

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

WINTER

NEWSLETTER

2013

ANNUAL MEETING – January 11, 2014 To include oyster gardening equipment sales and oysters on the menu

The TOGA Annual Meeting will be held Saturday, January 11, 2014, at McHugh Auditorium in Watermen's Hall on the VIMS Gloucester Point Campus, from 2:00 to 4:30 pm for the main meeting and refreshments. For those purchasing TOGA-made oyster equipment, this will take place from 1:00 to 1:45 pm. Details of the equipment and order forms are provided in this newsletter. Also starting at 1:00 are 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 station 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 2014 budget, elections for the 2014 Executive Board, a summary of 2013 highlights and awards. *In addition, a TOGA Executive Board proposed amendment to our by-laws to increase annual dues from \$10.00 to \$15.00, effective January 1, 2015, will be presented and voted on. Per the by-laws, Article II, Section 2, "The amount of the dues shall be determined by the voting membership". Per Article VI, Section 1, "These by-laws may be amended by a two-thirds vote of those present at any meeting that is open to all members of the Association..." A copy of our by-laws can be viewed on our website at www.oystergardener.org.*

Educational program: Our keynote speaker is Mr. Robert Connell, Regional Shellfish Specialist of the U.S. Food and Drug Administration.. Mr. Connell has been involved in shellfish sanitation for over 30 years. He is an FDA representative to the Interstate Shellfish Sanitation Conference (ISSC), which meets biennially to "foster and promote shellfish sanitation through the cooperation of state and federal control agencies, the shellfish industry, and the academic community". His presentation will provide a historical perspective of how shellfish sanitation topics/issues at the national level came to include oyster gardening. His is a message of ongoing education, discussion and two-way communication between shellfish gardeners and folks responsible for public health protection.

The second presentation is by Masters student Brendan Turley, who was recently selected as the second recipient of the TOGA Fellowship at VIMS. Brendan obtained his Bachelor's of Science from the <u>University of Miami, Florida</u> 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 <u>Aplysia Facility</u> for a year, and then spent six years as a NOAA-NMFS <u>fisheries</u> <u>observer</u> deployed on commercial fishing vessels in the Gulf of Mexico and South Atlantic. Brendan is

now working on his Master's Thesis focused on <u>population genetics</u>. He will outline his thesis project which involves tracking oyster restoration efforts in the Lafayette River using model predictions and genetic markers.

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.

PROPOSED 2014 EXECUTIVE BOARD

The current Executive Board has unanimously nominated the following officers for 2014. TOGA members will be able to make additional nominations prior to the election at the Annual Meeting.

President	Brian Wood	Vice President	Mike Todd
Secretary	.Mike Sanders	Treasurer	.Charles Yarbrough
At-Large Members	.Lynton Land, Natalie k	Kelly, Terry Lewis, Bob	Morgan

Following board memb	ers are not elected		
Past President	.Vic Spain	President Emerita	Jackie Partin
VIMS Advisor	.Karen Hudson		

RETIRING BOARD MEMBERS

hank you to three of our current Board Members, Steve Wann, Ken Hammond and Dave Turney. Steve Wann was the TOGA Treasurer for six years; the Event Coordinator for our annual Oyster Float Building Workshop for eight years; and supported many other outreach events during his long tenure as an active TOGA member. Steve was extremely helpful, and put in many hours to update the TOGA Virginia Registration Statement for a Charitable Organization, and to obtain our Retail Sales and Use Tax Exemption. We wish Steve well as he "works" off one of his bucket list items: sail to the Caribbean for six months. - Ken has been a board member for three years; Chairman of the Fundraising Committee and almost singly responsible for the short time it took to raise the \$50,000 to start the TOGA Fellowship Endowment with the VIMS Foundation; a major contributor to building the infrastructure for our annual OTEs; a participant in the G&L study; and a supporter of many outreach events. - David has been a board member for four years, one as Vice President and two as President and a term of Past President. Dave helped orchestrate the formation of the TOGA Fellowship Endowment; was our first Outreach Coordinator; authored our Chesapeake License Plate grant proposal; established and hosted our first Annual Shucking class with four time National Champion Oyster Shucker Deborah Pratt and sister Clementine; is co-author and staunch supporter of the TOGA Improvement Plan (TIP) and supported many, many outreach events. We are sure Dave and Nina will be spending their extra time with lovely grandchildren Ben and Anna Turney and Maggie and Sam Boncosky in the tree fort, zip lining, sailing, learning all about the outdoors/honeybees and occasionally indoors playing the piano.

Brendan Turley is the 2nd VIMS Graduate Student Recipient of the VIMS Endowment

About Me

Hello, my name is Brendan Turley and I am a Master's student at the Virginia Institute of Marine Science. I grew up in Kansas City, Missouri, which is about as far away from saltwater as one can be in the United States. However, I always wanted to be Jacques Cousteau and my parents encouraged that tendency. I attended the University of Miami, Florida for my Bachelor's degree and studied marine biology. After graduating, I worked at U of Miami's experimental hatchery breeding mummichogs and sea slugs. Afterwards, I worked as a fisheries observer for five years in the Gulf of Mexico and South Atlantic deployed on offshore shrimp trawlers and grouper/snapper bottom long-liners. Before moving to Virginia, I lived in Wilmington, NC working with Dr. Ami Wilbur at the University of North Carolina-Wilmington, who is the oyster hatchery manager there and taught me molecular genetic laboratory techniques.

