Research Farm Network Completes First Season of Experiments

By Bill Walton

The first season of the research farm network is wrapping up for the winter as we go to press. The eight participating farmers have handed in their notes, collected their temperature data loggers and are preparing their sites for winter. In October, extension agents Diane Murphy and Bill Walton visited each site to collect data on several experiments, including a test of control of fouling by periwinkles (in oyster bags) and the effects of even small changes in stocking densities of oysters. Though expected, there were clear differences in terms of growth and survival among farms – confirming the need to do these experiments in multiple locations. Our periwinkle experiment did not improve oyster growth but several farmers reported that they make fouling down and, in some cases, gave the oysters a cleaner look. We will continue this experiment and add periwinkles earlier in the year next season to see if there is any benefit.

By October our data for the first year, suggesting there is no benefit (in terms of growth) to stocking at densities below at least 250 in the first year. We will continue this a second year to see if this result changes. In addition, participants initiated other experiments which will be sampled in 2006 (including a planting density study with quahogs). After consulting with our selected growers, additional work in 2006 now includes working with ‘new’ species (such as the soft shell clam) and testing the importance of the height of oyster bags off the bottom. At the fall debriefing meeting all the participants agreed to continue with the program next season. SEMAC may extend the number of sites by adding several other growers.

continued page 2

Chefs’ Event in Winchester highlights Cape Cod and Islands Cultured Shellfish!

In Winchester, MA there is a small but highly regarded restaurant called The Catch, and what a catch it was for the Cape and Islands shellfish growers. Rated by Boston Magazine as the best seafood restaurant north of Boston, owner and Chef Chris Parsons offered his venue free of charge for a third Chefs’ event marketing Cape Cod and Islands Cultured Shellfish.

Working for SEMAC on marketing efforts for more than 3 years, Dr. Nora Barnes and the Center for Business Research at UMass Dartmouth once again planned the event, which was held on October 3rd. Growers from Barnstable, Cuttyhunk, Duxbury, Eastham, Orleans, and Wellfleet were on hand working the raw bars, suckling oysters and littlenecks, and speaking to more than 65 Chefs, restaurant owners, managers, and wholesalers. In the meantime Chris Parsons created shellfish hor’douerves, other appetizers, some great soups and supplied a wine tasting, while the Buzzards Bay Brewery provided a beer sampling chosen to compliment the featured shellfish.

continued on page 2
2006 SEMAC Programs

By Bill Burt

The SEMAC Board of Directors met in August to establish the funding priorities for Fiscal Year 2006. These budget meetings always generate a lot of good ideas, and as a result the center continues to provide strong industry support programs. For the upcoming year, the board decided to expand its research farm network project which began in the summer of 2005, and fund the program at $35,000.00. The board also set aside $25,000.00 for ongoing marketing efforts, and $10,000.00 went into a general industry support program, which can be used to help growers offset some of the costs related to aquaculture training events or aquaculture conferences. Industry members can also request small amounts of grant monies from this funding for innovative gear projects and ideas. $2,000.00 will be set aside for a Segment 2 HACCP training course to be offered in the future, and $3,000.00 was authorized for equipment maintenance for the YSI water quality monitoring instruments. With QPX still a big issue facing the industry, $5,000.00 was earmarked for emergency disease diagnostic funding. Also at the August meeting there was considerable discussion about red-tide, the impact on various sectors of the industry including the growers and the hatcheries. Given the concern about future seed supplies the board recommended that up to $10,000.00 be expended to do a seed supply study with the purpose to gain an understanding of seed supply needs over the next five year period. Finally, the board approved $10,000.00 to be used to cover administrative costs related to the operation of the center, noting the large in-kind match provided by Barnstable County and Cape Cod Cooperative Extension.

Research farms...from page 1

This will be decided later in the winter.
The following growers participated in the FY 2005 program.
Carl Syriala - Barnstable Harbor
Gregg Morris - Duxbury Bay
Keith Mann - Buzzards Bay
Dennis Pittsley and Rob Tourginy worked with Keith Mann on the project
John Lowell - Cape Cod Bay Flats
Rob Garrison - Martha's Vineyard
Lee Sheppard worked with Rob Garrison on the project.
David Slack - Pleasant Bay
Mike Dunbar - Cape's Southside
Irving Puffer-Wellfleet Harbor

Cultured Product rated as excellent...from page 1

A reporter from the New England Food Service News published by GC Publishing attended, and she spoke to the growers and chefs alike. The article about the Catch Chefs' Event was featured in the October edition, along with a full page spread of pictures.
Technical Coordinator, Bill Walton provided a presentation that evening describing shellfish aquaculture and the benefits of a cultured product. In addition to this presentation, those who attended were given stylish Cape Cod and Islands Cultured Shellfish bags, filled with information and gifts. Wellfleet grover Joel Fox presented Chris and Meg Parsons with a plaque to thank them for their hospitality.

