



## Growing oysters for a cleaner Bay

### Winter 2020

<http://www.oystergardener.org/>

### Virtual Annual Meeting – January 9, 2021 from 2:00 -3:30 pm

TOGA is moving the Annual Meeting to a virtual platform in anticipation that January life won't yet be back to normal. We'll miss seeing



you all in person (and the amazing spread of food) but we sincerely hope you'll join us virtually. Celia Cackowski (VIMS Marine Advisory Program) and I will be teaming up to facilitate the meeting and we've

condensed it down to an hour and a half, including stretch breaks, to reduce screen-fatigue. Advanced registration will be required and we are here to help those not familiar with videoconferencing.

To streamline the event, pre-recorded content will be made available to registered guests to view on their own. For example, the middle-school writing contest winners and awards will be available to view at your leisure so we don't miss out on the contributions of these talented young people. The meeting itself will include two main sections - TOGA business and educational content. TOGA business includes the treasurer's report, the annual event roundup, 2021 goals, and the election of officers. The educational content will feature Alexandria "Alex" Marquardt, the 2021 PhD TOGA endowment student and another guest speaker to be determined.



Here's the link to Register in advance for this meeting:

[https://cwm.zoom.us/meeting/register/tJ0vf\\_uqqTsqHNU-AIALp0ReIB1yHtopSJGZ](https://cwm.zoom.us/meeting/register/tJ0vf_uqqTsqHNU-AIALp0ReIB1yHtopSJGZ)

After registering, you will receive a confirmation email containing information about joining the meeting.

--Karen Hudson, VIMS Marine Advisory Program & TOGA-VIMS liaison

### Annual Meeting issues to be voted on by the TOGA membership

Following are proposals by the 2020 Board of Directors to amend the bylaws, to add a new President Emeritus position, to elect the 2021 Board of Directors, and to elect a new President Emeritus.

#### TIDEWATER OYSTER GARDENERS ASSOCIATION BY-LAWS AMMENDMENT

#### ARTICLE III: ORGANIZATION, ELECTION AND DUTIES

*old*

Section 4: The Executive Board shall consist of the elected officers of the Association, the Past President of the Association, the President Emeritus, the President

Emeritus/Engineer, the President Emeritus/Education, and four members -at-large. All of these positions will have full voting privileges.

*new*

Section 4: The Executive Board shall consist of the elected officers of the Association, the Past President of the Association, the President Emeritus, the President Emeritus/Engineer, the President Emeritus/Education, the President Emeritus/Youth Participation, and four members -at-large. All of these positions will have full voting privileges.

### **The proposed TOGA slate of officers and Board Members for 2021:**

President - Doug Schaefer  
Vice President - Sue Stiff  
Treasurer - Brian Ingram  
Secretary - Carl Zulick  
Past President - Terry Lewis

Members at Large:

Ken Hammond  
Ken Paugh  
Lou Castagnola  
Russell Mait

TOGA members are asked to vote to make Mike Sanders President Emeritus.

### **Introducing the 2020 Recipient of the TOGA/VIMS Student Fellowship Endowment, Alex Marquardt**

Hello TOGA members! Thank you all so much for your support of graduate students through the TOGA Fellowship! I'm Alex Marquardt, a new PhD student at VIMS. I completed my Master's degree at California Polytechnic State University in May 2020. My Masters research focused on the population status, reproduction, and growth of Pismo clams in California. Shellfisheries are near and dear to my heart.

I've worked for state agencies as a technician and biologist on shellfish monitoring programs, led shellfish research, and even worked at a local oyster farm on the west coast.



For my PhD research at VIMS, I will be investigating oyster life history and population dynamics in the Chesapeake Bay. One focus of my research is understanding the growth and mortality of oysters in their first 3-4 months after settling. Last summer, I initiated a project at two sites in the James River to monitor spat settlement throughout the summer and estimate growth.

This semester I've spent many hours at the microscope counting spat, taking photographs, and measuring individual spat. With this information, I will be able to generate a growth curve and estimate mortality in those first, critical months after settlement. I hope to identify optimal time windows or conditions that improve settlement success and survival. Next summer, I plan to expand this study to two additional rivers to see how oyster settlement, growth, and survival vary across space and time.

I am excited to share more about my research with you at the annual TOGA meeting in January! I am deeply grateful to be a recipient of the TOGA fellowship for the 2020-2021 academic year. Thank you all for your support!

