
Shellstockers Review

Newsletter of the North Carolina Shellfish Growers Association

Jim Swartzenberg—President
PO Box 269, Smyrna, NC 28579
July 2009 Skip Kemp—Vice President

Telephone (910) 347-7240

Volume 52

INSIDE SCOOP . . .

- *There are more than 1000 small clam and oyster farms on the East Coast*
- *Maine has 5 women oyster farmers*
- *Massachusetts has 6 women oyster farmers; business hires 10 women part time. Also one woman digs clams*
- *Connecticut has 3 women oyster farmers*
- *New York has 4 women oyster farmers*
- *New Jersey has 1 woman oyster farmer*
- *Virginia has 2 women oyster farmers*
- *North Carolina has 3 woman oyster farmers*

*Tommy Leggett
Chessie Seafood
Farm Raised York
River Oysters*

Note from the President: I keep trying to figure out how to get more people involved in growing oysters, but it seems almost an elusive prospect. Other states, such as Virginia, Connecticut, Rhode Island, and Massachusetts have had some success with oyster farms, but so far in NC there is nothing even approaching their numbers, and we can't hold a candle to the oyster industry on the West coast. The sale of farmed oysters by Virginia growers has increased ten-fold since the initial survey covering the 2004 crop.

The Pacific states have the advantage of the Pacific oyster, *Crassostrea gigas*, which grows quickly and is resistant to diseases. They also have an infrastructure and laws that support the industry in ways that encourage people to get into the business. There are several medium to large sized companies making money on oysters on the West coast including the mega-farm, Taylor Shellfish.

It's a shame we cannot get more people growing oysters, especially since we consider our Eastern oysters superior in taste and quality to the Pacific. So I ask again: What is it going to take to get more people involved in growing oysters in North Carolina?

I think the answer lies in the oyster rather than the people.

I recently took part in a series of agricultural-biotechnology meetings that shed some light on where we are and where we need to go to reach our goals. AgBiotech is the new buzz word in the industry, and it's what will be happening as we turn into the 21st century and try to find ways to feed a growing population with a decreasing agricultural landscape -- that is, one with fewer farms, less rainfall, and more pressures on land and water acreage.

For the oyster industry, it will mean developing a strain of oysters that can hold up in our estuaries during both the good years and the droughts, that can grow fast enough to be ready for harvest before diseases and other stressors set in, and that looks and tastes better than our conventional wild stock. When we get that oyster, the people to grow it will show up.

We're getting there one slow step at a time, but don't expect great breakthroughs any time soon. Our new research hatchery is scheduled to break ground this summer, but even after that is built,

the funding for research programs is tight. The hatchery will not only need operating funds but also separate funds for research projects. In Virginia, the VIMS hatchery has been working on developing strains for several years now, and they have made many good strides forward. But again, they haven't developed any break-through strains, and their funding is also tight.

Meanwhile we need to prepare our public for what some people think is a less than acceptable food – a genetically modified oyster, better known as a biotech food. We need to convince the public that biotech is a good thing and that genetic research is the vehicle that will one day feed the world.

Marine Experts Stunned: The biggest oyster ever found in Britain was plucked from the seabed off Plymouth.

The mollusk measures seven inches across and weighs a whopping 3lbs – three times the size of an average oyster.

Previously the biggest ever found in Britain was discovered on Arisaig beach in Scotland in August 1997. It weighed 1.8lbs (0.83kg) and was listed in the Guinness Book of Records, but that has now been eclipsed by the latest discovery.

The creature, nicknamed Shelly, is a species known as the edible or native oyster which usually grow to four inches and weigh around 1lb. It was dredged up from the English Channel and found in a box of fish bought at market by fishmonger Peter Randall, 58. 05/13/09



BRITISH RECORD: Jo Pearce of Mevagsissey Sealife Aquarium with the monster mollusk

Virginia Aquaculture Conference 2009: The 2009 Virginia Aquaculture Conference is scheduled for November 13-14, for the Lexington Hotel, George Washington Inn & Conference Center, in Williamsburg, VA. This year's conference will follow the same format as the successful 2007 conference, providing an opportunity to learn about current and upcoming issues and new developments in culture technology, and to interact with others in the aquaculture industry.

Friday afternoon will start with a special half-day session on marketing aimed at alternative outlets for cultured product. That evening will be the Gala Aquaculture Reception, featuring products all grown in Virginia. Saturday morning there will be a plenary session with information of interest to all sectors of Virginia aquaculture, followed by afternoon concurrent sessions for fresh water and salt water producers.

Of particular interest for shellfish farmers will be the sessions on Saturday afternoon. The afternoon will begin with a presentation by Mark Green, St. Joseph's College, Maine, entitled, "Ocean Acidification and Shellfish, 'Death by Dissolution'." Next up will be Kurt Stephenson, Virginia Tech, addressing "Oyster Aquaculture – Payments for Water Quality Services." Just before afternoon break will be Lewie Lawrence, Director of Regional Planning for the Middle Peninsula Planning District Commission, discussing "Managing Use Conflict – Land Use Policy Considerations." After break, Bob "Skid" Rheault, Executive Director of the East Coast Shellfish Growers Association, will discuss "Oyster Marketing in the Northeast." A tag-team presentation by Gef Flimlin, NJ Cooperative Extension Service, and Sandy MacFarlane, Coastal Resource Specialists, Massachusetts, will focus on "Regional BMP Development Efforts."

