



Growing oysters for a cleaner Bay.....www.oystergardener.org

WINTER

NEWSLETTER

2015

Annual Meeting Slated for January 9, 2016 at VIMS

Preparations are underway for the 2016 Annual Meeting which will be held Saturday, January 9 from 2pm to 4pm. As in past years, the venue will be Watermen's Hall on the Virginia Institute of Marine Science (VIMS) campus at 1208 Great Road, Gloucester Point.

Karen Hudson has arranged for Va. Dept. of Health and Va. Marine Resources Commission representatives to be there to answer questions on growing area classifications, gardening permits etc. They will be available 1 hour prior to the meeting (1 – 2 pm).

Virginia Lieutenant Governor Ralph S. Northam has been invited to speak on the recently instituted Virginia Oyster Trail. (At the time of publication of this newsletter, his availability had not been confirmed.)

Presentations will also be made by Lydia Bienlien and Melissa Karp, VIMS graduate students currently supported by the TOGA endowment. Their vital research projects are described in separate articles in this newsletter. In addition, Terry Lewis, TOGA's vice president, will introduce the winner(s) of the Middle School Essay Contest to read the winning essay(s).

During the business portion of the agenda, Treasurer Charles Yarbrough will review TOGA's finances and present a top level budget for 2016. President Mike Sanders will briefly review 2015 accomplishments and present plans for next year.

The election of officers for 2016 will be conducted by Past President Brian Wood. The Nominating Committee has recommended re-election of the current slate of officers:

President:	Mike Sanders
Vice President:	Terry Lewis
Treasurer:	Charles Yarbrough
Secretary:	Jennifer Palazzo
At-Large Board Members:	Mark Erbe, Robert Morgan, Ben Smith, Vic Spain
Past President:	Brian Wood (not elected)
President Emeritus:	Jackie Partin (not elected)
VIMS Liaison:	Karen Hudson (not elected)

Additional candidates may be nominated by any TOGA member.

The meeting will be followed by a potluck reception which, in the past, has featured delicious oyster specialties prepared by the membership. Bragging rights for the best oyster stew are up for grabs again this year. If you would like to bring a dish or otherwise help with the refreshments, please contact Ann Wood at awood45858@aol.com.

Update on the TOGA/VIMS Fellowship Endowment (Honoring Jackie Partin and Mike Osterling)

It was April 2011 when we established the endowment with VIMS for the purpose of supporting graduate students enrolled in the School of Marine Science of the College of William and Mary researching oysters and shellfish and, more broadly, the ecological restoration of the Chesapeake Bay. Thanks to many donors, volunteer fund raisers and float builders (float sale proceeds are donated), the endowment is currently funded at over \$103,000, and including earnings the total has reached over \$113,000. In addition, it has now provided financial assistance to five graduate students who have been doing valuable research. Our first graduate student was PhD candidate Wenda Quidort, who worked on developing genetic techniques to detect and monitor adenoviruses in Chesapeake Bay waters and shellfish. She has since received her PHD and teaches biology, chemistry and physics at Hudson Valley Community College in Troy, NY. Our second recipient was Masters student Brendan Turley who is now working on his Master's Thesis on population genetics. His project involves tracking oyster restoration efforts in the Lafayette River using model predictions and genetic markers. PhD candidate Ann Arfken is finishing up her second year studying the role of oyster microbiomes in the nitrogen cycling processes of oyster reefs.

Our two most recent student recipients introduce themselves below. They plan to give us a brief description of their work at the Annual Meeting.

Hello TOGA members! My name is Lydia Bienlien and I am thrilled to have received a TOGA fellowship this year. I am happy to take the opportunity to tell you a bit about myself. I am in the third year of my Master's program at the Virginia Institute of Marine Science (VIMS) under the direction of Dr. Ryan Carnegie, who runs the Shellfish Pathology Laboratory. I was born in Fort Collins, Colorado, but moved around quite a bit when I was younger. I was homeschooled through high school and then went to college at Morningside College in Sioux City, Iowa. While there, I was on the varsity teams for both soccer and track and field and became an academic All-American. I graduated from Morningside summa cum laude and was awarded the Outstanding Graduate Award in Sciences, an award to the top graduating student of all the scientific departments. I double majored in biology and chemistry and, after being part of the Research Experience for Undergraduates (REU) program at VIMS the summer after my junior year, I knew I wanted to do marine research.

