



SPRING

2010

NEWSLETTER

****SPRING OYSTER FAIRS****
MAY 1 & 15, 2010

Spring Oyster Fairs

The Tidewater Oyster Gardeners Association (TOGA) will conduct the 2010 Spring Oyster Fairs at two locations: **May 1**, the Middle Peninsula Fair will be at Christchurch School, 49 Seahorse Lane, Christchurch, VA 23031. The school is just east of Saluda off Route 33; on **May 15**, the Northern Neck Fair will be at St. Andrews Presbyterian Church, 435 East Church Street (VA 200), Kilmarnock, VA 22482.

The planned agenda is as follows:

8:30AM- Registration Begins, (Coffee and Danish at the Christchurch event only)

8:30 to 10:00AM - Vendors of oyster gardening equipment and supplies are invited to display their wares for sale

10:00 to 11:30AM - Program
Introduction: TOGA and Upcoming Events

Ken Kurkowski: Middle Peninsula Aquaculture: Where Spat Come From: Past, Present and Future

Brian Wood: TOGA Survival and Longevity Study

Lynton Land: Nutrient Trading and Spat Set

Vic Spain: A Welcome to New Oyster Gardeners

Notes from the Annual Meeting

More than seventy individuals attended the TOGA Annual Meeting on January 9 at VIMS. They were treated to two outstanding presentations. The first presentation by Russell Burke was a description of the Army Corps of Engineers funded project on oyster restoration in the Great Wicomico River. Russell discussed how the thicker substrate and the local conditions allowed the oysters to successfully (at least in the short term) begin the reef building process.

In the second presentation Tom Murray discussed the current status of the commercial oyster aquaculture industry and how the magnitude has dramatically increased within the past year or so.

Dr. Lynton Land and Dr. Ryan Carnegie summarized the status of the VMRC/VIMS/TOGA longevity study on Rappahannock wild oysters. Brian Wood invited participation in the new

TOGA Growth and Longevity Study on various available aquaculture oyster strains.

As of the meeting, TOGA paid membership was 443. We reported TOGA had coordinated the sale of 526,000 spat throughout 2009. The new officers of the Executive Board were elected as follows:

President –	Vic Spain
Vice President –	David Turney
Treasurer –	Steve Wann
Secretary –	Kathy Hoffman
Directors At-Large –	Brian Wood
	Bob Buckner
	Lynton Land
	Nick Ferriter

Of course, Jackie Partin (President Emeritus) and Chan Chandler (Past President) continue their invaluable work.

Apology- We sincerely apologize for the error on the dues notice sent out stating that the Annual Meeting would be on January 10 (instead of January 9). A number of members missed the meeting on Saturday and came on Sunday to a closed facility instead. We can understand how frustrating that was and will try very hard to avoid such an error in the future.

TOGA at Reedville Fishermen's Museum's Family Day 2010

TOGA was invited to join the exhibitors at the Reedville Fishermen's Museum (RFM) Family Day on Saturday, March 13 to celebrate animals of the Chesapeake Bay. There was an array of exhibits of animals in and around the Bay; including displays of the Menhaden Fisheries, Virginia Wildlife live show

presentations, and a Microscopic projection of live organisms from nearby Bay water. In addition there were the Bee Keepers Club of the Northern Neck, the Northern Neck Kennel Club and a Wildlife Conservation Officer helping attendees to identify animals who live in and around the Bay by a well touched display of pelts from beavers, otters, foxes and more (even skunks.)

TOGA paired up with local favorite oysterman, Dudley Bittlecomb, who demonstrated the art of tonging for oysters while displaying his oyster work boat at the RFM dock. This was timely as we at the TOGA exhibit were promoting oyster gardening for a cleaner Bay; working on the theme of the old versus new way of oystering. Kids of all ages enjoyed peering through the TOGA set up of a small aquarium filled with feeding oysters, barnacles, shrimp and a couple shy mud crabs.

Other attractions were the replica of John Smith's Scallop built by members of RFM and their Skipjack (Claud Somers) and Buy boat (Elva C) restored by the members of RFM, too.

We at TOGA want to thank RFM for the invite to Family Day and announce our partnership on the upcoming Fall Oyster Fair and Boat Show September 11, 2010 at the Museum. There will be speakers on many oyster related subjects, vendors selling oyster gardening supplies and oyster seed sales. Watch for details of the event in TOGA's Summer Newsletter. ...*Brian Wood MOG, Project Coordinator, awood45858@aol.com*

How TOGA is Helping to Make a Difference in Colonial Beach



The Colonial Beach Foundation has announced a major initiative to restore, preserve and protect the waterways and beaches at Colonial Beach, Virginia. A coalition called the Beach and Water Coalition (BWC) has been assembled to spearhead this effort. The coalition is composed of contributing supporters from the Virginia Cooperative Extension Service, the Chesapeake Bay Foundation, the Colonial Beach School System, TOGA and Project Colonial Beach, as well as many citizens of Colonial Beach. The mission of the BWC is to undertake many projects and launch programs to achieve success in meeting its key objectives, which are:

- To improve the water quality of Monroe Bay and the Potomac River
- To restore, preserve and protect the beaches at Colonial Beach
- To support the environmental health of the Colonial Beach community
- To bring together citizens and especially the youth of our town to preserve and protect our natural

resources and the beauty of our community.

