
Shellstockers Review

Newsletter of the North Carolina Shellfish Growers Association

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What's the Buzz . . .

Shellfish are biggest catch: The value of the shellfish landed by Scottish fishing boats soared by 22 percent to £140 million last year, making them the Scottish fleet's most valuable catch for the first time. A new report by the Scottish Government also revealed that the number of active fishing vessels in Scotland fell by 62 during the year, to 2,224. From: Scotsman.com

Swede takes World Oyster Opening Championship: Galway, Ireland: Hasse Johannesson opened 30 oysters in 2 minutes 41 seconds at the Galway International Oyster Festival. In its 53rd year, it generates about 8 million euros for the local economy. Attendees consume 100,000 oysters.

Virginia Marine Resources Commission would revoke fishing licenses for up to two years for anyone convicted of illegally taking oysters from a designated sanctuary, during closed seasons, from polluted waters, from an aquaculture farm or from private shellfish beds. First-time offenders could face revocations and repeat violators could expect their licenses to be pulled for longer periods. *Associated Press - September 22, 2007*

Note from the President: I invited Bob Rheault, our guest at the upcoming Aquaculture Development Conference, to cover the "Note" for me this month. Here's his take on what the East Coast Shellfish Growers Association has in store for the coming days:

As the ice forms on the pond where I work, I am thankful to have days where it is too cold to go out and work so I can clear my desk and work on Association issues. We are planning our Annual Meeting to be held in conjunction with the North Carolina Aquaculture Development Conference, January 18-19. I am looking forward to meeting southern growers and hearing about the issues that concern them the most. Many accuse the ECSGA of being oriented around New England issues, but that is only because we don't have many vocal members from southern states. I hope we can change that.

As I reflect on the past year I feel proud that the ECSGA has made important strides this past year. While occasionally it feels as if we are spinning our wheels, most of the time I think we are making good progress.

Our proposal to develop Best Management Practices for the East Coast industry received Northeastern Regional Aquaculture Center funding. We are optimistic that we can find funds to broaden this initiative to a coastwide effort.

The East Coast Shellfish Research Institute is incorporated and getting organized. We are optimistic that our efforts in DC last year paid off and a couple of planned earmarks will make it through the budget process. Our top research priorities remain looking at the environmental interactions of shell planting and mechanical harvesting, but this year *Vibrio parahaemolyticus* detection was added to the list. John Kraeuter is leading an effort to itemize and prioritize research priorities for the industry for the next ten years. We hope to have a draft document to share at the NC conference.

Our annual trip to DC gets better each year. Last year we had record attendance at the annual oyster reception that we hosted with the Gulf and Pacific Coast Growers. We were also able to visit a record number of legislative offices this year. None of this would be possible without the assistance and logistical support of the National Fisheries Institute and our allies from the Pacific and Gulf Coasts.

Our most recent battle with the Army Corps over their proposed new nationwide permit for shellfish aquaculture was a tough one. Thanks to hours of work and dozens of phone calls and letters (along with important help from

the Congressional Shellfish Caucus) the final rule was published and a set of regulations was developed that we think we can live with. At least the Corps dropped their contention that shell cultch and spat on cultch are “fill” (essentially a pollutant under the Clean Water Act).

I wonder why we had to fight this battle at all. Like the fight against the listing of the oyster as an endangered species, or the fight to keep the EPA from changing the rules to allow more sewage to be dumped into coastal waters, this fight with the Corps seemed like one we should not have had to face. We are the good guys. We have the green stamp of approval and our crops have proven environmental benefits.

In this vein we are working with the World Wildlife to help guide their development of a sustainability certification process. There will be a workshop at the NC Conference designed to make sure that these guidelines are practical and workable, while ensuring that our industry continues to develop in a sustainable and environmentally sensitive fashion. For this effort to work properly we need to have grower participation so I hope growers will turn out.