*My research at VIMS involves oysters, parasites, and bacteria. The oyster I am studying is, of course, *Crassostrea virginica*. *Perkinsus marinus* is a parasite of this oyster that causes the disease "dermo." This parasite thrives in moderate to high salinities and can be found in almost all oysters in those salinity ranges. *P. marinus* can and has killed many oysters in the Chesapeake Bay. So where do the bacteria come in? Two bacteria in particular, *Vibrio vulnificus* and *Vibrio parahaemolyticus*, cause food-borne illnesses associated with consumption of raw oysters in humans. These bacteria do not harm the oyster though. Despite the measures taken by the oyster industry to reduce the risk of *V. vulnificus* and *V. parahaemolyticus*, the reported number of people getting sick from oyster consumption has drastically increased in the last few years. One important question has been why some oysters carry high *Vibrio* burdens, which may translate to higher consumption risk, while others do not. My project investigates whether *P. marinus* in the oyster may be influencing tissue levels of *Vibrio*, since *P. marinus* is so prevalent and infects oysters at such high levels. In fact, both *P. marinus* and the bacteria can be found in the same tissues within the oyster, so it is reasonable to ask whether they are interact-*

ing. Answering this question could guide shellfish management in the Chesapeake Bay and also has relevance for the oyster industry in terms of breeding and selection of oyster lines. I am pleased that my research is interdisciplinary, touching on shellfish ecology and sanitation, oyster biology, parasitology, and microbiology, and I am so appreciative that TOGA is supporting me while I pursue this work.

Greetings Tidewater Oyster Gardeners! Hello, my name is Melissa Karp, and I am currently in my final year of my Master's degree at the Virginia Institute of Marine Science. I am working with my major advisor, Rochelle Seitz, and committee members Mark Luckenbach, John Brubaker, and Mary Fabrizio to study the role of restored oyster reefs as important habitat and feeding grounds for a diversity of Bay organisms.

A little background on myself: I grew up in a suburban town about 30 minutes outside of Philadelphia. I then moved up to Boston for my undergraduate education at Tufts University, where I got a B.S. in Biology and Environmental Science. During my time at Tufts I actively sought out opportunities to get involved in marine science research, and was selected to be a NOAA Hollings Scholar. As part of the scholarship I had the opportunity to work in a NOAA research lab during the summer between my junior and senior years. This research experience solidified my desire to pursue a career in marine science and continue on to graduate school. Outside of academics, I played on the varsity field hockey team all 4 years, and was lucky enough to end my career by being part of the DIII National Championship winning team!

A little about my research: My thesis research is entitled "Structural complexity and location affect the habitat value of restored oyster reefs: implications for restoration". The main goals of my research are to (1) determine the diversity and abundance of organisms that live on restored reefs in the Virginia portion of the Chesapeake Bay, and (2) examine how the structural complexity, or arrangement of the oyster shell material, and location of the reefs affect the abundance of those organisms and predator-prey interactions on the reefs. The hope is that this information will help guide resource managers in selecting areas for restoration and designing oyster restoration projects that will successfully provide quality habitat and increased productivity. To accomplish these goals I am conducting both field surveys of restored reefs throughout the Virginia portion of the Bay and controlled laboratory experiments.

Thanks to Jennifer Dillon, VIMS Associate Director of Development and TOGA member, for coordinating the input from VIMS and our graduate students above. If you would like to donate to the Endowment online, please go to www.oystergardener.org and click on **TOGA/VIMS Endowment** at the bottom of the home page. To donate by mail, please make checks out to "VIMS Foundation," noting "TOGA Fellowship Endowment (3506)" in the memo section, and mail to Virginia Institute of Marine Science Foundation, c/o The College of William and Mary, P.O. Box 1693, Williamsburg, VA 23187-8779. All donations are tax deductible. The TOGA Board wishes to express its gratitude to all who have supported this effort.