For more information regarding registration, agenda, and other updates, please visit the conference web site at: www.vaaquacultureconference.com or contact Mike Oesterling (804-684-7165, mike@vims.edu).

New Oyster Breed a Boost to Industry: New Zealand oyster farmers say a breakthrough in selective oyster breeding will enable the industry to triple in size.

An oyster hatchery producing up to 50 million Pacific oysters a year was opened in Nelson.

The single-seed oysters will now be produced in large scale commercial quantities at the hatchery.

Oyster farmers say the nursery-grown spat, or baby oysters, guarantee an oyster consistent in size, shape and quality. *Radio New Zealand* 06/11/09

First-Ever Global Report on Shellfish Finds 85 Percent of World's Oyster Reefs Have Vanished: The Nature Conservancy released the first-ever comprehensive global report on the state of shellfish at the International Marine Conservation Congress in Washington, DC. The report, which finds that 85 percent of oyster reefs have been lost worldwide, concludes that oyster reefs are the most severely impacted marine habitat on the planet.

The report, written by scientists across five continents, from conservation organizations as well as academic and research institutions, focuses primarily on the distribution and condition of native oyster reefs.

Besides being a culinary favorite and a long-standing staple in seafood restaurants around the globe, oysters provide benefits to humans in less obvious ways. For example, they act as natural water filters and improve water quality, provide food and habitat for fish, crabs and birds, and serve as natural coastal buffers that help to protect shorelines and keep coastal marshes intact, an important factor in protecting communities against increased storm surges and sea-level rise expected with climate change.

Nature Conservancy 05-24-09

ECSCGA now has a Facebook Page - so if you are into this and want a cool way to keep track of association events and happenings become a fan!

go to :

<http://www.facebook.com/editevent.php?picture&eid=91312064245&created&new&m=1#/pages/East-Coast-Shellfish-Growers->

California Oyster Farmer – 1; U.S. Park Service – 0: Supporters of a Marin County, Ca. oyster farmer claimed victory after a panel of scientists concluded that National Park Service officials made errors, selectively presented information, and misrepresented facts in a series of reports about his Drakes Bay shellfish operation.

The findings mark the second time in a year that the Park Service has been put under a spotlight for essentially fudging data in its attempts to show that the Drakes Bay Oyster Co. harmed the environment.

While the report did not specifically accuse anyone of misconduct, it raised serious questions about governmental misuse of scientific data.

In fact, the farm, which operates under a federal lease until 2012, had no demonstrable negative impacts on the bay's ecosystem, harbor seals or native eelgrass, biologists with the independent National Research Council found.

The findings were widely seen as vindication for the oyster company, which has been embroiled in a rancorous dispute with the Park Service over its impact on the pristine estuary along the Point Reyes National Seashore.

The trouble started in 2005, when Kevin Lunny, a local rancher, purchased the oyster farm from Johnson Oyster Co. He was required to get a special-use permit from the California Coastal Commission, which had placed a cease-and-desist order on the property as a result of previous problems.

In the midst of those negotiations and discussions about extending the 2012 lease, the Park Service came out with accusations of environmental damage, setting off a series of dueling scientific reports.

The battle intensified in 2007, when the Park Service issued a report claiming, among other things, that oyster farming reduced the number of harbor seals and damaged eelgrass beds.

Among the disputed claims was a complaint that Lunny expanded his farm to an area historically used by female harbor seals and their pups, and that oyster boats were observed scaring off seals in the area. The Park Service said the number of harbor seals declined from 250 to 50 in the area Lunny developed.

Park Service officials also claimed the oyster farm could hasten the spread of destructive nonnative species that hitchhike on the oyster shells. The voluminous waste produced by oysters, they said, increased sedimentation in the estuary.

Lunny and his supporters complained to the Marin County Board of Supervisors and Sen. Diane Feinstein. The inspector general of the U.S. Department of the Interior issued a report last year accusing Park Service officials of exaggerating data.

Although the Park Service corrected mistakes in later reports, the panel concluded that the agency "selectively presented, over-interpreted, or misrepresented the available scientific information on potential impacts of the oyster mariculture operation."

Pete Peterson, a professor of marine biology at the University of North Carolina who chaired the study committee, said political pressure, funding issues and conflicting mandates, not deliberate misconduct, are concerns.

