



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

WINTER

NEWSLETTER

2014

TOGA's Annual Meeting - January 24, 2015

The TOGA Annual Meeting will be held Saturday, January 24, 2015, at McHugh Auditorium in Watermen's Hall on the VIMS Gloucester Point Campus. ***The main meeting and refreshments*** will be from ***2:00 pm to 4:30 pm***. ***Before the meeting, starting at 1:00 pm***, there will be two stations, one staffed by the Virginia Marine Resources Commission (VMRC) ***to provide members with the status of their Oyster Gardening Permit and to renew if needed*** (required every five years); and one staffed by the Virginia Department of Health ***to provide members with the current growing area classification of their body of water*** (whether or not oysters are safe to consume).

The agenda for the main meeting is as follows:

Business portion: Treasurer's report and planned 2015 budget, elections for the 2015 Executive Board, a summary of 2014 and planned 2015 events, a state of TOGA summary, proposed changes to TOGA's by-laws, and awards.

Educational program: Our keynote speaker is Dr. Mark Luckenbach. Mark is a professor of Marine Science and the Associate Dean for Research and Advisory Service at the Virginia Institute of Marine Science. His talk is entitled, "Is there a role for oysters in Chesapeake Bay clean-up?"

The second presentation is by Ann Arfken, the 3rd VIMS Graduate Student Recipient of the VIMS Endowment. Ann is currently finishing up her second year as a PhD student at the Virginia Institute of Marine Science. Ann will brief us on her studies: "Implications of *Crassostrea virginica* microbiomes in the oyster reef nitrogen cycle".

TOGA's youth writing contest: At the conclusion of the educational program, board member and writing contest organizer Terry Lewis will announce the winners of TOGA's 1st annual Youth Writing Contest.

Refreshments and good conversation: Last year we added to our buffet several oyster dishes made by TOGA members. This was enjoyed by all, so ***we are again asking for your help by bringing a favorite oyster or other side dish***. We will need the usual vegetable and fruit trays, cheese and crackers, cookies and drinks. Ann Wood and Laura Todd are organizing this, so please call them at 703-217-4366 (Ann) or 919-606-2159 (Laura), and let them know what you will be able to bring.

Section 2: Elections

a. Currently: Elections will be conducted at the last meeting of the year.

a. Proposed: Elections will be conducted at the annual meeting.

Section 4: Currently: The Executive Board shall consist of the elected officers of the Association, the immediate Past President of the Association, and four members-at-large.

Section 4: Proposed: The Executive Board shall consist of the elected officers of the Association, the Past President of the Association, the President Emeritus, and four members-at-large.

a. Currently: A majority of the membership of the Executive Board shall constitute a quorum.

a. Proposed: A majority of the membership of the Executive Board shall constitute a quorum, including those participating by electronic means (teleconferencing, videoconferencing, etc.), when utilized.

b. Currently: All action and business conducted by the Executive Board shall be by a majority vote of Executive Board members present.

b. Proposed: All action and business conducted by the Executive Board shall be by a majority vote of the Executive Board members present. Board members may participate in person or by electronic means (teleconferencing, videoconferencing, etc.), when utilized.

-- Mike Todd, MOG

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 \$93,000 (donation level not including investment earnings). A short blurb from Jennifer Dillon, VIMS Associate Director of Development, TOGA member and good friend to TOGA folks- "You all have done a phenomenal job continuing the momentum on this endowment and it has truly added to our program by having these resources available to support students ..."

So far, the endowment has helped three students, all of whom have met (or plan to meet) with TOGA folks and described their vital and interesting work at VIMS. 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 gone on to teach Biology, Chemistry and Physics at Hudson Valley Community College in Troy, NY. Our second recipient is Masters student Brendan Turley who obtained his Bachelor's of Science from the University of Miami, Florida in 2006 with a double major in Marine Science/Biology and a minor in chemistry. After graduating, he worked as an aquaculture technician at the Rosentiel School of Marine and Atmospheric Science's Aplysia Facility for a year, and then spent six years as a NOAA-NMFS fisheries observer deployed on commercial fishing vessels in the Gulf of Mexico and South Atlantic. Brendan is

now working on his Master's Thesis focused on population genetics. His project involves tracking oyster restoration efforts in the Lafayette River using model predictions and genetic markers. Our most recent recipient is PhD candidate Ann Arfken. See her article below.

If you would like to donate on-line, 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 Endowment” 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 their gratitude to all who have supported this effort.

-- Vic Spain, MOG

Greetings Tidewater Oyster Growers!



