Study Shows Clam Kicking Harmful To Seagrass Beds

The results can be deciphered from graphs in a scientific paper. But the real proof is a grass bed in Back Sound in Carteret County. Either way, the conclusion is the same: clam kicking is harmful to seagrass beds.

And anything that adversely affects seagrass spells trouble, unproductive trouble.

As part of a large Sea Grant project to study the biology of the hard clam and the effects of its harvesting methods, researcher Charles "Pete" Peterson sectioned off plots of seagrass in Back Sound to test the effects of clam kicking.

Some of the plots were left untouched and used as controls to measure against the effects of raking, light kicking and intense kicking in other plots.

In the raking and light kicking plots, seagrass biomass dropped approximately 25 percent immediately after harvest. But within a year's time, these beds completely recovered.

In the intensely kicked plots, seagrass biomass fell by about 65 percent immediately after harvest. The beds did not begin to recover for at least two years. And four years later, the intensely kicked plots still had 35 percent less seagrass than the control plots. Why all of this concern for a bed of submerged grass?
Seagrass is an important part of the estuarian ecosystem. It provides food, directly or indirectly, refuge and habitat for the smallest marine microorganism to the largest fish.

More directly stated: Seagrass abundance can affect how many shrimp, scallops and clams the consumer can heap on his plate. Even for the clam that is being harvested, seagrass in important to the productivity of the population.

When it comes to refuge, grass beds offer added protection. Peterson learned that the whelk, one of the clam's life-long predators, can decimate a clam population within five warm-water months along sandy estuarine bottoms. But among blades of grass, the hard clam can hide from its footed foe.

In some cases seagrass also may help the clam in its procurement of meals. Many biologists have long believed that growth rates were higher in areas where strong currents delivered more food. But Peterson found that the reduced current flow caused by the presence of grass beds can, in some cases, deliver more food to the clam's

sediment level and increase the bivalves growth.

To test the theory that seagrass cover affected the abundance of other species, Peterson examined populations of bay scallops. He found that bay scallop density dropped as seagrass declined after clam kicking.

But the intensely kicked plots contained even fewer scallops than expected. Peterson suspects the greater decline is caused by the patchiness of the grass cover. If the remaining cover were evenly distributed, scallop densities would be higher, he speculates.

Does clam kicking, in a seagrass bed or out, increast next year's crop of baby clams? This was a commonly held belief among Carteret County clam kickers. They thought that clearing the estuarine bottom of larger clams made more room for baby clams. Peterson tested the notion.

He learned that the removal of adult hard clams by kicking did not enhance the recruitment of baby clams. In fact, in intensely kicked sand plots recruitment was 50 percent lower than in the control plots. In intensely kick-

ed seagrass beds recruitment fell by 15 percent.

Peterson attributes the decline to the disturbance of

sediment caused by the kicking. "Environmental damage caused to seagrass beds and to dependent fisheries production is not balanced, even in part, by any increase in local hard clam recruitment or by any other obvious benefit," he says.

The NC Division of Marine Fisheries had suspected the beds' importance and the adverse effects of kicking; consequently they closed the beds to mechanical harvest

"My results added biological teeth to a policy that DMF had already been following," Peterson says. "Now they can say to the fishermen who wants a grass bed open to harvest, we have scientific proof that kicking harms the beds and beds have advantageous impacts on clams and other fisheries, especially shrimp and bay scallops."

But what of the clams nestled in these grassy beds? Are they a resource lost to the fisherman? No. Many of these clams can still be harvested by use of rakes or tongs. But more importantly, Peterson believes these protected mollusks, if left unharvested, can parent the thousands of clams needed to repopulate harvestable areas tomorrow.



Feeding The Gulls

Lisa Zack of Calabash and her son Joshua fed the gulls on the strand at Sunset Beach Wednesday afternoon. The late November weather was unseasonably warm.

Holden Board Approves

Land Use Plan, Town Code

absent.