Exit Survey Results
Dr. Barnes provided the results of the exit survey for the event to the SEMAC Board of Directors at their October 26th meeting. Thirty four (34) of the sixty eight (68) attendees filled out the survey forms.

The survey indicated that more than 90% of those who filled out the survey found Cape Cod Cultured product to be of excellent quality. 88% indicated the event was helpful to them, and the majority once again indicated that meeting the growers was a highlight of the evening. Several restaurants offered to have a similar event at their establishments in the future. The next steps in the ongoing marketing efforts will be the subject of a marketing subcommittee meeting sometime in December.
"Spit and Chatter"

By Jennifer Mullin
Grower in Barnstable Harbor

When Scott and I embarked on our journey to become shellfish farmers nine years ago, we did so with many desires and dreams. The most important of these were to be a part of a sustainable and green industry. Our wishes were remarkably similar to the concerns of residents of Barnstable Village. Even before our business took root there was opposition to the leasing of any sites for farms in Barnstable Harbor. The proponents to aquaculture in Barnstable Harbor stated fears of pollution from our boats and equipment as well as a concern for the populations of naturally occurring shellfish. Many farmers spoke at town council and shellfish committee meetings to address these issues and assure the public that we would protect this resource from pollution, that our farmed shellfish were native to the harbor, and our shellfish would have the potential to add to the town’s stocks, since the spawning of our animals could not be contained within our sites. Once these issues were addressed, we were on our way. Recently two issues have arisen that have the potential to change the perception of aquaculture as a sustainable, green industry.

Pollution and the possibility of introducing Triploid oysters could turn the tide of public opinion against aquaculture. The pollution I speak of, in our harbor, comes in the form of equipment that is taken by the tides off of lease sites. While this is unavoidable given the nature of our business, it can be rectified after the fact. For many years we have periodically taken “gunking” trips up the many creeks in Barnstable Harbor looking for runaway nets, PVC pipes, mesh bags, steel racks, and the occasional dinghy. I cannot recall a trip where we came back to the ramp with an empty boat. While what we find is often not from our farm, it is our obligation to pick it up and dispose of it properly. If every farmer took just one trip per season up the creeks we would be keeping our promise to protect our harbor. While still merely a proposition, even the possibility of experimenting with Triploid oysters would be a violation of the trust the public placed in us when permitting us to lease sites in Barnstable Harbor. While the Triploid oyster is the same species (C. virginica) that are traditionally found in Barnstable, the DNA has been altered to prevent reproduction. So, while it is still technically a native shellfish, the production of Triploid’s would not be in the spirit of our promise to the public. Furthermore as Triploid oysters do not reproduce, our farms would no longer have the potential to repopulate the harbor’s oyster stocks. So, as tempting as it might be to investigate an oyster that can grow faster it would be a violation of the trust placed in us. Every farmer has to contribute to maintain the public’s positive views on aquaculture. Keeping the public’s opinion of aquaculture as a sustainable and green industry is paramount.

Spit and Chatter is a Column for and by Growers - See page 4 editors note.

Real-time marine water quality data from Barnstable Harbor

From Diane Murphy
Winter is fast approaching, but imagine the ice has melted and the first whispers of spring have arrived. You wonder if the water will ever warm up and send forth the pulses of microscopic food your clams and oysters so eagerly await. Well, this spring everyone can tune in to Cooperative Extension’s Marine Program website for up to the minute water condition information. Imagine going to a website where you can view water conditions updated every 15 minutes – day and night. SEMAC’s water quality data collection has expanded this year to include a newly-deployed YSI instrument in Barnstable Harbor. Unique to this site is the addition of EcoNet which was just released this year. EcoNet is a remote monitoring system which relays water condition data from the instrument’s multiple sensors to a customizable website. Users may choose a specific time range for the data display and view the latest information in Barnstable Harbor for dissolved oxygen, temperature, salinity, pH, chlorophyll, etc. Tested this year, the instruments have been removed for the winter season and will be redeployed in Spring, 2006.

