water snake to crawl into a boat in the sound.

"The moccasin, she's aggressive," Austin says. "Especially if she's carrying babies."

Mother Nature hasn't allowed salt water to rule in Currituck since 1828. That year, a powerful hurricane grabbed Curri-

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Jim Easley

Photo by C.R. Edgerton

Of all the sportsmen who have made the annual pilgrimage to harvest the bass in Currituck Sound, none are so memorable as the West Virginians.

By the busloads they came, most from deep in the heart of coal country.

"I guess they just wanted to get away from all that mining," says hunting and fishing guide Warren Austin of Barco. "It must feel good to get out of those holes in the ground and come here for some fishing in the open air."

The West Virginians enjoyed their Currituck outings to the limit, but they weren't rowdy and didn't demand much from their guides.

What they wanted most of all was to catch fish.

"A West Virginian, he'd fish in a bathtub, if that's all he had," Austin says. "And when he'd catch them, he'd take them all home with him.

"Ain't no telling how many bass them boys took out of this sound."

But, like others who once swore by the fishing in Currituck, the West Virginians don't come anymore.

"It's because the fishing is down to zilch these days," Warren says. "When the word's out there's no bass, it takes care of itself. We don't have to advertise."

tuck Banks, shifted it around a bit and filled in what was then known as New Currituck Inlet. Because the nearest salt water inlet is south at Oregon Inlet, Currituck remains mostly fresh water.

But increased salinity would be disastrous for the sound's bass population, says Pete Kornegay, the N.C. Wildlife Resources Commission's biologist for the 13-county northeast region.

"We had a four-year drought that started in 1984-85," he says. "That reduced the freshwater inflow into the sound and caused salinity to increase."

Extreme high salinity in 1987-88 exceeded the tolerance limits for largemouth bass and other freshwater species in the sound, Kornegay says. Many of the fish died and none spawned.

"And while the water quality in Currituck is good compared to other coastal areas of the state, it's all still a matter of how you look at it," he says. "If you talk to a sportfisherman, he'll say salt water is pollution. If you talk to a commercial fisherman, he'll say fresh water is pollution."

Then there's what Warren Austin calls "real pollution." Over the years, Austin says he's seen lots of raw sewage drain into the sound.

Some of the signs are obvious.

Farmers who cultivate hungry crops such as corn, cabbage and broccoli must pour large amounts of fertilizer into the soil. The natural leaching process carries nutrient-laden runoff into the creeks and rivers that eventually end up in the sound.

In extreme cases, swine farmers have allowed water from their waste lagoons to

empty directly into the Currituck drainage basin.

But whether or not the waters in Currituck Sound are polluted or whether they're salt or fresh isn't all of the problem, says UNC Sea Grant Director B.J. Copeland.

Copeland is co-author of a recent report on the status of the Albemarle-Pamlico estuary.

He agrees that the decline of the bass fishery can be traced to slight changes in the water's salt content. But other factors include changes in the sound's water movements and in the abundance of underwater grasses.

"And let's not forget overfishing," says Copeland. "All these things have happened over a period of the last 20 years."

Copeland says the sound's primary problem can be traced to a canal that connects the North Landing River to Virginia Beach. "This canal, built for flood control, transports wastes from Virginia Beach," he says. "The net flow goes into Currituck."

Over the last two decades, these pollutants, along with farm runoff and the residues of overdeveloped shorelines, have poisoned the sound and its plants and animals.

"The solution, then, is to reduce those inputs," Copeland says. "If we can get rid of the Virginia stuff, and be careful about watershed development in Currituck County, then the sound would clear itself up. Nature is very resilient."

Meanwhile, the state is continuing its efforts to revive the sound's largemouth bass population. In 1989, when salinity levels had dropped drastically, more than 60,000 bass fingerlings were released.

And, beginning this year, the size limit on bass taken from Currituck rose from 12 to 14 inches. Also, the Wildlife Commission is proposing to change the statewide creel limit from eight to five largemouth bass per day.

Whatever the solutions, they won't come easy. The constant pressures of developers, politicians, sportsmen and vacationers will continue to play important roles in Currituck Sound's recovery.

For the people whose livelihoods have always depended on the fish and fowl taken from Currituck, the future doesn't seem as bright as the past.

"Bass fishing just don't get it anymore in Currituck," Warren Austin says. "I turned down a party this month because I didn't think he'd do any good out there, and I'd hate to take his money knowing that." •



Photo by Joel Arrington

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, Box 8605, NCSU, Raleigh, N.C. 27695-8605.



Just how important is Sea Grant research? Ask U.S. Secretary of Agriculture Clayton Yeutter. He recently gave the Department of Agriculture's

prestigious Superior Service Award to three Sea Grant researchers.

J. Wendell Gilliam, Wayne Skaggs, and Robert O. Evans—all scientists at North Carolina State University—were recognized for their contributions to agriculture.

Sea Grant funded the prize-winning project. It focuses on how farmers can reduce the amount of nitrogen lost through the soil. And, since those nutrients usually leach into rivers and streams that eventually find their way to the Tar Heel coast, the team studied how estuaries are affected by the excess fertilizer.

The men conducted their research on a coastal North Carolina farm and then devised recommendations for better managing farm runoff. As a result of their study and other needs, the N.C. General Assembly enacted a cost-sharing program to entice farmers to follow the recommendations.

"The program is working so well that three other states—Maryland, Delaware and Virginia—also require these better management practices in their cost-sharing programs," says UNC Sea Grant Director B.J. Copeland.