Zack laughed, "They're such scavengers! They'll take the bread right out of my hand!"

Auditor Said Calabash Only Collected 78 Percent Of Taxes

DAWN ELLEN BOYD

Calabash only collected 78 percent of the taxes it levied last year, according to Johnny Britt, an auditor with S. Preston Douglas and Associates of Whiteville.

Britt said his company would like to see this rate at well over 90 percent.

Collections have posed a continuing problem for the town.

The town's current tax base is approximately \$7,750,000, according to Britt. The last tax evaluation was done in 1978. Councilman Robert Simmons said he believes that figure will be around \$20 million after the new evaluation is completed this

Britt said the town's assets were over \$82,000. The town's revenue sources for the past fiscal year were over \$62,000 and it's expenditures were over \$47,000, leaving the town almost \$15,000 in the black.

Town Clerk Janet Thomas informed the council that the town was hav-

ing difficulty paying the \$175 rent on the town hall due to procedural problems. The owners of the building have separated, with disagreement between the husband and wife as to who the check should be made out to—one spouse only or both, as usual.

The council recommended to Thomas to make the check out as usual to Eric and Barbara Hunn, not to Barbara only, unless a lawyer informed them that the property had been separated by a formal legal agreement.

Councilman-eiect Patricia
Lewellyn suggested the board send
the check to Barbara Hunn made out
to both of them, and send a carbon
copy to the town's lawyer along with
an explanation of the problem.

Mayor Sonia Stevens told the council that the maintenance contract for the garbage truck with Bex Heavy Equipment Company in Whiteville is working out well.

"They've been good so far and come every time we've called," she

Councilman Simmons said, "The new council can do what they want to, but I'd recommend getting out of garbage pick-up."

Stevens pointed out that in the summer the town's restaurants need garbage pick-up every day. "If a health inspector sees a rat around here, even outside, he takes off," she said.

Councilman Virgil (Tink) Coleman said the old private garbage pick-up was expensive and not very good.

Board members indicated they plan to seek bids from several private garbage pick-up companies before making a final decision.

In other business, the town council:
•Transferred \$230 from salaries to sanitation to cover the costs of a ticket issued because the garbage truck was overweight.

 Tabled a decision on a washout problem on Lake Drive until all town council members can view the damage.

 Heard from Mayor Stevens that Robert Rourk Sr. of Whiteville, a licensed engineer, is drawing up plans for the town's septic tank.

*Heard from Mayor Stevens that South Brunswick Islands Chamber of Commerce Co-Director Karen Moshoures was to have attended the meeting to discuss updating of the Calabash brochure. She urged council members to go ahead and consider whether they wanted town monies to help pay for it, pointing out that it listed every business in Calabash. No action was taken.

Cox Sentenced In Assault On Patrolman

Judge F. Gordon Battle wrapped up a light criminal session in Brunswick County Superior Court last Wednesday, finding Johnnie G. Cox guilty of driving while impaired and assaulting a law enforcement officer with a firearm. He had pleaded

Holden Beach commissioners met

for five minutes Monday morning

and approved the 1985 Land Use Plan

Commissioner Hal Stanley moved

the new land use plan be adopted,

given notice of his intent to appeal.

The charges stemmed from an incident last spring in the Shallotte Point area.

and assaulting a law enforcement officer with a firearm. He had pleaded not guilty to both charges and has

and the board unanimously approved

without futher discussion. Lyn

Holden was the only commissioner

the matter last Monday.

The board held a public hearing on

Coded System Corporation in

Avon, N.J., had reviewed the town's

ordinances, and Town Administrator

R.W. Buck said they had made no

substantive changes except to bind

Commissioner Stanley asked if

Buck and Town Attorney Doug

Ledgett were satisfied with the docu-

ment. After they voiced their approval, the board unanimously voted

In other business, Mayor Kenner

Amos informed the commissioners he would represent Holden Beach at

the dedication of the Odell William-

son Bridge at Ocean Isle Beach on

Wednesday, Nov. 27, and invited

to accept the codified ordinances.

the ordinances into book form

fourth charge, leaving the scene of an accident, was quashed on a motion by the defense.