The initial project of the BWC was launched on March 27, 2010 when Vic Spain and Dave Turney presented an empowering seminar on the benefits of water purification through oyster gardening. They discussed how oyster gardening can improve the water quality in our area; trained us on how to take care of the oysters; outlined the permitting requirements for growing oysters, and shared the Virginia Health Department regulations regarding the growing and harvesting of the oysters. Vic then assisted a group of citizens in the construction of flipfloats so they could begin oyster gardening this spring.

The seminar was held at the Parish Hall at St. Mary's Episcopal Church. Forty-five people participated in the seminar, and twelve constructed floats that will be new homes to oysters in Monroe Bay, Maddox Creek and the Potomac River.

The members of the BWC and the participants at the seminar want to express how much we appreciate the support of TOGA for this effort. In particular, we would like to commend Vic Spain on his dedication to the mission of TOGA and of the BWC.

We hope to produce many new oyster gardeners, and in turn, many new oysters, to help clean up the waters in and around Colonial Beach....*Natalie Kelly, Beach and Water Coalition, Colonial Beach & TOGA member*

TOGA's Oyster Growth and Longevity Study

We at TOGA are pleased to announce

the kick off of TOGA's Oyster Growth and Longevity Study this May with over thirty volunteers covering the Tidewater from as far North as Colonial Beach to South as sites on the York River. We are expecting the project study oysters will be available sometime in May. Then we will be contacting volunteers for the date, time and place for dispatching of the supplies, oysters and a brief training course on the study's requirements.

It's not too late to volunteer! We are still looking for more participants, especially from the James River and Creeks along the Potomac. Join us for this important and timely study and gain the added bonus of having oysters clean up your local waters.

...Brian Wood MOG, Project Coordinator, awood45858@aol.com

TOGA Members Invited to MOG Refresher Course

Since 2000 a Master Oyster Gardener Refresher Course has been held every other year for MOG graduates. This year the course is open to the TOGA membership as well. The course will be held in Watermen's Hall on the Gloucester Point campus of the Virginia Institute of Marine Science. The event will be on June 22 and run from about 9:30AM to 3:30PM. Refreshments and lunch will be included. Speakers for the day and their topics include:

Dr. Roger Mann - The realities of oyster restoration

Mr. Bob Fisher - Cownose ray projects

Dr. Stan Allen - Oyster breeding programs at VIMS

Mr. Tommy Leggett and Ms. Jackie

Harmon - CBF oyster restoration projects

MOG Roundtable - sharing of experiences and thoughts on future directions for TOGA

If you are interested in attending, please contact Mike Oesterling, 804-684-7165 or mike@vims.edu about pre-registration. We are requesting a \$10.00 donation to TOGA for your attendance.

Can Nutrient Trading Improve Bay Water Quality?

"Cap-and-trade" appears to have reduced sulfur emissions from power plants successfully and less expensively than was projected using mandated emission limits. The success is thought to be due to realistically low caps, which were strictly enforced, among a relatively small number of very similar emitters. Whether or not a "cap-and-trade" system for Bay nutrient pollution could be successful in a very much more complex system is debatable. Opposing views are expressed in the Forum of the February 2010 Bay Journal (www.BayJournal.com). Search the DEQ web site www.deq.state.va.us for "Trading Manual."

Oysters remove nitrogen and phosphorus from the water and sequester the nutrients in their tissues. In the case of nitrogen, a recent VCU/VaTech study found that harvesting one million cultivated market-sized oysters 3 inches long removes 291 pounds of nitrogen. Since it takes about 2 years for an oyster to grow to that size, about 146 (291 / 2) pounds of N are removed annually.

It is instructive to compare the removal of nitrogen from the water by oysters with

the nitrogen pollution caused by growing corn. The fertilization efficiency for grain is between 50% and 75% (see the February issue of Scientific American). Using actual data from 27 fields reported in the Virginia on-Farm Corn Test Plots for 2004 and 2005, the average fertilization rate was 162 pounds of nitrogen per acre, yielding 174 bushels of grain containing 116 pounds of nitrogen. Each acre thus released about 46 pounds of nitrogen to the environment (162 - 116) because only about 72% of the nitrogen in the fertilizer was sequestered in the grain. Accepting that about 20% of the 46 pounds of nitrogen released to the environment is converted to harmless nitrogen gas by the process of denitrification, each acre of corn caused about 36 pounds of nitrogen pollution (80% of 46 pounds).

One million oysters (about 5000 bushels) remove the nitrogen pollution caused by the growth of about 4 acres of corn (146 / 36). In Northumberland County, where I live, 14,000 acres of corn are grown annually. It would take 3.5 billion oysters (one million oysters *14,000 acres / 4), about 17 million bushels, to offset the nitrogen pollution from growing corn in Northumberland County. That number can be nearly doubled to account for the pollution caused by growing an additional 11,000 acres of wheat and barley.