-- Vic Spain, MOG

Your best source of TOGA information is at

www.oystergardener.org

Enjoy Fall at Stratford Hall!



This year's festival (September 19 and 20) honored TOGA's past Vice President, the late Mike Todd, who successfully started TOGA's participation in this event. Thousands enjoyed wines from Virginia wineries and oysters from Chesapeake Bay and Tidewater growers. The oysters were steamed, roasted and on the half shell. There were other specialty foods, arts and crafts, kids activities, educational talks, and much more! As a direct result of this event, thousands of people have a better awareness of the joy and benefits of oyster gardening. TOGA is most proud of the volunteers who were essential to the success of this event.

Following is from **Laura Todd** who did a fabulous job representing TOGA in organizing the event.

*Whether it was setting up tables and chairs, adding tartar sauce, passing out wine glasses, consolidating oyster shell reclamation baskets, filling cocktail sauce containers, getting more raw oysters, passing out raw and cooked oysters, taking orders, explaining how to build an oyster cage or how to get started growing oysters or whatever else needed to be done, YOU, the TOGA volunteers, made it happen. Chef Pete even let one of our volunteers take over the Rappahannock River Oyster's grill while he was presenting in the education tent! We cannot adequately express in words the gratitude and appreciation that Mike Sanders and I want to extend to each of you. We had the largest volunteer turnout ever (45 over the 2 days) for any event and all were definitely needed during the peak periods. Special recognition is due to the latest MOG class for having 44% participation. The Stratford Hall management and staff repeatedly stopped both Mike and I to express their heartfelt appreciation and ask that we pass it on to you. The most common phrase, "**OMG we could NEVER do this without your amazing people!!!**"*

2015 Fall Oyster Float Building Workshop

A forecasted tropical storm with coastal flooding, for the first Saturday in October, caused this event to be postponed to Saturday, October 17. In the days preceding the postponed event TOGA used our website, Facebook page and email to inform our membership of the rescheduled event.

A beautiful fall day was enjoyed by all who attended this year's Oyster Float Building Workshop at the VIMS Hatchery. This year, as in the past, TOGA offered the Taylor Float, Flip Float and "Float Repair" station. Several vendors were there selling various accessory products and oyster spat/seed. Participants also had an opportunity to purchase TOGA caps and shirts. At the TOGA information tent MOGs chatted with several participants about oyster gardening and the TOGA VIMS Fellowship. The Chesapeake Bay License Plate applications were available.

This year's workshop resulted in 8 floats being built and over 110,000 oyster spat/seed being distributed by the vendors. The olden days of rubber hammers and 2x4s for bending wire are no more; TOGA's new Big Bendito made bending wire a quick and fun task for float builders and those watching. Thank you to the volunteers who helped make this workshop successful. Next year's Oyster Float Building Workshop is planned for the first Saturday in October.

TOGA volunteers put in a lot of effort this year building Prebuilt Floats and Devices to raise money for the TOGA VIMS Fellowship. TOGA sold over 54 Pre-Built Floats and Devices at this workshop; and when combined with the Spring Workshop Sales, over \$4,600 was raised for the TOGA VIMS Fellowship in 2015. Thank you to all for using the order form to insure that we had your desired float or device available for you at the workshop. - - Charles Yarbrough, MOG

6th Annual Virginia Half-Shell Oyster Tasting Event 2015

Fine, fair, end of October weather and fantastic oysters supplied by six Virginia oyster growers: Great Wicomico, Rappahannock, Chessie, Chapel Creek, Morattico Creek, and Mobjack Bay Oyster Companies, provided attendees a chance to taste the difference of oysters grown in various parts of the Bay. Kelsick Specialty Market (the delightful facility of the day's festivity) rounded out the taste experience with fine Spirits, delicious brats, oyster and Brunswick stew. Many TOGA raffle prizes were happily won by those present; including Vic Spain's portable shucking table, TOGA oyster cages, Ann Wood's Beach Glass art and Katie Bruneault's lovely Oyster Art. A great day was had by all.