Cox was sentenced to a three-year active term with the N.C. Depart-

ment of Corrections for assaulting a N.C. Highway Patrol officer. He was found guilty of driving while under the influence, level 2, and was sentenced to the N.C. Department of Corrections for one year, suspended five years with a 30-day active sentence upon expiration of his threeyear sentence. He was ordered to pay a \$300 fine and costs of court, to surrender his operator's license and not operate a motor vehicle while on probation, to obtain a substance abuse assessment, pay the fee for it and follow the recommended course of treatment.

treatment.

Battle gave the defense 90 days in which to prepare a record of appeal, and the state 30 days after the record is filed in which to file an alternate record, amendments to the record or objections. During the appeal, he ordered Cox be placed under \$25,000 bond.

cond.

Cox was represented by A.H.

Gainey Jr.

Robert S. Bowen, common law robberty, crime against nature; State Department of Corrections not less nor more than 10 years, concurrent with present sentence, work release recommended, restitution \$508 to victim if released on work release.

Todd Vaught, speeding 74 in a 55 zone; \$50 and costs.

Stephen Joseph Boyles, probation violation; admits violation, continue on probation, transfer back to New Hanover County.

Marvin Fulford, probation violation; admits allegations, probation revoked, State Department of Corrections two years, Committed Youthful Offender, credit for time served.

Owens Addresses DAR

Soil conservationist Maynard Owens addressed the William Gause Chapter of the Daughters of the American Revolution at their Nov. 21 meeting.

Owens told the group about soil conservation in Brunswick County since its beginnings in the 1930s.

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Sandra Doyle Ward, southeastern soil conservation field director, presented a slide program that traced 50 years of soil conservation

history.

"All people must work together to protect our natural resources," said Ward. "We must remember land is perishable, therefore we must correct our mistakes to insure there will be a soil resource for our future generations."

The chapter recognized four new members at the meeting: Diane Holden, Artelia Dale, Bonita Brown, and Esther Bullock.

Santa Claus To Visit AARP

and adopted the town code.

A special guest, Santa Claus, will conduct a Christmas gift exchange among members at the Dec. 5 meeting of Calabash Chapter 3640 of the American Association of Retired Persons.

He will be accompanied by a musical program of traditional Christmas tunes.

The meeting at the Calabash Volunteer Fire Department will open with a covered dish supper at 6:30 p.m., said Percy Bray, public relations chairman. Members are asked to bring a salad, main dish or dessert of their choice.

Also, President Pearl Krick has asked members to bring canned goods to give to needy families during the Christmas season.

Sale Nets \$2,800

A Nov. 16 rummage sale netted \$2,800 for Sea Haven Youth Home, said President Sharon A. Wiley.

The funds will be used to help furnish the care home, which is scheduled to open in the near future.



them to accompany him.

Collects Food

Members of VFW Auxiliary Post
7288 in Calabash are collecting canned goods to distribute to 'needy
families during the Christmas
holidays, according to spokesman
Eva Gray.

The group will meet on Saturday, Dec. 9, at 6:30 p.m. at Brunswick House in Calabash for a Christmas party.

School Club

Helps Needy

The Vocational and Industrial Club (VICA) at South Brunswick High School plans a toy, clothing and food drive at various locations in the county to benefit the needy at Christmas.

Club advisor Garrett Wayne Mellor said beginning Thursday, Nov. 28, people in the community can bring items to Minta Chevrolet in Bolivia, Rose's in Southport, Red and White at Long Beach, Young's Grocery in Winnabow and Southbound Grocery in Bolivia.

Friday, Dec. 13, will be the last day to drop off items.

The toys and other items received will be distributed on Dec. 20 by VICA members, said Mellor.





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