"I'm disturbed by the recognition that what went on at Drakes Bay is part of a bigger picture nationwide in which the Park Service has a dual mandate," Peterson said, "the use and enjoyment of cultural resources and the responsibility that those resources are sustained for future generations. That's almost a catch-22." *San Francisco Chronicle* 5/6/09

Taylor Shellfish wins Lawsuit against Washington DNR: After a lengthy and expensive legal fight with Washington State DNR over a disputed area of oyster growout, Taylor shellfish has won. The NCSGA supported the company throughout their fight. Here is an excerpt from a note received from President Bill Taylor:

Dear Jim,

As you may have already seen in the news today, Taylor Shellfish and DNR have reached a settlement agreement over the disputed land and shellfish in Totten Inlet. We feel that this is a win-win situation and we are very happy to have this dispute behind us. On behalf of the whole Taylor family I would like to thank you for the support you have shown us. Now is the time for us to move on and do what we do best, grow shellfish and create jobs in our local community.

Thanks again for your support,

Bill Taylor

Are oysters more important than teachers? With a vote falling almost entirely along party lines, the North Carolina House passed a budget that raises taxes on everyone in the state and also cuts thousands of teacher jobs.

The Democrats overwhelmingly supported the budget. Not one Republican did.

Some who supported the budget say the state's poor economic situation left them with little choice but to raise taxes and eliminate the teachers.

Folks at the conservative Civitas Institute disagree.

"I think there's definitely some political gamesmanship on how they're trying to sell this to the public," said Brian Balfour who is with the Civitas Institute.

To back up his point, Balfour **compiled a list of things** he says may be worthwhile, but most people would not think were more important than keeping teachers on the payroll.

For instance, are oysters more important than teachers? The state is spending \$3 million on oyster reef and sanctuary programs.

While art teachers are losing their jobs, the N.C. Arts Council is getting nearly \$9 million and the House has budgeted \$30 million for state grants to local cultural activities.

Public television stations are receiving \$13 million.

The Ergonomics Center at N.C. State is getting half a million and UNC Chapel Hill will get \$1 million for a botanical garden.

Balfour says it's not that all these things are bad, but he questions how the state can justify paying for them while cutting teachers and raising taxes. *Charlotte, NC (WBTV) 06/15/09*

Study Finds Manmade Nanoparticles Could Contaminate Marine Food Web: Researchers at the University of South Carolina's Nanocenter and the Coastal Center for Environmental Health and Biomolecular Research (CCEHBR) have determined that nanoparticles can move easily into the marine food web and, once there, are absorbed in marsh grasses, trapped in biofilms and consumed by filter feeders, such as clams.

The team created three estuarine mesocosms, or experimental enclosures replicating a coastal estuarine ecosystem, and introduced gold nanorods into the ecosystems. Clams and biofilms were found to accumulate the most nanorods.

Dr. Geoff Scott, director of the CCEHBR, said "As the first study to examine the fate and effects of nanoparticles in marine ecosystems, we really didn't know what to expect. This study enabled us to understand how these nanomaterials were transported and distributed through the ecosystem. One significant finding is that bivalve shellfish, such as clams, accumulated a significant amount of the nanomaterial."

Dr. John L. Ferry, an environmental chemist at USC, added that the study is significant because it shows that manmade nanoparticles can enter the estuarine food chain and ultimately find their way into shellfish and fish that **humans eat**. *Nanowerk 6/23/2009*

Climate Change Serious Threat to Oysters: Scientists have found evidence that shellfish are being harmed by the effects of global warming. Already endangered by overfishing and disease, the authors of a new study say oysters are becoming smaller and less robust as greenhouse gases alter the acidity of water in estuaries and ecosystems where they live.

Researchers with the Smithsonian Environmental Research Center in Edgewater, Maryland, studied the impact of rising carbon dioxide levels in the atmosphere - one byproduct of carbon-rich industrial emissions - on the larvae of two closely-related oyster species - Eastern oysters, which are indigenous to the Atlantic coast of the United States, and Suminoe oysters, which are native to Asia. *Washington, DC 06/17/09*

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.
- Oyster Gardening Supplies and Used Grow-Out Cages — J&B AquaFood (910) 347-7240.
- 3/8” clam mesh. 14’ X 1900’ Bill Cox (252) 225-8891
- Shellfish Lease in Stump Sound, 10.2 acres – Swartzenberg (910) 330-0737
(Members advertise free)

NCSGA Board of Directors Meeting: The board of directors will meet on Wednesday, July 8 at 6:00 P.M. at the NC Coastal Federation building in Ocean. Members are encouraged to attend.

Invite a friend to join NCSGA today.

North Carolina Shellfish Growers Association—Membership Application

Name: _____
Last
First
M.I.

Company/Affiliation _____

Address: _____

City
State
ZIP

E-mail: _____

Make check payable to NCSGA. Mail to P.O. Box 269, Smyrna, NC 28579
 Annual Dues \$15

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

North Carolina Shellfish Growers Association

Jim Swartzenberg — President
 Skip Kemp — Vice President
 Terri Lawrence — Treasurer
 Don Freeman — Past President (Advisor)
 Dr. Ed Jones — N.C. Coop. Ext. Advisor
 William Small — NCDA Marketing Advisor
 Matt Parker — NCDA Business Advisor

Board of Directors
 Jay Styron
 Bob Cummings
 Bradley Lawrence
 Tom Mattison
 Kevin Lawrence
 Brad Scott