My name is Ann Arfken. I am currently finishing up my second year as a PhD student at the Virginia Institute of Marine Science. I am working with my advisor, Bongkeun Song, and committee members, Lisa Kellogg, Ryan Carnegie, Iris Anderson, and Michael Piehler, to study the role of oyster microbiomes in the nitrogen cycling processes of oyster reefs.

A little about me: I was born and raised in Indiana, and attended Miami University of Ohio for my undergraduate education. After receiving a BS in Zoology, I made a little detour and decided to attend Wake Forest School of Law, where I graduated with my JD. After a little less than two years as an attorney in North Carolina, I jumped at the chance to return to the lab and follow my passion of scientific research. I attended the University of North Carolina at Wilmington and graduated with an MS in Marine Biology. Realizing I was not quite done with my academic pursuits, I decided to continue on and work towards a PhD in Marine Science at VIMS. Even though graduate school can be quite stressful at times, I really love what I do and I am always looking forward to answering the next question my research inspires!

A little about my research: My dissertation research is entitled “Implications of *Crassostrea virginica* microbiomes in the oyster reef nitrogen cycle”. The aims of my research are to elucidate the community structure of microbes found in the gills, guts, and shells of oysters, and to examine the function of these microbial communities in the nitrogen cycle of oyster reefs. One of my goals is to determine whether a stable, ‘core’ microbiome exists in oyster guts and gills, and to assess what a healthy oyster microbiome looks like. Additionally, I am interested in understanding what effects seasonality, disease, and geography have on these microbial communities. Another important goal is to link different oyster microbiome structures to community function in the microbial nitrogen cycling processes. Certain microbes are able to remove nitrogen from estuaries by converting nitrogen species in the water and sediments to nitrogen gas. By determining the nature of different microbiomes in oysters, we will be better able to understand how oyster microbes influence the nitrogen cycle in an estuary. Combined, these goals will provide a greater insight into the health of oysters, and a better understanding of the positive impacts oysters have on reducing nutrients in the Chesapeake Bay.

– Ann Arfken

2014 Oyster Float Building Workshop

Beautiful weather was enjoyed by all who attended this year’s September 13th Oyster Float Building Workshop at the VIMS Hatchery. This year, as in the past, TOGA offered the standard 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 Caps and T-Shirts with the TOGA logo. At the TOGA information tent MOGs chatted with several participants about oyster gardening and the VIMS Fellowship Endowment. The Chesapeake Bay License Plate applications were available.

This year’s workshop resulted in 15 floats being built and over 95,000 oyster spat/seed being distributed by the vendors. The float building participants were seen helping each other build floats at the various workstations. Thank you to the volunteers who helped make this workshop successful. Next year’s Oyster Float Building Workshop is being planned for early October 2015.

TOGA sold over 52 Pre-Built Floats and Devices at the workshop; which will result in a donation of over \$2,000 to the VIMS Fellowship Endowment. Our volunteers put in a lot of effort through August and September building these floats and devices. 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



Oysters and wine were in high demand at this year’s Stratford Hall Wine & Oyster Festival. This popular event took place on a perfect fall weekend in September on the Oval at Stratford Hall in Westmoreland County. The 5000 people that attended the festival sampled oysters prepared a variety of ways, including raw on the half shell, fried, steamed and roasted. Nearly 30,000 oysters were consumed at the Festival, with their shells recycled for reef restoration in the Bay. Five regional oyster growers and 13 wineries came together with 50 artisan vendors and 11 food vendors to create a one of a kind atmosphere featuring oysters.

A special thanks goes to our 39 TOGA volunteers. In addition to educating many visitors at our TOGA booth, they assisted oyster growers and helped Stratford Hall in their ticketing process. TOGA also coordinated activities in a large education tent. This year’s schedule featured an oyster shucking demonstration by world champion Deborah Pratt, cooking demonstrations from local chefs, and an education seminar on the oyster industry by Dr. Jim Wesson from VMRC.

As a direct result of this event, thousands of people have a better awareness of the joy and benefits of oyster gardening. Planning for the 2015 Festival is already underway, and TOGA will once again play a prominent role.

-- Mike Todd, MOG

5th Annual Virginia Half Shell Tasting Event at Kelsick Market

Even a Nor'easter could not dampen the spirits of the attendees at the November 1st, 2014 TOGA's 5th annual Oyster Tasting Event (OTE) on Main Street Gloucester, VA. With the usual wonderful cooperation from Kelsick Market folks and the added warmth of the next door Puller Center floor space, what might have been a drizzly dreary day turned into a cozy and friendly gathering of over 160 happy oyster lovers.