This conception of TOGA's Oyster tasting events was created with the specific intention to introduce oyster lovers to the different tastes of Virginia's grown bivalves. And now oyster tasting has blossomed to numerous events all over the Tidewater. TOGA Oyster Tasting Event over the past six years has presented oyster tasting to over 1000 attendees. TOGA feels it accomplished a very important job introducing oyster lovers to Virginia oyster aquaculture and creating relationships with local oyster growers with opportunities of tasting their bivalves.



Special thanks to all our volunteers that came out on Halloween to help: our six oyster growers, Deborah Pratt plus sister Clementine for shucking demo/lessons including shucking competition and lastly but not least, Kelsick Specialty Market 's crew. Plus we need to mention Vic Spain's new fashion line of TOGA head dress. See picture of the Marsh Monster with Clementine and Deborah . Mission accomplished and job well done. Stay tuned for next year's planned OTE. -- Ann Wood

Middle School Students Encouraged to Write an Essay to Win Fabulous Prizes

The December 15th deadline for the second annual TOGA Middle School Essay contest is fast approaching, so please encourage any aspiring young students to get their pens out and send in an entry!

After a very successful initial Middle School Writing Contest, the Tidewater Oyster Gardeners Association (TOGA) is sponsoring the Second Annual Middle School Writing Competition, with three prizes of \$150, \$100, and \$50 for first, second and third places respectively. The theme of the essays is "Consider the Oyster"- a wide open category that must include an essay based on oysters.

The competition is open to all Virginia students in grades 6, 7 and 8. Home-schooled students are welcome to enter.

Prizes will also include gear from outdoor sports businesses and Supporting Members of TOGA. Winners will be announced and awards presented at the Tidewater Oyster Gardeners Association annual membership

meeting at the Virginia Institute of Marine Sciences on January 9, 2016. The winner's parents, a mentor, or a teacher may be guests of TOGA for the presentation event. The winning entries will be read by the students at the awards program during the Annual Meeting.

The three top winners will be published on the TOGA Web site, and may be published in other publications or web sites, including the Virginia Outdoor Writers Association website.

The article should be written in WORD format and attached to an e-mail. The submissions can be made between now and the December 15, 2015, deadline. For more information go to www.oystergardener.org.

"If you know of any aspiring young writers, please encourage them to enter the contest," said Brian Wood, Past President of TOGA. "This is a great way to involve young people in learning about oysters, and having their work published gives young writers the recognition that could lead to many wonderful careers," he said.

Virginia Oyster Trail Launched with Fanfare and Great Food at the Tides Inn

The Virginia Oyster Trail was launched by Governor Terry McAuliffe at the Tides Inn in Irvington, VA on November 9th. The Oyster Trail is a major tourism development project that will connect tourists to oyster purveyors, raw bars, restaurants, and oyster culture on the Northern Neck, Middle Peninsula, and the Eastern Shore.

Governor McAuliffe said he wants to make what oysters are to Virginia the same as what lobsters are to Maine. "Virginia produces the best oysters in the world, and as the oyster industry continues to grow we want it to be known that Virginia is the Oyster Capital of the East Coast," he said. Last year Virginia's oyster harvest increased more than 24%, surpassing 650,000 bushels. "We have seen yet another year of remarkable growth in our oyster industry. Our oysters are delicious, harvested sustainably, and provide good jobs for hard-working Virginia watermen. When it comes to oysters, Virginia is all in," said McAuliffe. This year's harvest was the highest since 1986. It is a 61% increase over the harvest of 2012.

The Oyster Trail features seven different oyster regions that produce oysters with distinct flavors, offering an oyster for every palate, according to Rita McClenny, President and CEO of the Virginia Tourism Corporation. "The Virginia Oyster Trail will allow travelers to experience the state in a new way by pairing oysters with other Virginia products and learning more about the area they come from. This experience will be a new reason for travelers to visit Virginia," she said.