News Flash: The YSI EcoNet system at the NERRS (National Estuarine Research Reserve System) in Grand Bay, Mississippi continued to log water quality data during Hurricane Katrina. Even though the unit was under about 6 feet of water -- with a peak surge height of 13.9 feet -- it kept logging. When the storm surge subsided the YSI equipment started transmitting data – apparently undamaged. Let’s hope we never experience a test like that!

YSI data is also being collected in Wellfleet Harbor and Pleasant Bay, but these stations do not have EcoNet connections at this time. However, the data will be posted periodically on the web site.

"Every farmer has to contribute to maintain the public’s positive views on aquaculture. Keeping the public’s opinion of aquaculture as a sustainable and green industry is paramount.”

Jennifer Mullin, Grower
Barnstable Harbor

This YSI marine water monitoring station in Barnstable Harbor will provide up to the minute water condition information beginning in the spring of 2006.
Announcing a continuing workshop series, developed and offered by a consortium of Woods Hole Oceanographic Institution Sea Grant, Cape Cod Cooperative Extension, the Southeastern Massachusetts Aquaculture Center, Massachusetts Department of Agricultural Resources, and the Massachusetts Coastal Training Program

Improving Shellfish Aquaculture Production

Coming in 2006
Look for Announcements of Specific Dates

Management of Pests: Pests, such as blue mussels, barnacles and algae, seriously affect shellfish farmers, from making their work unpleasant to the extreme of loss of their shellfish crop. Often shellfish farmers aren’t aware of pests until the problem is a major problem. This workshop will include growers discussing how they’ve dealt with pest issues, a presentation of various pro-active methods to limit pests, and distribution of identification guides of common pests.

Disease Recognition and Management: Although shellfish farmers know that diseases can inflict significant mortality on their shellfish crop, there’s a need to both 1) recognize the first signs of the disease in the field and 2) consider crop management techniques that reduce the spread and effects of disease. This workshop will include growers talking about their experiences with shellfish disease, a hands-on demonstration of recognition of diseased shellfish, presentations of recommended best management practices, and distribution of identification guides of signs of various shellfish diseases.

Upcoming Events

2006

January 6th - 1:00 PM (tentatively scheduled)**
Massachusetts Aquaculture Association Board of Trustees Meeting - Farmhouse Conference Room, Barnstable

January 13th & 14th
MA Aquaculture Centers’ Network Booth at the Massachusetts Municipal Association Trade Show
Hynes Convention Center, Boston

January 19th - 1:00 PM (tentatively scheduled)**
SEMAC Board of Directors Meeting
Farmhouse Conference Room, Barnstable

February 13th - 16th
Aquaculture America 2006
Riviera Hotel & Casino
Las Vegas, Nevada

February 27th - March 1st
26th Milford Aquaculture Seminar
Four Points by Sheraton, Meriden, CT

March 12th - March 14th
2006 International Boston Seafood Show
Boston Convention and Exposition Center

** Call (508) 375-6702 after January 1st to verify date, time, and place

Editorial Note

We recognize that there are concerns about the implementation of triploidy in local aquaculture. We emphasize that triploidy is a common agricultural practice (used with bananas, watermelons, etc.) and that triploids are not transgenic organisms. Additionally, triploidy can be induced without chemicals in native oysters (Crassostrea virginica). Triploid Pacific oysters, documented as having faster growth and better condition (e.g., no water bellies) have been in production on the US west coast for two decades and are currently sold in markets across the country. Local data on the growth and survival of native triploid oysters is currently lacking. SEMAC will not conduct any research or experiments which pose a problem for the local growers and which are not accepted by the shellfish constables and the Division of Marine Fisheries.

Happy Holiday Season to all!

SEMAC Tidings is published by the SouthEastern Massachusetts Aquaculture Center, an agency of Barnstable County funded through the Massachusetts Department of Agricultural Resources.

Offices are located at Cape Cod Cooperative Extension, Deeds and Probate Building, Barnstable Village, the County Farmhouse, Rt 6A Barnstable and at the Captain Charles Hurley Library of the Massachusetts Maritime Academy. William Burt—Editor