We were so lucky to have these six oyster growers this year: Chapel Creek Oysters, Chessie Oyster Company, Great Wicomico Oyster Company, Mobjack Bay Seafood, Rappahannock River Oyster Company (with The Rappahannocks and Old Salts), and Ward Oyster Company. They presented the tasters with many variations of the Bay's best bivalves, and participants had fun filling out their oyster tasting guide cards and comparing notes with others around them. Some used their notes to remember from which place they wanted to buy extra oysters to either consume on the spot or bring home and enjoy later. This separate selling opportunity was a new feature in this year's OTE, and from the positive comments received, it will become a standard.

As in past OTE's it was our good fortune to have Deborah Pratt and her sister Clementine Macon on hand for entertaining shucking demonstrations, and also helping out at growers' booths. They are fast and the crowd loved the show!

Beth and her crew at Kelsick Market had some warm and delicious comfort foods ready to take the chill off those coming in. The Kelsick Market folks also provided the well-attended beer & wine concession along with all table condiments that added to the oyster tasting experience.

And the skilled labors of TOGA member Ken Hammond and sons led to super table creations and easy placement for the best seating areas we've ever had. They made the set-up and tear-down efforts go so smoothly, and that always is so much appreciated.

Additional special thanks can be given to Karen Hudson of VIMS for her services, Jackie Partin, TOGA Founder, for her guidance and Jeff Odell, TOGA volunteer organizer, for getting things together for this successful event.

The fundraiser raffle table was very popular this year, with the TOGA shirts, hats, apron, and unique oyster shucking block & knife sets pulling in many to say "Hey, I'd like that!" Along with the donated beach glass crafts and jewelry (by Ann Wood) that many were so pleased to take home. Jackie's grandson won the big oyster themed mobile, which he proudly showed to everyone in the hall. Brenda Sanders is our raffle ticket sales queen, and next year she shall have a tiara to befit her position.

All the hard efforts of the many volunteers deserve recognition. Thank you to the shuckers, set-up & tear-down crews, booth managers, and ticket sales helpers (aided by PayPal use). To those who stayed to the end for cleanup support, the Puller Center lady said the place was left way nicer than she could have imagined, and we are more than welcome to come back again.

We are looking forward to the 6th Annual Oyster Tasting Event. If you have any comments or suggestions, please go to the TOGA website, www.oystergardener.org and send us a line.

-- Ann Wood

TOGA Lottsburg

TOGA held its annual fall Northern Neck event in Lottsburg on Sat. October 18. It was a beautiful day and happened to correspond with a fair being held by Ace Hardware next door, so we probably got some additional attendance. That said, attendance was slim (about 30) and seed sales were slow. About 20 thousand small sterile oysters (triploids) spawned this year and three thousand larger fertile oysters spawned last year were sold. Fertile oysters from 2013 were all that were available because hatcheries did not produce many fertile larvae in 2014.

Karen Hudson, Shellfish Aquaculture Extension Specialist from the Virginia Institute of Marine Science, gave a presentation about oyster hatcheries: the process (broodstock conditioning, algal production and larval culture), industry trends, and current VIMS research in support of industry hatcheries. Hatcheries are the basis of a value added chain from shellfish farm to market. The economic activity associated with Virginia's shellfish aquaculture industry is over \$81 million- 76% from hard clam culture and 24% from oyster culture. Karen stressed that reliable hatchery production is the key to expanding the aquaculture industry, so we need to understand the cause(s) of production problems. She cautioned not to assume all hatchery problems are linked to the same cause. Water quality is the common theme that can have damaging effects on production but each hatchery site has very different environmental parameters and local drivers of water quality. VIMS is currently involved in three projects focused on shellfish hatchery support – a water quality monitoring program tracking a wide variety of parameters at commercial hatchery sites, harmful algal bloom (HAB) research keeping watch on emerging nasty species and evaluating the potential larval oyster mortality from exposure to residue associated with Gwynn's Island Bridge repainting. TOGA members take note -- you are partners in the HAB research by providing an expansive geographic network for reporting algal blooms.

Lynton Land gave a brief "How to Garden" presentation at the end of the program (posted on the TOGA web site www.oystergardener.org), describing the pros and cons of the kinds of gear available to gardeners, as well as how to choose the size and kind of seed oysters to grow.

-- Lynton Land

Equipment Corner

Bender Blues -- Has your bender come unhinged? The benders have saved float builders countless



hours in folding the mesh wire into cages. However, after a number of cycles, the 4 inch strap hinges we were using would deform and break. We are now using a 3 inch door hinge, and have increased the number of hinges (3 for a 42" bender, 4 for a 50" bender). The photo shows a recently-fabricated 50 inch bender. The barrel of the door hinge is stronger, but still small enough to allow the correct geometry. If you purchased an older version from TOGA, we would be happy to retrofit it for you at no charge. Please contact Vic Spain at

vicspain@rocketmail.com.