Given these facts, you can reach your own conclusions as to whether we should support yet one more bureaucracy to address the Bay's water quality problem. Only by reducing the nitrogen and phosphorus pollution from agricultural fertilization and urban infrastructure (wastewater plants and storm water discharge) can Bay water quality be improved. The more oysters the better. They clarify the water and improve light

penetration so that sea grasses can become re-established, and diploid oysters from hatcheries hopefully increase the "strike" of disease-resistant animals. But let's grow oysters for the right reasons and not be deluded that oysters remove enough nutrients from the water to allow existing pollution by both agriculture and urban infrastructure to continue unchecked.

...Dr. Lynton S. Land, PO Box 539,
Ophelia VA 22530, JandL@nnwifi.com

Newsletter Distribution

Last year we asked how many would prefer to receive their Newsletter by email rather than snail mail. A few responded, but so few that we didn't feel it would generate significant savings. Also, we have learned that it is near impossible to keep current email addresses because folks just forget to tell us when they change their email. So, for those who wish electronic Newsletters, they are available for download at www.oystergardener.org. We will continue to mail Newsletters to our membership and some others who we feel may find them useful. We also put extra copies in public libraries. If you strongly object to receiving the Newsletter by mail, please let Vic Spain (vicspain@rocketmail.com) or Jackie Partin (hellneck@earthlink.net) know.

Communication

www.oystergardener.org

Your most up-to-date source of
TOGA information.

Our newsletter was paid for by
funds generated from the sale of
Chesapeake Bay license plates.

Outreach Schedule

Following is the TOGA outreach schedule (as of March 2010) for the first half of 2010. The entire schedule is posted at www.oystergardener.org. There are a few uncertain dates, and of course, new activities may develop. Some of the events require a number of volunteers to man the TOGA display in shifts, so volunteers are always welcome. Please contact Vic Spain at vicspain@rocketmail.com or Dave Turney at dn.turney@yahoo.com if you would like to add a new event or change/clarify the info. This schedule will be periodically updated. *Denotes an event conducted or sponsored by TOGA. All others are community events with TOGA participation.

<u>EVENT</u>	<u>DATE</u>	<u>LOCATION</u>	<u>COORDINATOR</u>
Master Gardener Seminar	3/27	White Stone	Nick Ferriter
Beach & Water Coalition Oyster Float Seminar	3/27	Colonial Beach	Vic Spain
Rapp Valley Garden Club	4/20	Prince George	Curt Bluefeld
Hampton Roads H&G Tour Dave Turney	4/21	Hampton Roads	Julian Cox,
Poquoson Earth Day	TBD (Apr)	Poquoson	Julian Cox
York Co. Waterways Alliance	4/24	York County	Vic Spain
MedPen Oyster Fair* Dave Turney	5/1	Christchurch School	Vic Spain,
Earth/Arbor Day Wesson, Vic Spain	5/20	Fort Monroe	Grady
Northern Neck Oyster Fair*	5/15	Kilmarnock	Lynton Land
Montessori School	TBD	Alexandria	Dave Turney
Eco-Expo	TBD (June)	Beaverdam Park Gloucester	Jim Renner
MOG Refresher Course* Jackie Partin,	6/22	VIMS	Sam Joplin, Mike
Oesterling, Vic Spain			
Gwynns Is. Festival	TBD (June)	Mathews	Jim Renner

Messages from Vendors

EASTFIELDS FARMS ... Oyster flip float kit \$42 [for 1000 oysters] , oyster bags and cages, cable ties and hooks , Shell bag netting by the roll or piece. As a distributor we can offer discount prices for large orders. 25 yrs experience. Located approx. 10 miles from Middle Peninsula Aquaculture.

Peter Perina, Mathews, VA 23109, 804-725-3948, eastfields@rivnet.net

OCEAN PRODUCTS will attend the Middle Peninsula Fair,
<http://www.opr-rope.com/> .

MIDDLE PENINSULA AQUACULTURE... Please see Spat Order Form below.

Need Spat? Take advantage of the “TOGA discount”. Ken Kurkowski is asking all gardeners who wish to purchase spat from Middle Peninsula Aquaculture to preorder by mail prior to April 28 for delivery at Christchurch School on May 1, and prior to May 11 for delivery to Kilmarnock on May 15. Please mail the following form in adequate time to insure that your spat is ready for pickup at Christchurch or Kilmarnock.



OYSTER SEED (SPAT) ORDER FORM

Name: _____

Address: _____

Phone: _____

_____ Bag(s) Low salinity Diploid @ \$25.00 ea (will spawn when mature)

_____ Bag(s) DeBy Diploid @ \$25.00 ea (will spawn when mature)

_____ Bag(s) Triploid @ \$30.00 ea (sterile, will not spawn)

(Each bag contains approximately 1,000 spat)

Will pick up at(check one): Christchurch _____ Kilmarnock _____

Order closing date: April 28, 2010 May 11, 2010

Make check payable to Middle Peninsula Aquaculture (MPA) or pay at pick up.

Mail order to: Middle Peninsula Aquaculture

P.O. Box 769

North, VA 23128