*This ends the announcement of the virtual Annual Meeting. Hope to see you there.*

## TOGA Recognized in the VIMS Impact Report covering 2015 - 2020

Following is an excerpt from Dr. Wells' Introduction to the Impact Report.

*Whether you are a supporter who shares our passion for the water, a partner organization or agency with a stake in our mission, an alum sharing your leadership and learning with the world, one of the dedicated individuals who work, volunteer, and study here, or one of the visionary Foundation Board members elevating VIMS through your service and generosity, you have a share in our success.*

*Thank you. We have accomplished much over these five years and we stand poised to achieve much more.*

*And so, we go.*

*John T. Wells  
Director, Virginia Institute of Marine Science  
Dean, William & Mary School of Marine Science*

TOGA is listed in several places in the document including:

Page 31 "Attracting Exceptional Talent" – the



TOGA fellowship is listed second on the list. Page 57 – TOGA is listed in the section with supporters that contributed \$10,000 - \$49,000 during the campaign. Page 74 – TOGA is

listed in the President's Council 2016, 2019, 2020.

Page 75 – TOGA is listed in the Dean's Circle giving society 2015 and 2018.

If you would like more information on the Impact Report, see [https://www.vims.edu/about/leadership\\_admin/dean/annual\\_reports/index.php](https://www.vims.edu/about/leadership_admin/dean/annual_reports/index.php).

Thanks to Susan Maples, VIMS Director of Development, for helping to sort through the large report.

--Vic Spain, MOG

## Virtual Success: Welcome a new class of Master Oyster Gardeners!

This year has brought its share of challenges but I'm happy to report a silver lining in the clouds – the first ever virtual Master Oyster Gardener course. At first, it seemed an impossible task to take a two-day, in-person class and transition it online. Fears of



technology glitches, Q & A chaos, and a lack of connectivity between participants ran through my head. Boy, was I wrong! Together with Celia Cackowski, my amazing colleague, Vic Spain and other experienced MOGs we pulled this off without a hitch.

I'm happy to report 2020 delivered more interest than ever before - to the point we reluctantly had to turn people away. (Keep in mind we had to cancel the 2019 class due to lack of interest.) Rather than two full Saturday's in a classroom at VIMS, each subject was broken out to an hour module delivered via Zoom videoconferencing platform. The course handouts, videos, and communication were shared using Google Classroom which essentially served as an "electronic notebook", adding considerable value beyond what we can provide in print.

The drawback, of course, was the lack of hands-on activities, however lessons learned from this “forced” virtual experience will improve the MOG course of the future.

The 2020 graduating MOG class is an impressive group of twenty-six gardeners representing seven counties and a coastal reach from the Potomac to the Poquoson River. As a reminder, the MOG course is meant to “train the trainers”. We take oyster gardeners (1-10+ years’ experience) and provide the foundation needed in a variety of subjects to produce a new “crop” of highly trained outreach volunteers. As with each class, the variety of gardening and professional experience among the participants expands knowledge beyond the confines of the prepared materials.

All in all, this virtual course has inspired us to think differently about future courses and using technology to promote more geographic participation. We are excited for the contribution of this new MOG cohort and we hope there are more TOGA members out there ready to join this amazing and diverse MOG community and increase oysters in the Bay, one creek at a time.

**Congratulations to the graduates!**

- |                      |                   |                 |
|----------------------|-------------------|-----------------|
| Mike Ballato         | Mark Hamilton     | Susan Shelton   |
| Mark Besore          | Kenneth Hammond*  | Vic Spain*      |
| Karen Bracken-Penley | Richard Henshaw   | Sue Stiff       |
| Walter Bundy III     | Kenneth Highsmith | Robert Weller   |
| Lou Castagnola*      | Mary Ann Lewis    | Valynn Westfall |
| Christine Conley     | Bill Sandel       | Miles Wong      |
| Russell Mait         | Stephen Saunders  | Leigh Westfall  |
| John P. Davis        | Douglas Schaefer* | Brian Wood*     |
| Kim DiGangi-Cushing  | John Shelton      | Carl Zulick     |
| Camille Grabb        | Richard Siciliano |                 |
- \*Second Timers

--Karen Hudson, VIMS Marine Advisory Program & TOGA-VIMS liaison

**Official Advice on Oyster Gardening near Treated Lumber**

*This subject came up at the recent MOG class. It has come up before but not resolved.*  
Here is the official word on the treated lumber question from Todd Egerton, VDH DSS:

Happy Holidays! After working with the rest of DSS & WH folks and consulting with our environmental toxicologists within VDH, below is the messaging we're hoping you can pass on to the oyster gardeners in answer to their questions about treated lumber. While it seems like there is not a significant concern except in possible extraordinary circumstances, it includes some abundance-of-caution best management practices for gardeners. If they have additional questions, myself and our growing area manager will do our best to answer them.