Flip Float Lift- A new set of instructions for the lift is on our Devices and Designs page (http://media.wix.com/ugd/9d48db_6d159dc2c0174a4aa5fb3fb990634c07.pdf). There was one incident where the bottom braces collapsed with an overloaded flip float. Not likely to be a problem, but I have since started reinforcing these braces with some metal straps. Also, some might prefer to use the strong crab pot line we get from Ocean Products on the winch instead of the strap that comes with the winch. That's an easy change if you have the line. We will get you some if you need it. Please contact Vic Spain at vicspain@rocketmail.com. -- Vic Spain, MOG

MailChimp -- In the past year we have tried to improve our communications with members. Lots of things happen between newsletters so we wanted a faster way to get info out to you. Have you ever tried to email 600 folks with yahoo mail or gmail? We found it very difficult. As you may know, there is bad free stuff and good free stuff on the internet. MailChimp is one of the good guys.

As long as our membership does not rise above 2000, (we thought the current 600 was pretty good), we can use MailChimp service for free. Because we are continually getting new members and updating membership information, we update the MailChimp list almost everytime we send out an email to the membership. It's fairly easy once you get the hang of it. MailChimp allows us to save templates with our logo, provides feedback if there are syntax errors in our mail list, tells us how many messages bounce and how many opened the email. Good info to have. So far it looks like about 70% of you open email from TOGA.

We do not intend to inundate you with email or solicitations. We just want you to know about TOGA happenings that we think many of you are interested in. So it is important that we have your current email address, and we know from the bounces that quite a few of our email addresses are out of date. If you are a current member and have an email address but have not been getting our MailChimp emails, please let us know by emailing Vic Spain <vicspain@rocketmail.com> and Ann Williams <annorganizer@yahoo.com>. Also, when you renew your membership, be sure to give us all your contact information, because frequently it has changed and we have no way of knowing.

Learn more about MailChimp at <http://mailchimp.com/about/>

-- Vic Spain, MOG

2nd Annual Middle School Writing Contest Announced to Encourage Students to Learn About Oysters

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 Science in January, 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.

"If you know of any aspiring young writers, please encourage them to enter the contest," said Brian Wood, 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.

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.

-- Terry Lewis, MOG

TOGA Members Asked to Help

We would like to make the winners of our Middle School Writing Contest feel very special when they receive their awards at the annual meeting on January 24th. In our literature we mentioned their prize money, but also said they would receive items from members and oyster related businesses. We need your help in providing some of those items.

If you have an oyster related T-shirt, ball cap, spare shucking knife, or good oyster book you've already lightly used, it would make a great addition to our prizes to these youngsters. Or maybe you are acquainted with the owners/managers of an oyster related business, such as a grower, restaurant, or one of the many festivals we attend. They might have an item or two they would like to donate, including caps and shirts, or a gift certificate for free admission, a meal, or even a tour of their facility. I'm sure we could mention their generous donation when we make the awards to the students.

This organization has a very large membership, and with just a little help from you, we can make this a truly special event for these aspiring and talented students. If you have any questions, or have a donation, please contact Terry Lewis at lewistmn@msn.com or call 804-693-2687.

-- Terry Lewis, MOG

List of Upcoming TOGA Events

TOGA participated or sponsored over 40 events in 2014 and we are expecting another busy year in 2015. Some of our key events are listed below, but we encourage you to regularly check the calendar on the TOGA website www.oystergardener.org for upcoming events.

Northern Neck Float Workshop, Tentative date late April
Historic Garden Week (Hampton – Newport News) April 22
Spring Middle Peninsula Oyster Fair, Tentative date May
Spring Northern Neck Oyster Fair – Tentative date June 6

RivahFest, Tappahannock, VA, June
MOG Course, 2 days in June or July
Stratford Hall Wine and Oyster Festival, September 19 and 20
TOGA Float Workshop, Tentative date early October
Half Shell Oyster Tasting, Tentative date early November

-- Mike Todd, MOG

Upcoming 2015 TOGA membership dues increase

As presented to the attendees of the Annual TOGA membership meeting in January 2014, the forecasted budget shortfalls led to the need of increasing the yearly membership dues from \$10 to \$15. It was voted upon to initiate this increase in the 2015 calendar year. At all the 2014 TOGA event booths we provided new and renewed members with this clarification that dues for 2014 were \$10 and would become \$15 in 2015.

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. So it is a critically important feature in any group of likeminded individuals.

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.

If the address label on this newsletter shows the year 2014 or earlier, your 2015 dues are due in January 2015. While it's on your mind, please fill out the form on the following page and mail it in soon.



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>

*Your best source of TOGA information is at
www.oystergardener.org*



**Happy Holidays from all of us
at TOGA**

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 \$15.00 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