The ECSGA is covering your back, but we need more resources to do the job right. Our membership has expanded every year as more growers hear about us and recognize the value of the work we have been doing. But we need more members if we are going to be effective. -- RBR

Right after the NC conference we head to Capitol Hill for three days of lobbying and our annual Congressional Reception. We are supporting NOAA’s Marine Aquaculture Initiative and the Offshore Aquaculture Act while still working to secure funds for the ECSRI. We are also working to preserve two key laboratories whose budgets have been stripped bare. The NOAA Lab in Milford, CT has done critical work for our industry for decades and the USDA/ARS Lab in Delaware has been instrumental in looking at detection and control of *Vibrio* bacteria associated with shellfish-related food born illness. We will also be seeking funds to do some marketing.

I have to wonder what the next big crisis will be. It would be nice if we could just work on the farm and not have to worry about federal and state regulators crushing our business, but it seems that every year we are faced with issues that threaten our livelihoods. As if weather, predators, disease and theft were not enough to worry about! -- **Bob Rheault, President ECSGA, bob@moonstoneoysters.com**

P.S.: If you are not a subscriber to the ECSGA e-mail LIST you are missing out on a great way to stay informed about issues in our industry. Follow the simple instructions on our website. It is free and if you don’t like it you can always unsubscribe. <http://www.ecsga.org/index.htm>

2008 Aquaculture Development Conference: To be held January 17-19, 2008 at the Sheraton in Atlantic Beach NC. Friday’s topics include a presentation by Dr. Robert Rheault on opportunities for the East Coast shellfish industry. The keynote address at the noon luncheon on Friday will feature Dr. Ron Hardy, University of Idaho, who will speak on the significance of sustainable aquaculture to industry and the marketplace.

The Saturday Shellfish and Marine Aquaculture Workshop is open to all at no charge. Topics include:

- Comparison of ALS and floating bag – Jay Styron
- Aquaculture of the blood clam – Dana Schmidt
- A test for restoration of bay scallops in Bogue Sound – Dr. Ami Wilbur
- Crop insurance for shellfish growers – Robert Cerda
- Proposed organic standards for shellfish aquaculture – Dr. Robert Rheault, ECSGA
- World Wildlife Federation vision for sustainable shellfish standards – Colin Brannen

Please see the website <http://www.ncaquaculture.org> for the latest information.

A joint NCSGA/ECSGA annual meeting will be held following the last Saturday Shellfish and Mariculture workshop

ECSGA/NCSGA Annual Meeting: Please join us on Saturday, February 19 following the Aquaculture Development Conference workshops for a joint annual meeting with the East Coast Shellfish Growers Association. We'll be lining up the details for the 2008 shellfish Expo and confirming our 2008 slate of officers. We will convene at 1:30 at the Carteret Community College aquaculture facility (Howard Building).

Study Draws Dismal Sketch of Core Sound Fishing Industry: Economic factors, such as coastal development and low seafood prices, have deteriorated the historic commercial fishing industry in the Down East area of Carteret County, according to an economic analysis released by the N.C. Marine Fisheries.

The value of seafood landings has decreased by 50 percent since 1997 and participation in commercial fishing has dropped by 43 percent, according to the report.

Fewer than half the commercial fishermen in a recent survey think they will still be a commercial fisherman a decade from now.

"Compared to a study of the same area five years ago, these numbers are alarming," said Scott Crosson, DMF socio-economic program manager and author of the report. "This is the first time we've seen this many of the fishermen believing they will not be around in the future."

The report finds that while household incomes in the area still compare to those in other rural North Carolina areas, fishing incomes have dropped sharply. Many fishermen have adapted by taking landside jobs and continuing to fish as supplemental income.

Active and retired commercial fishermen surveyed ranked the issues of fuel prices, low prices paid the fishermen at the docks, imported seafood, coastal development and loss of working waterfronts as the top challenges facing the industry. Many of these pressures are not likely to diminish in the near future.