Thanks again, Todd

---

"We are not aware of any health complaints or illness reports associated with the consumption of oysters that have been grown in the proximity of treated lumber piers. Of the chemicals involved in pressure/salt treated lumber, inorganic arsenic, which is toxic, is rapidly converted to the low-toxicity organic arsenic by marine organisms, including shellfish. Copper, which can accumulate in



shellfish and finfish, has not been identified as a health concern for human consumption, except in extraordinary circumstances (ex: no flushing timber lined canals, industrial inputs). VDH DSS&WH does not currently sample for these chemicals in oyster meats. Creosote, and other PAH containing compounds are potential carcinogens, and have resulted in consumption advisory recommendations in areas with a legacy of industrial contamination.

While the National Shellfish Sanitation Program and VDH:DSS&WH does not address treated marine lumber as a human health

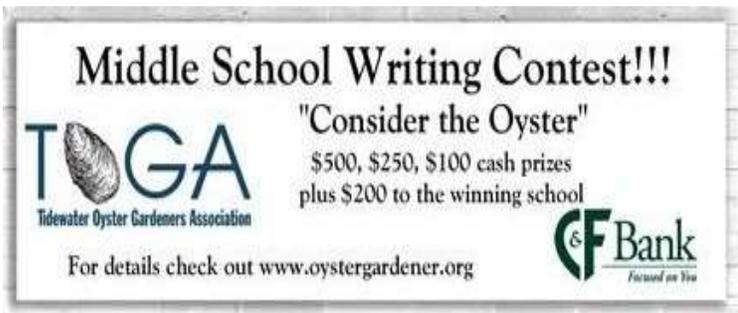
hazard, if there is a concern about these compounds, out of an abundance of caution, the following general best management practices could be followed: ensure the growing area is in approved waters if the product is to be consumed; use food grade, inert substances for the construction of all grow out equipment and other surfaces that will contact items to be consumed; avoid consuming shellfish grown in marinas and other areas where there boats are moored (which can have bacterial, petroleum, anti-fouling paint, and other concerns) or in areas of very recent construction where leaching may be greater from freshly applied treatments."

-- Todd Egerton, VDH DSS

### **Tidewater Oyster Gardeners Association and C&F Bank Opens 2021 Middle School Writing Contest Continuing with Increased Prize Money**

After seven very successful Middle School Writing Contests, the Tidewater Oyster Gardeners Association (TOGA) and C&F Bank are continuing the writing competition with prizes of \$500, \$250, and \$100 for the top three essays. The theme of the essays is "Consider the Oyster"- a wide open category that must include an essay based on oysters.

Additionally, the school of the first-place entry will be awarded \$200 to spend on educational aids. The competition is open to all Virginia students in grades 6, 7 and 8. Home-schooled students are welcome to enter.



"This continued increase in prize money indicates the commitment TOGA members have to emphasize education for our young people," said Terry Lewis, President of TOGA.

"Reaching young people at an early age is very important to start a lifelong interest in ecology and the importance of the health of the Bay," he said.

Depending on the pandemic situation, winners will be announced and awards presented at the Tidewater Oyster Gardeners Association annual membership meeting at the Virginia Institute of Marine Sciences in January, 2021. The winners' parents, a mentor, or teachers 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. Essays can be written about oyster life, history, recent developments, or even recipes with background from how the recipe came about.

"If you know Middle School students, please encourage them to enter. Previous year's winners and some of their schools are now growing oysters in the floats they won for their essays. This is a great way to encourage youngsters to get involved with oysters, learn about the ecology of the Bay, and help improve our environment," said Lewis.

