

THE DREDGE



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Connecticut Sea Grant, University of Connecticut

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Developing Disease-resistant Shellfish

Connecticut Researcher Involved in Study to Understand Which Oysters Perform Best

MSX disease devastated Long Island Sound's oyster population in the mid- to late-1990s, and the lack of successful commercial sets after this point has prevented the industry from recovering.

The Connecticut Department of Agriculture's Bureau of Aquaculture has been collecting oyster set data for over ten years, and for the past three years they have observed significant sets of oysters in Western Long Island Sound.

"Since it takes three to four years for an oyster to reach market size, we just might have a commercially-viable harvest this year," says Inke Sunila, State Shellfish Pathologist.

But counting on Mother Nature is tricky and unpredictable, and shellfish producers are relying more and more on hatchery seed than recruitment from wild populations. "We've been lucky to have our own hatchery in Noank, but there is very little disease-resistant seed available for nursery culture," explains Steve Plant, owner of Connecticut Cultured Oysters LLC.

Recognizing that this problem was not unique to Connecticut, researchers, producers and extension agents sought funding to compare the growth and survival of oyster lines selected for disease resistance throughout the Northeast Region.

The group, led by Dr. Paul Rawson of the University of Maine, received a grant from the U.S. Department of Agriculture's Northeastern Regional Aquaculture Center (NRAC) to conduct their disease-resistance trials at grow-out sites that were selected in Maine, Massachusetts, Rhode Island, and Connecticut. The study began this past summer, and will continue for two seasons. To learn more about the project, contact Dr. Inke Sunila @ (203) 874-0696.

To learn more about funding opportunities available through NRAC, visit www.nrac.umd.edu.



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CALENDAR

November

13-16 International Conference on Shellfish Restoration
www.icsr2007.wur.nl/

January

18-19 East Coast Shellfish Growers Assoc. Annual Meeting
www.ecsga.org

February

25-27 Milford Aquaculture Seminar
mi.nefsc.noaa.gov/seminarworkshop

24-26 International Boston Seafood Show
www.bostonseafood.com

Welcome from the Connecticut Sea Grant Program

The Connecticut Sea Grant Program (CTSG), based at the University of Connecticut Avery Point (Groton) is one of 31 state programs, which are federal-university partnerships located in coastal and Great Lakes states.

CTSG's vision is to foster sustainable use and conservation of coastal and marine resources for the benefit of the environment and both current and future generations of Connecticut citizens.

Our program works statewide and beyond to achieve healthy coastal ecosystems and consequent public benefits by supporting research, outreach and education activities, in partnership with our stakeholders. Our primary program themes are: (1) marine aquaculture and biotechnology, (2) use and conservation of marine resources, ecosystems, and habitats, and (3) marine and aquatic science literacy.

CTSG Extension Educators work in various areas related to aquaculture and seafood production. Nancy Balcom specializes in seafood safety education and offers the Hazard Analysis and Critical Control Points (HACCP)

training program throughout the region. Tessa Getchis specializes in aquaculture business planning and production techniques, and teaches an introductory aquaculture course at the University. Robert Pomeroy's focus is aquaculture economics and international aquaculture development. Balcom and Getchis are also involved in seafood marketing and promotion, and CTSG is an *ex-officio* member of the Connecticut Seafood Council.



To learn more about our program highlights, accomplishments and impacts, visit:

www.seagrants.uconn.edu. We also welcome you to subscribe to our magazine *Wrack Lines* and *The Dredge* newsletter. Contact our office at (860) 405-9127.

Sylvain De Guise is the Director of the Connecticut Sea Grant College Program.

Resurfacing of "The Dredge"

You heard it, we're bringing back the shellfish industry newsletter. John Volk, retired Division Chief of the Bureau of Aquaculture, developed the publication as a means of communication with the State's shellfishing industry. The Sea Grant Extension Program will produce quarterly issues, with contributions from the Connecticut Bureau of Aquaculture (DA/BA) and the National Marine Fisheries Service (NMFS) Milford Laboratory, to distribute to the shellfish industry, municipal shellfish commissions, and other interested stakeholders.