The Core Sound area of Carteret County (Down East) offers a representative view of the North Carolina fishing industry as a whole. NCDMF Release 12 Oct., 2007

S.C. Clam Farmers up \$15 Mil: About 15 clam farmers will share \$1.79 million from Taiwan-based steamship line Evergreen Shipping Agency and Norfolk Dredging Co. after settling a lawsuit over an oil spill in Charleston Harbor.

The case stemmed from a Sept. 30, 2002 incident in which 12,500 gallons of heavy "bunker" oil oozed into Charleston waterways and polluted a 15-mile stretch of shoreline. According to Coast Guard accounts of the incident, an Evergreen ship, the Ever Reach, ran into unmarked and submerged sections of steel dredge pipe as the ship steamed toward its North Charleston container terminal. The underwater crash tore a 24-foot-long gash in the vessel's hull and ruptured a fuel tank.

The resulting oil spill sullied wildlife, boats, creeks, marshes and piers all the way from the former Navy base in North Charleston down to Folly Beach. The \$4 million cleanup took months to complete.

As a result of the spill, the farmers said their collective inventory was almost entirely destroyed, dropping more than 90 percent from about 28 million clams to about 2 million. Any clams that survived were harvested, and some clam beds are still in operation, Applegate said.

Did You Know . . .

"As happy as a clam" is a shortened version of the original phrase "as happy as a clam at high water." A clam would be happy in high water because then a clam digger or other predator couldn't get at it.

The phrase first appeared in print in the 1830s. From: *The Arizona Republic*, Oct. '07

Carteret Community

College offers online courses. For Spring 2008 semester AQU 112- *Aquaculture 2*, which does not have prerequisites and AQU 230- *Fish Genetics and Breeding*, which has General Biology 1 as a prerequisite. Other courses will be offered online as they are developed. To enroll see: <http://www.carteret.edu/education/academicprograms/AQUA/aquacultmain.htm>

Aquaculture Revenue in Canada Rose in 2006

2006 operating revenues for Canada's aquaculture industry were at an all-time high for the second consecutive year as a result of increased production and exports. The industry reported record revenues of \$CAN 968.7 million, up 24.7% from 2005. *Aquaculture Magazine* "Currents" Nov. '07

Drought Continues in Southeast: Apalachicola Bay is suffering from a shortage of drinking water and a potential loss of aquacultured clam and oyster crops and other species that depend on freshwater flows coming from Georgia and Alabama in the Apalachicola river. The U.S. Army corps of Engineers has proposed to incrementally reduce the amount of water released from Georgia reservoirs into the Apalachicola river from 5,000 cubic feet per second (cfs) to 4,150 cfs and allow storage of excess inflows in the reservoirs thus helping to relieve Atlanta and other affected areas of their shortage of drinking water.

Drought not Everywhere: Higher than normal rainfall over the past several months has taken its toll on local oyster beds near Bay City, Texas. "It won't be a bumper crop, that's for sure," said Buddy Treybig, owner of Buddy's Seafood and Arnold's Seafood in Matagorda. The Colorado River has dumped record amounts of rainwater into Matagorda West Bay over the past year, killing most of the oyster beds, Treybig said. *Bay City Tribune Oct 22, '07*

Longevity, Clam Style: A small clam dredged up from the Atlantic off Iceland may hold the secret to aging. The clam, from a species called the ocean quahog, appears to be the oldest living creature ever known. When the mollusk was growing from a larva 405 years ago, Queen Elizabeth I was on the throne and William Shakespeare was writing *The Merry Wives of Windsor*. The record-breaking clam was caught last year when scientists from the Bangor University School of Ocean Sciences were dredging the seabed north of Iceland. It might even have been with us today had not the dredging team from Bangor University scooped it untimely from the ocean floor and finished it off when it was a sprightly 405 years old.