The article should be written in WORD format and attached to an e-mail. The submissions can be made between now and December 15 annually. For more information, go to [www.oystergardener.org](http://www.oystergardener.org)

--Terry Lewis, MOG

### **TOGA Oyster Float Sales, Williams Wharf Landing, Oct. 3, 2020**

The Tidewater Oyster Gardeners Association (TOGA) held its Fall float sales event at Williams Wharf Landing in Mathews County, VA. Located just south of the historic Mathews Court House on the East river, with its own history of oyster operations, historic boatyard and steamboat landings, this facility proved to be an excellent venue and the weather was perfect.

In an effort to keep safe and maintain social distancing, all floats were sold on a pre-ordered basis. This involved non-group float builds by individual TOGA board members with attendees coming for pick up at staggered pre-determined times according to last name.



In total, approximately 75 floats were sold with Tidal Tumblers being the most popular at 32. Other float supplies such as grow-out bags, rope, and wire were available for sale along with diploid and triploid oyster spat provided by Linton Land and Judy Ambrose.

This event continues to be one of TOGA's primary fundraising activities. As a 501c3 non-profit, TOGA donates all profits from float sales to the TOGA/VIMS student fellowship endowment to benefit graduate students working on oyster research. Last year's donation totaled \$5445 and assisted (2) PhD candidates. This year's donation is \$5915.48.

-Brian Ingram, MOG

## Deltaville Maritime Museum Outdoor Exhibit Installation

Did you know that TOGA has a program devoted to installing museum exhibits? This year, two displays have been completed.

In November, TOGA produced an outdoor



The location of the new TOGA exhibit at the Deltaville Maritime Museum in Deltaville

exhibit for installation on the pier at the Deltaville Maritime Museum (DMM) complete with a living oyster garden. The exhibit has been installed just opposite the museum's mooring for the popular F.D. Crockett, a historic



Exhibit panels on the pier next to the F.D. Crockett

1920's era Chesapeake Bay buyboat. Board members Vic Spain and Carl Zulick designed the exhibit, and it was installed by DMM Museum Director Bob LeBoeuf.

TOGA and the DMM have a long partnership in which TOGA has assisted with an indoor museum exhibit, the new outdoor exhibit, and holding float sales and



Bob LeBoeuf installs a cage in the oyster garden

educational exhibits once a year during the DMM's Holly Point Farmers Market. TOGA often holds Board meetings at the DMM facility.

The exhibit consists of 8 educational panels and 5 demonstration oyster floats and cages filled with hundreds of happy *Crassostrea Virginica*. The panels address the mission and activities of TOGA, how to grow oysters, predators and threats, and descriptions of the different containment systems. The colorful panels were printed using UV resistant inks on aluminum backing to resist the severe weather and environment of the waterfront.

The exhibit was designed to inform visitors about the importance of oysters to the Chesapeake Bay and encourage them to consider growing oysters themselves. TOGA covered the cost of the exhibit using a grant

from the *Chesapeake Bay* Restoration Fund that gets its money from the sale of VA license plates.

TOGA is working with other museums on the bay to install similar exhibits in the future. We are excited to announce plans to work on new exhibits at the Reedville Fishermen's Museum and the Yorktown Watermen's Museum next year.



The exhibit demonstrates the use of containment devices that will hold oysters of various ages. In the above photo, clockwise from upper left, are a mesh bag with floats, a tidal tumbler, a bottom cage, a downunder, and a flip float. Photos by Carl Zulick

– Carl Zulick, MOG

## TOGA Display on Highlights of the History of Oysters in the Chesapeake Bay installed at Williams Wharf Landing, Mathews, VA

A 20-panel display was installed at Williams Wharf Landing in Mathews County on August 18th. Thanks to Carl Zulick, Brian Ingram, Ken Hammond, Ken's son and Judy Spain for installing the structure and display panels. It turned out that only Carl



To view the content of the display, please go to <https://www.oystergardener.org/toga-static-display>.

could dig holes through solid oyster shells for the post holes. And thanks to the Mathews Land Conservancy for allowing us to install the display.

– Vic Spain, MOG

## Dues for 2021

If you received this newsletter in the mail, please check the year by your name on the address label. If it is 2020 or earlier, then 2021 dues are due in January 2021. If you believe there is an error, please contact Vic Spain at



[vicspain@rocketmail.com](mailto:vicspain@rocketmail.com) or 804-642-6764. Annual membership is \$15 (per family) and are for one calendar year, not 12 months from payment date.

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

Please use the form at the end of this newsletter to update your membership. You may also use it simply to update your information. It is important that your address and email address are correct as that is our primary way of communicating with members. You may also share this membership form with a friend.