The first issue of the "*Oyster Dredge*" dates back to the summer of 1984. Can you remember what you were doing that summer? Here's what else was happening on the Connecticut aquaculture scene back in 1984:

- The Aquaculture Commission released its report with recommendations for stimulating aquaculture development in Connecticut.
- The first State cultching project was initiated on the natural beds in Bridgeport and Stratford.



- The Aquaculture Division (now Bureau) took delivery of the 50 foot workboat, dedicated by Governor O'Neill as the "*Yankee Oyster*".
- Over 243,000 bushels of oysters were harvested at a value of over \$8 million dollars.
- Nearly 100,000 bushels of clams were harvested at a value of approximately \$3 million dollars.

Fond memories you'd like to share? Please send your contributions to the Editor (see page 6).



Oyster seed attached to bulkhead at Cedar Island Marina, Clinton Harbor

Greetings from the Bureau of Aquaculture!



The Bureau of Aquaculture is pleased with the resurrection of the industry newsletter, "*The Dredge*". The newsletter will provide the Bureau a routine method of notifying industry members of news items. The Bureau will

continue to send letters to all licensed harvesters noting important regulatory changes.

General news of the past legislative session includes a shellfish statute change requiring the Department of Agriculture, when issuing a resource assessment permit for the purpose of assessing the viability of a shellfish area, shall not authorize more than 100 acres of assessment area per permit. The legislation further states that the Department requires the placement of buoys at each corner of the assessment area, as defined by the permit applicant, prior to the start of any assessment. The Department is also responsible for notifying all abutting shellfish ground owners or lease holders of the issuance of permits no later than five days prior to the effective date of the permit.

The Bureau will continue to approve new shellfish lease applications no less than 50 acres or greater than 200 acres in a rectangular shape. However, after the lot is engineered and the applicant provides an initial sealed bid retainer, the Bureau will buoy the corners of the lot and place the legal notice in the paper and on the Department Web site www.ct.gov/doag/ (select "aquaculture"). The lot will be awarded to the highest bidder deemed responsible through a sealed bid process. That individual will be responsible for all the advertising costs as well as the cost of buoying all corners of the lot.

David Carey is Director of the Bureau of Aquaculture.

Department Announces Agriculture Viability Grants

The Connecticut Department of Agriculture announced the opening of its Agriculture Viability Grants Program for 2007. The purpose of these grants, available to both shellfish producers and municipal shellfish commissions, is "to strengthen the economic viability of Connecticut farmers and to promote the sustainability of agriculture in Connecticut and its municipalities."

Farm Transition Program To qualify, applicant must be a registered farm business, agricultural cooperative or registered non-profit working directly with farmers in Connecticut.

Farm Viability Program To qualify, applicant must be a municipality within the State of Connecticut, a regional planning association or a regional council of government within the State.

Grants are capped at \$50,000, and matching funds are required. Municipality and non-profits may use in-kind services for their match. Proposal deadline is November 16, 2007 for this year's competition.

Download an application at: www.ct.gov/doag (select "business development and assistance", then "agricultural") or contact Ron Olsen at (860) 713-2503 or ronald.olsen@po.state.ct.us.

Sustainable Agriculture Research and Education (SARE) Grants

The Northeast Sustainable Agriculture Research and Education (SARE) Program, funded through the U.S. Department of Agriculture (USDA), offers competitive grant opportunities for producers, researchers, cooperative extension specialists and non-profit organizations.

SARE Farmer grants are available to develop, refine, and demonstrate new sustainable techniques and to explore innovative ideas developed by farmers across the region. Sustainable Community Grants are available to reconnect rural revitalization and farming. Projects can address diverse issues such as land use, nutrition, employment, markets, education, farm labor, public policy, and environmental quality.