The clam has been nicknamed Ming by the research team at Bangor, although they insist that this refers to the dynasty that happened to be in charge of China at the beginning of the clam's life.

If Ming had been hoping for a quiet old age, he will clearly have been disappointed. He is not only going to be examined for clues about climate change, but Help the Aged has offered a £40,000 grant in the hope that he might be able to unlock the secrets of a long life. From: *The Sunday Times*, UK, Oct '07

Quick Stats on United States Aquaculture

- 81% of the seafood consumed in the U.S. is imported and 40% of those imports are farmed
- Global wild harvest is 95 million tons and likely cannot be sustained
- To meet increased demand for seafood, the world will need 40 million tons of aquaculture by 2030
- Present global aquaculture production is nearly 60 million tons, valued at \$70 billion

Aquaculture Magazine "Currents"
Nov. '07

2008 Dues are Due. Please mail in your check today.

Aquaculture Only Way to Meet Demand: Expanding aquaculture production is the only way to meet future global demand for seafood according to the United Nations' Food and Agriculture Organization (FAO).

"A rapid development of aquaculture therefore requires better planning and better management of the sector in order to mitigate the adverse consequences on the environment," said FAO Director-General Jacques Diouf at a meeting in Rome.

FAO estimates that by 2030, with the world's population growing by 2 billion people, an additional 37 million metric tons of fish will be needed to maintain current levels of consumption. About 45 percent of all seafood consumed worldwide is farmed, a total of about 48 million metric tons annually.

Diouf added that responsible policy decisions regarding water, land, seed and feed as well as sound environmental management are necessary to sustain and enhance the growth of aquaculture.

A paper presented by FAO at the meeting noted that not only does aquaculture help reduce hunger and malnutrition by providing food rich in protein, fatty acids, vitamins and minerals, it also improves food security by creating jobs and raising incomes. For example, fish farming in Asia directly employs some 12 million people.

"Aquaculture has clear potential for economic and social development in many countries," said Diouf. *Seafood Business* Nov. 21, '07

Rising Acid Levels Threaten Shellfish: Rising acidity levels in the ocean, due mainly to increased levels of carbon dioxide from fossil fuels, could pose a major threat to shellfish industry by the end of the century. That view comes from scientists with the US National Oceanic and Atmospheric Association, or NOAA, and has drawn serious attention from U.S. Senator Frank Lautenberg, D NJ.

A NOAA scientist said the problem could affect 500 million people worldwide who rely on the ocean for food. In the U. S. alone, the fish and shellfish industry is worth \$4 billion per year. Lautenberg has sponsored a bill to study the problem.

The immediate concern is that certain marine creatures, especially in their juvenile stages, may not be able to form calcium carbonate skeletons and shells if the ocean is too acidic.

"Ocean acidification is a threat to our marine ecosystem and our economy. The change in ocean chemistry caused by greenhouse gases is corrosive and affects our marine life, food supply and overall ocean health," Lautenberg said. *Pressofatlanticcity.com* Nov.3 '07

Group Urges Public to Decry Offshore Aquaculture: Food & Water Watch, a Washington, D.C., consumer advocacy group, yesterday called for public participation in the Gulf of Mexico Fishery Management Council's upcoming hearings about offshore aquaculture development.

In the past two months, FWW released two reports, "Fishy Farms, The Problems with Open Ocean Aquaculture," and "Offshore Aquaculture: Bad News in the Gulf," which both contend that farming seafood at facilities 3 to 200 miles offshore would negatively impact consumers, ocean resources and the region's economy.

This March the Bush administration introduced the National Offshore Aquaculture Act. Last year, NOAA outlined a 10-year plan to improve federal aquaculture regulations and triple domestic aquaculture production to one million metric tons by 2025. *Seafood Business* Dec.5, '07

VA Adopts New Regulations for Mariculture: Virginia adopted its first regulatory program for clam and oyster farming in coastal waters, an industry estimated to be worth \$30 million to \$50 million a year.