## Upcoming Events

**15 December 20**, Middle School Writing Contest Essays due, Event Coordinator: Terry Lewis, [lewistmn@msm.com](mailto:lewistmn@msm.com). See TOGA Website for Information at [www.oystergardener.org](http://www.oystergardener.org)

**9 January 21**, TOGA Virtual Annual Meeting, see Article this issue

**1 March 21**, Articles for spring newsletter due.

## Newsletter News

The newsletter is published 3 times a year and is mailed to all TOGA members. Full color copies of this and past newsletters may be seen on the website at <http://www.oystergardener.org/newsletters>.



The deadline for the next newsletter is March 1, 2021. Any TOGA member who wishes to submit an article for the newsletter may do so prior to the deadline date. Articles will be printed as space allows.

Email to either Vic Spain at [vicspain@rocketmail.com](mailto:vicspain@rocketmail.com) and/or Kathy Haurand at [kathaurand@aol.com](mailto:kathaurand@aol.com)

--Kathy Haurand, MOG

## Chesapeake Oyster Alliance Survey

In support of the Chesapeake Oyster Alliance goal of putting 10 billion oysters in the Bay by



2025, we are continuing to collect TOGA member data on how many spat are put in each year.

We are asking that, if you have not

done so yet please consider providing information about how many oysters you and your family are putting in the Bay.

There are 2 ways, the first is to simply fill out our new membership form when you renew your membership or update your information. The second is to annually complete the online survey at [www.oystergardener.org/member-survey](http://www.oystergardener.org/member-survey).

The following chart shows the data we have collected so far. Thanks to those who submitted their information.

--Vic Spain & Kathy Haurand, MOGs

### Results - Jan thru Nov 2020

243 People responded to the survey

Based on 2020 Dues paying members, excluded commercial growers

Type Grown	Count	Percentage
Both	103	42.4%
Diploid	32	13.2%
Triploid	108	44.4%
<b>Total Responded</b>	<b>243</b>	<b>100.0%</b>

Spat Annually	Count	Percentage
Both	167,590	46.8%
Diploid	57,850	16.2%
Triploid	132,625	37.0%
<b>Total</b>	<b>358,065</b>	<b>100.0%</b>

Shell Disposal	Count	Percentage
Back to Water	181	74.5%
Erosion Control	5	2.1%
Landscaping	21	8.6%
Recycling	17	7.0%
No Answer	19	7.8%
<b>Total Responded</b>	<b>243</b>	<b>100.0%</b>

### Main Tributary to Chesapeake Bay

Back River	0	0.0%
Chesapeake Bay	11	4.5%
Chincoteague Bay	0	0.0%
Fleets Bay	7	2.9%
Horn Harbor	0	0.0%
Ingram Bay	18	7.4%
James River	10	4.1%
Milford Haven	6	2.5%
Mobjack Bay	34	14.0%
Piankatank River	24	9.9%
Poquoson River	8	3.3%
Potomac River	37	15.2%
Rappahannock River	56	23.0%
Winter Harbor	3	1.2%
York River	24	9.9%
unknown	5	2.1%
<b>Total</b>	<b>243</b>	<b>100.0%</b>

Our newsletter and many of our activities are funded by the sale of **Chesapeake Bay license plates**



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

# A Few Happy Memories from 2020



*MAY ALL HAVE  
A BLESSED  
HOLIDAY, AND  
A SAFE AND  
HEALTHY 2021*





*Quote by Jonathon Swift*

***"He was a Gold  
man that first ate  
an oyster."***



### **TOGA Membership Form**

P.O. Box 2463, Gloucester, VA 23061

Date: \_\_\_\_\_ Please Check:  New Member  Renewal Annual Dues are \$15

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, and Zip Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Body of water where oysters will be grown: \_\_\_\_\_

What type do you grow? (sterile triploids, fertile diploids or both) \_\_\_\_\_

Approximately how many spat of each type do you plant each year? \_\_\_\_\_

What do you do with your shell from harvested or dead oysters? \_\_\_\_\_

Please check here if you use this form only to update your information (and not to pay dues)

**This**

**Page**

**Intentionally**

**Left**

**Blank**

PO Box 2463  
Gloucester, VA 23061

Return Service Requested

Non Profit Org.  
U.S. Postage **PAID**  
Yorktown, VA  
Permit # 33



*Growing oysters for a cleaner Bay*