To learn if you qualify for these or other SARE funding opportunities, call (802) 656-0471 or visit:

www.uvm.edu/~nesare/FGinfo.html

Shellfish Industry Pioneers: A Tribute to an Oyster Boat Captain and Industry Leader:

Captain Emil W. Usinger
1910-2007



Emil W. Usinger's family maintained lighthouses in both Connecticut and New York.¹ Emil recalled the days of oyster sailing sloops and schooners that were built in the 1800s, sailing from Virginia to the New York market.²

Emil worked for the *Radel Oyster Company* in Norwalk, Connecticut at an early age and at 18, had his first Mariners License.³ At 21, he received his 10,000-ton Captain's License running gas tankers throughout Long Island Sound and New York Harbor.¹

Emil married Helen Brown in 1934 and began working as a deckhand on an oyster boat for the *Blue Points Company*, owned by *General Foods*, in Milford Harbor (CT).^{1,3,4} In 1936, the company moved them to Providence, Rhode Island, where Emil served as Captain of the company's oyster fleet.

In 1943, Emil transferred back to Milford as Manager of Operations.³ Emil recalled the "natural growers" gathering seed in Sharpies. From 1957 to 1958 the heaviest set of starfish occurred. He worked with scientists from the now National Marine Fisheries Service laboratory conducting studies aimed at reducing the numbers of predators (stars and drills).

In 1963, Emil was promoted to Vice President and transferred to Sayville in Long Island, New York, managing the oyster facility located on Great South Bay.^{1,3} Emil attempted to restore the shellfish resources in the Bay by importing oyster set from the Housatonic River in Connecticut and attempting two spawns of hard clams per season.⁵

He captained several historic vessels, but Emil loved the "*Blue Points*." Originally named the "*Clara Rae*" in 1931, the "*Blue Points*" was 102 feet long with a 28 foot beam, capable of holding 4,000 bushels of oysters. Emil also captained other famous oyster boats launched in 1946 at the *Blue Points Company*, the "*Milford*" and the "*Greenport*," as well as the "*Mascot*," the "*Harvester*," and the "*Columbia*," out of Milford.

After retiring in 1986, Emil was delegated by the oyster industry to testify before Congress, traveling worldwide promoting the industry with endeavors including hosting a clam bake for a U.S. Secretary of Agriculture.^{3,4}

References:

¹Rutheve Brockett, Milford Historian; Interview 1997.

²Clyde McKenzie, Shellfish Biologist and Historian NMFS; Audio interview 1991.

³Connecticut Post; Family written obituary, 1/29/07.

⁴Kenneth B. Hawkins, GSS.

⁵Emil W. Usinger, son of Capt. Usinger - Family interview.

Photos compliments of his family.

Submitted by:

Lori Romick, The Shellfish Sister, LLC, Milford, CT

Walt Canzonier, Bivalve-sur-Maurice

Ronald Goldberg, NMFS Laboratory, Milford, CT

Article previously published in the newsletter of the National Shellfisheries Association, September 2007.

Legislation Offers to Restore LIS Shellfish Beds

The U.S. Senate is moving closer to passing a multi-million dollar bill which proposes to restore oysters in Long Island Sound.

Senators Charles E. Schumer and Hillary Rodham Clinton announced the bill earlier this year (April 2007), which authorizes \$25 million for the U.S. Army Corps of Engineers to assist with construction and restoration of Long Island Sound's oyster beds. The federal share of this project would be \$18 million to support work in both Connecticut and New York waters.

To read the press release, visit: www.senate.gov/~clinton/news/statements/ and scroll to April 4, 2007.

Molluscan Aquaculture Dialogues

World Wildlife Fund To Develop Global Aquaculture Standards

World Wildlife Fund (WWF) is convening several roundtable discussions or “dialogues” regarding the creation of global standards for certifying aquaculture products. The most recent dialogues are being held to discuss standards for an eco-label for shellfish.

The first Molluscan Aquaculture dialogue was held in Washington D.C. in 2004, and a more recent dialogue was held at the annual Pacific Coast Shellfish Growers Association meeting in 2007. Meeting participants discussed the draft goals of the dialogue, which are to develop and implement verifiable environmental and social performance levels that minimize the potential negative effects of mollusc aquaculture, recommend standards that achieve these performance levels while permitting the shellfish farming industry to remain economically viable, and continue to promote the beneficial environmental and social aspects of shellfish cultivation. They also discussed potential dialogue objectives, including ensuring open and transparent dissemination of information between the stakeholders participating in the dialogue.

There are three meetings scheduled for 2008 including: North Carolina (January), Florida (February), and Rhode Island (April), then others overseas. WWF expects that these standards will be developed by the end of next year (2008).