Officials and farmers have spent months crafting regulations aimed at protecting property rights and the environment and settling mounting conflicts between shellfish farms and boaters, waterfront property owners and anglers.

The new rules that went into effect Dec. 1 specify that:

- New farms cannot be closer than 100 feet from existing piers and shoreline.
- Poles and warning signs must be installed to mark farm borders.
- Landowners within 500 feet of a proposed seafood operation must be informed of the project and can protest it.
- Hard-plastic cages and bags, in which shellfish are grown in shallow waters, cannot be set atop environmentally important underwater grass beds.
- No more than 250 of these structures can occupy any acre of leased creek or river bottom. (There are no height restrictions.)

State officials are eager to get an accounting of just how big the industry has become. Owners of farms will be required to report their harvests each month to the state. And each shellfish worker must obtain a state license, at \$5, so the state will know how many employees are on the water. *The Virginian-Pilot*, Nov 28, 2007

Native Duo Jailed for Selling Poisoned Shellfish: Two members of the Cowichan band of Vancouver, Canada have been jailed for selling poisoned shellfish to their own people.

Marvin Patrick Johnny, 49, and Kevin Marcel Sylvestor, 37, pleaded guilty last week in Provincial Court in Duncan to three counts of violating the federal Fisheries Act for selling shellfish contaminated with paralytic shellfish poisoning. They also sold butter clams from an area closed because of a poison warning.

Johnny, who has a previous record of fisheries violations, received nine months in jail and was banned from fishing for two years. Sylvestor, who has no previous record, received a four-month sentence to be served in the community, and a two-year fishing ban.

After the two men sold their contaminated catch door-to-door in the Cowichan Bands community in 2005, one person was hospitalized with numb hands and feet, one person was sick for weeks and others were sick for a few days. Besides numbness, other symptoms included vomiting and diarrhea. *CanWest News Services*, November 25, 2007

Shellfish Growers, Scientists, Educators, Environmentalists, Friends of the Coast, lend a hand to shellfish culture in North Carolina while you help yourself, help the coast, and help our precious water. Join the NCSGA today. Pay your \$15 annual dues, receive all the benefits of an annual membership, and support our important work. Make checks payable to NCSGA; Memo: 2005 Dues; Mail to NCSGA, P.O. Box 269, Smyrna, NC 28579.

“Dot” to Catch Oyster Rustlers: Oyster rustling in South Australian has led to the adoption of hi-tech “DataDot” technology.

Streaky Bay oyster grower Alan Burge is using the anti-theft technology following the theft of \$9000 worth of oysters. While growers use various surveillance techniques to guard against theft, Mr. Burge said the DataDot technology provides an easy solution.

The technique increasingly is used in seafood industries around Australia to guard against poachers.

Mr. Burge, the owner of Libido Oysters, said the DataDots include his lease number and company name. "You still have to catch the crooks but this is a way of proving the oysters are yours because you can see them with a magnifying glass," he said.

"If somebody finds our oysters, it would hold up in a court of law."

DataDots are as tiny as a grain of sand and very difficult to detect with the human eye.

Each one is laser-etched with several lines of a unique identifying code and they are attached with a liquid adhesive that shows up as an ultraviolet light.

DataDot Home and Business Technology managing director Neil McCormack said, "We spray microdots on to the oysters and secure them with adhesives. The key is to warn people that you have done it and it acts as a deterrent and is very successful." Article from: *The Advertiser*, Adelaide, South Australia, December 21, 2007

Bargain Center:

• Lowest Prices — NCSGA membership discounts for ADPI bags, cages, and netting. Peter and Diane Perina, distributors for ADPI and Coastal Aquacultural Supply. (804) 725-3948.

(Members advertise free)

MAY ALL YOUR CLAMS BE SOLD; MAY ALL YOUR OYSTERS BE BIG

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