After the ceremony there was plenty of great food and beverages, featuring the seven areas on the Oyster Trail. Thanks to Joanie Carter for including TOGA in the event. Joanie and Vice President Terry Lewis made numerous good contacts for the organization and had a chance to speak briefly with the Governor to acquaint him with the educational mission of TOGA. -- Terry Lewis, MOG

Update on the 2015 Master Oyster Gardener Class

The new MOG class has been moving along in targeting the 50 volunteer hours committed to when taking the class. New MOG's have been building floats, manning education booths and outreach activities. Doug

Schaefer has completed his hours and we have four with over half the hours completed. We have lost one member who has moved to Utah, although she is finding oyster fossils there. David Singletary and Lauren Broccoletti are assembling display boards and wire-bending equipment to promote oyster gardening on the Peninsula and Va. Beach area where we have not had an outreach coordinator. I think we have all hours up-to-date on their participation. -- David Singletary, MOG

Veteran MOGs, we still need you too. If you are a graduate MOG and a current TOGA member, we will assume you are an active MOG unless we hear different. So please update your status with Nancy Smith who is keeping track of all MOGs. You can contact her at nancy_smith@verizon.net , 804-435-8756. Please let Nancy know if you are still active as an MOG and make sure she has all of your contact info. Nancy will try to maintain the status of all MOGs and keep them informed of activities where they may be interested and needed. If you consider yourself “retired” as an MOG, then let her know that as well and we will respect your privacy.

TOGA Dues for 2016

TOGA membership dues of \$15 per family are due in January 2016. Non-profit organizations depend upon their membership to sustain the efforts of the group. Volunteers give of their time and others provide resources as they best can. In many ways the standard membership fee is a simple and easily understood base for the association to build upon.

TOGA truly appreciates that in today’s world every dollar counts and the dues are used in the most efficient manner to get as much out of each contribution. All members are more than welcome to provide their input when visiting the TOGA website or our monthly board meetings.

Some have paid their dues early, or may be VIPs not owing dues, but if the address label on this newsletter shows the year 2015 or earlier, your 2016 dues are due in January 2016. While it's on your mind, please fill out the form on the following page and mail it in soon. Or go to <http://www.oystergardener.org/#!join-toga/c1rtd> and update your membership online. For questions about your membership, please contact Vic Spain at vicspain@rocketmail.com or 804 642-6764. -- Vic Spain, MOG



TOGA Cake by Hai Edison

Please Share this TOGA Membership Form

You are invited to become a member of the Tidewater Oyster Gardeners Association, a group of people interested in growing oysters for fun, for delicious food, and to help restore the health of the Chesapeake Bay. You may also use this to renew your membership.

Members...

- Receive newsletters with the latest oyster gardening information
- Participate in educational events sponsored by TOGA
- Learn about innovations in oyster gardening techniques
- Benefit from the expertise of hundreds of others interested in growing oysters

Membership is \$15.00 for one year, individual or family. This ensures that you will receive regular newsletters and notice of upcoming events.

NOTES

- Annual membership has increased to \$15 for 2015 and beyond, as approved by the membership.
- The number by your name on this newsletter address block indicates the latest year for which your dues have been paid.

Please fill out membership form below and send to **TOGA, PO Box 2463, Gloucester, VA 23061** with a check for \$15 membership dues, payable to TOGA. If you want, you can make an additional donation to support TOGA's educational activities. You can include it in the same check.

TOGA Membership

Check New member or Renewal Additional Donation

Name _____

Address _____

City, State, and Zip _____

Phone _____

Email _____

Body of water where oysters will be grown

Happy Holidays from all of us at TOGA



Our newsletter was paid for by funds generated from the sale of Chesapeake Bay license plates. These funds also help pay for the Spring Fairs and the MOG course.

See <http://dmv.virginia.gov/exec/vehicle/splates/info.asp?idnm=CB>

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