28th Annual MILFORD AQUACULTURE SEMINAR February 25-27, 2008

NOAA’s Northeast Fisheries Science Center, Milford Laboratory is pleased to announce its Annual Aquaculture Seminar will be held February 25-27, 2008 in Meriden, CT. Technical sessions will include oral and poster presentations of current research on all aspects of shellfish aquaculture, including husbandry, nutrition, genetics, and disease.

This annual meeting is a unique blend of industry, academics, government, and research that results in sessions that are informative and in observations that prove invaluable. Plan to attend.

Deadline for Titles and Abstracts: December 15, 2007

For additional information, contact:
walter.blogoslawski@noaa.gov or call (203) 882-6535.



If you have questions or would like to participate in the upcoming dialogues, contact the Aquaculture Program Officer Colin Brannen at colin.brannen@wwfus.org or (202) 778-9534. Visit WWF on the Web at: www.worldwildlife.org/ci/dialogues/mollusc.cfm

East Coast Shellfish Growers Association (ECSGA) *Top Ten Reasons To Join!*

1. Communication among growers.
2. Coordinated industry efforts on national issues.
3. An Executive Director who expresses our issues to government representatives, the media, and the public.
4. East coast growers “at the table” at the Interstate Shellfish Sanitation Conference, in the halls of government, in academia, and in restaurants.
5. Generic Marketing Program that benefits East coast growers.
6. Public Education Initiatives that deliver the facts on the benefits of shellfish farming to the consumer.
7. Annual meeting held to address needs of growers.
8. Web site as a source of information, and an advertising venue.
9. List Serve fosters timely communication.
10. We are all too busy to do this ourselves, so we need to support an organization that can do it for us!

Bob Rheault is the President of ECSGA. Contact :
bob@moonstoneoysters.com or visit: www.ecsga.org.



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Would You Like to Contribute to *THE DREDGE*?

Please submit comments, news, articles, and/or classified items, to:

The Dredge Newsletter
 c/o Tessa Getchis, Editor
 Connecticut Sea Grant
 1080 Shennecossett Road
 Groton, CT 06340-6048

Prefer an e-newsletter? Contact us:
 (860) 405-9104
tessa.getchis@uconn.edu

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- 2' x 2' x 3.25" stacking trays w/ center support (\$15/unit)

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AQUAGUIDE




The Connecticut Sea Grant Extension Program recently posted its Online Aquaculture Resource Guide, the "AQUAGUIDE". This Web site is intended to provide educational resources that will assist aquaculture producers, municipal shellfish and harbor management commissions, researchers, educators, students, and aquaculture enthusiasts.

Visit our site at:
www.seagrants.uconn.edu/

ONLINE RESOURCE GUIDE FOR AQUACULTURE IN CONNECTICUT

INTRODUCTION
 CALENDAR OF EVENTS
 GETTING STARTED IN AQUACULTURE
 SHELLFISH ENHANCEMENT / RESTORATION
 EQUIPMENT AND SUPPLY VENDORS
 FUNDING OPPORTUNITIES
 TESTING LABORATORIES
 COURSES
 PERIODICALS
 PRODUCTION STATISTICS
 RESOURCES FOR EDUCATORS
 CAREERS IN AQUACULTURE
 MUST-SEE WEB SITES
 CONTACT AN EXPERT!

PLEASE RATE OUR SITE!
tessa.getchis@uconn.edu

Fish Watch (10/18) US Seafood Facts provided by NOAA NMFS
World Bank Report (9/07) Aquaculture: Changing the Face of the Waters

INTRODUCTION
 Aquaculture is defined as the controlled cultivation and harvest: in the waters and tidal wetlands of the state of aquatic animals and plants, including but not limited to, oysters, clams, mussels and other molluscan shellfish, lobsters and crabs, fish and commercially important seaweed.
 -Connecticut General Statutes

Purpose
 This guide is intended to provide web-based educational resources that will assist Connecticut aquaculture producers, municipal shellfish and harbor management commissions, researchers, educators, students, and aquaculture enthusiasts. If you have any questions or suggestions for improvement, please contact: tessa.getchis@uconn.edu