"The award from the Department of Agriculture proves that Sea Grant scientists are tops when it comes to assuring that our coastal resources are used wisely," Copeland says.

Have you decided aquaculture is the wave of the future? Then Sea Grant has a new publication for you.

Raising Hybrid Striped Bass in Ponds, by Ron Hodson and Jennifer Jarvis, is a manual that provides step-by-step procedures for producing market-size hybrids.

Commercial catch of striped bass has sharply declined in recent years, leaving a void in the seafood market. But the hybrid, which is a cross between striped bass and white bass, fills that void with an even better fish—one that grows faster and is hardier.

UNC Sea Grant has put 10 years of research into developing the hybrid, and the National Coastal Resources Research and Development Institute funded the first commercial culture of the hybrids.

Now the results of both projects are available in this new manual.

Hodson and Jarvis describe how to collect broodstock, cross-fertilize the eggs, manage the larvae and tend the fingerlings. They include information about feed, diseases, pond structure, equipment and marketing. And they provide tables for determining the economics of raising the hybrids.

For a copy of this manual, write Sea Grant. Ask for UNC-SG-90-05. The cost is \$5 plus \$1 for postage and handling.

If you've ever wondered who eats seafood, what types they prefer and why they change their eating habits, then Sea Grant researchers have some answers for you.

David Griffith and Jeff Johnson, two East Carolina University anthropologists, along with Jim Murray and Skip Kemp of the Marine Advisory Service, surveyed consumers in the Southeast about their seafood preferences.

The resulting information has been compiled into an easy-to-read illustrated booklet, *Getting to Know Southeast Seafood Consumers*.

Designed for use by seafood retailers, wholesalers and processors, the illustrated booklet strives to help businessmen develop an understanding of the complexity of factors affecting seafood choices.

Practical matters like price, ease of preparation and availability certainly affect food decisions. Yet a person's experiences, lifestyle, phase in life and traditions also influence the foods they purchase and eat.

For a copy of *Getting to Know Southeast Seafood Consumers*, write UNC Sea Grant. Ask for UNC-SG-90-04. It's free, but please enclose \$1 for postage and handling.



If you grow and harvest shellfish on estuarine bottomland leased from the state, you'll want to attend Sea Grant's annual shellfish conference.

The workshop is scheduled for February 16 at the Duke University Marine Lab in Beaufort.

This year's conference is designed as a training session primarily for leaseholders, but offers information for those who are interested in obtaining first-time leases.

Sea Grant Marine Advisory agent Skip Kemp will lead the one-day workshop, which will focus on how to write shellfish management plans, the ecology and biology of shellfish, relaying shellfish from seed areas and polluted waters, extensive and intensive production of oysters and clams, and marketing and promotion.

As usual, the conference will end with a question-and-answer session and a social hour. A \$20 registration fee will cover all materials and the social.

Among the speakers for this year's workshop are Tom Ellis of the N.C. Department of Agriculture, N.C. Representative Robert Grady and Bill Hogarth of the N.C. Division of Marine Fisheries.

For more information, contact Skip Kemp at 919/247-4007.



Rolling, sunlit waves and a gentle breeze on the face.

These pleasant sensations of nature prompted coastal property owners to build their castles in the sand.

But angry winds and crashing waves

can spoil the mood fast.

When damage occurs, insurance pays off for some property owners. But flood insurance can be costly. For some, it's prohibitive.

Sea Grant's booklet *Saving Money on Flood Insurance for Coastal Property Owners* can help.

It identifies construction choices in new buildings, existing building modifications and insurance rating options that can reduce the annual cost of flood insurance.

With the assistance of an insurance agent, the guidelines should help a prospective builder, existing owner or designer to optimize the building for the lowest desirable flood insurance premium.

The booklet was written by Sea Grant coastal engineer Spencer Rogers.

For your copy, send \$1 to UNC Sea Grant, Box 8605, NCSU, Raleigh, N.C. 27695, and ask for publication number UNC-SG-89-05.

Next June, Tar Heel science teachers will have two opportunities to learn first-hand about the state's estuarine environment.

Approximately 15 teachers are needed to serve as trainers-facilitators for *Project Estuary*. A facilitator institute June 24-28 will examine characteristics of estuaries, activities to teach coastal ecology and field experiences for students.

Participants will go birdwatching, seining

for fish, hiking in maritime forests and travel aboard the Duke Marine Lab research vessel to Carrot Island and Cape Lookout.

Another June program, "Paddle to the Sea," will provide in-service training to 20 science teachers from a target area including Tyrrell, Hyde, Dare and Washington counties.

Selected participants will examine the Albemarle Sound watershed and study coastal education materials. They'll canoe on Lake Phelps and the Scuppernong River and survey Oregon Inlet from a headboat.

For more information about "Paddle to the Sea," call Lundie Spence, Sea Grant's marine education specialist, at 919/737-2454. Or request an application from UNC Sea Grant, Box 8605, NCSU, Raleigh, N.C. 27695.

For applications for the *Project Estuary* workshop, write Gail Jones, Assistant Professor, University of North Carolina, Chapel Hill, N.C. 27599-3500. Or call the UNC Mathematics and Science Education Center at 919/966-5922.

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. 18, No. 1, January 1991. Dr. B.J. Copeland, director. Kathy Hart, editor. C.R. Edgerton and Carla B. Burgess, staff writers.

Coastwatch is a free newsletter. If you'd like to be added to the mailing list, fill out this form and send it to Sea Grant, Box 8605, NCSU, Raleigh, N.C. 27695-8605.

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