Thesis Abstract

The Chesapeake Bay Foundation (CBF) is heavily invested in oyster restoration efforts throughout the region. In particular, they have been building reefs and planting oysters in the Lafayette River in Norfolk, VA. In 2012, the hydrodynamic modeling group at the Virginia Institute of Marine Science was contracted by CBF to model the population connectivity of oysters in the Lafayette. The group modeled the hydrodynamics of the system, which included runoff, tides, wind, and simple oyster larvae behavior, to predict where in the river the oyster spat would be located given a spawning location. This Master's project will use the model's predictions and naturally occurring genetic markers to identify to whom oyster spat collected in the Lafayette are most likely related. In the summer of 2013, the CBF put oysters from Tangier Island in the river at a specific location with the expectation that the oysters will spawn next year and are genetically distinct from the other oysters in the river. My thesis project is leveraging the CBF's existing citizen science spat collector program to collect tissue samples from the Lafayette River. The DNA from the spat will be compared to DNA collected from the Tangier oysters and oysters that naturally occur in the Elizabeth and James Rivers. It is expected that the results will demonstrate that the CBF's efforts in the Lafayette have genetically contributed to the oyster populations within the river. If not, then this information can help the CBF to modify their restoration plans.



Pictured from left to right are: Karen Hudson, VIMS, Dr. Kimberley Reece, Brendan's Mentor, Brendan Turley, Vic Spain, Jackie Partin and Brian Wood, members of the TOGA Board of Directors.

New Venue for Northern Neck Fall Workshop Exceeds Expectations

The Northern Neck Fall Workshop, traditionally held in Reedville during the annual antique boat show, was moved to September 7 in Lottsburg this year. The new venue proved to be a huge success as approximately 60 people attended and sixteen new members joined TOGA. In aggregate, the participating vendors sold 106,000 spat and had strong sales of oyster grow-out devices and other equipment. The program was primarily aimed at new gardeners and included a float building demonstration by Vic Spain. Master Oyster Gardeners (MOGs) were available to answer questions and offer tips and advice. *— Mike Sanders, MOG*

2013 Oyster Float Building Workshop

Beautiful weather was enjoyed by all who attended this year's September 14th 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 17 floats being built and over 129,000 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 to make this workshop successful. Next year's Oyster Float Building Workshop is planned for Saturday, September 13, 2014.

TOGA sold over 50 Pre-Built Floats and Devices at the workshop. This will result in over \$1,100 donation to the VIMS Fellowship Endowment. Our volunteers put in a lot of effort during 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.

-- Barb Shelton, MOG and Charles Yarbrough, MOG



WINE & OYSTER FESTIVAL

Wine and Oysters Form "Perfect Union" at Stratford Hall

There have been many famous marriages since the late 1730s at Stratford Hall, the historic home of four generations of the Lee family of Virginia. But one of the most famous marriages recently was the coming together of oysters and wine.

Spearheaded by Mike Todd, representing the Tidewater Oyster Gardeners Association, oyster tasting was added to a very successful wine tasting annual event that had been held at the plantation for the past six years. With the addition of oysters to the tasting, the attendance swelled from 2,400 people at the wine tasting last year, to nearly 5,000 attendees this year.

"This remarkable increase in attendance is an indication of just how popular oysters are becoming in Virginia," said Todd. "Oyster aquaculture is a fast growing industry and TOGA is actively working with growers and gardeners to encourage more people to grow oysters," he said.

There were 13 wineries, 7 oyster growers, 45 vendors, and 11 food vendors at the event, held September 21 and 22. Several options were offered for attendees to enjoy the Festival. Wine and Oyster Taster Tickets were \$45 and included 3 oysters, served on the half shell, from each of the 7 growers, for a total of 21 oysters. This ticket also included wine tasting from the 13 wineries on site. Tickets for wine tasting only were \$25, and for those interested in eating oysters only, an entry ticket could be purchased for \$10 and oysters could be purchased from the individual growers.

The Wine and Oyster Taster Tickets were by far the most popular, and during the event some 30,000 oysters were consumed, and 67 bushels of oyster shells were recycled for reef restoration in the Bay.

TOGA was very well represented by 32 volunteers wearing light blue TOGA shirts provided by the Association. They helped sell tickets, worked in the TOGA education kiosk, served as liaisons with oyster growers in their booths, and even helped some of the wineries with their samples. In addition, a large education tent sponsored by TOGA included oyster shucking and cooking demonstrations, wine education, an oyster growers roundtable, a discussion by the Virginia Marine Products Board, oyster gardening devices and techniques, and various educational videos were shown on TOGA's new 60 inch flat screen television.

Oyster growers at the event included the Chapel Creek Oyster Company, Chessie Seafood, Dragon Creek Oyster Company, MiFarm Oysters, Rappahannock River Oysters, Sewansecott Oysters, and the Ward Oyster Company.

As a direct result of this event, thousands of people are now much more familiar with the importance of oysters in cleaning the Chesapeake Bay area waters, their delicious and varied flavors, and how they can start gardening their very own oysters. Planning for the 2014 Festival is already underway, and TOGA will once again play a prominent role. *-- Terry Lewis, MOG*

Outreach is a Key Component of TOGA's 2014 Plans

TOGA sponsors or participates in roughly thirty outreach events each year. These events have various objectives, but one of the most important is working with schoolchildren to impart to their generation an appreciation for the oyster as a keystone species in the Chesapeake Bay's ecology. Many TOGA volunteers agree that this is their favorite type of event. Examples include:

- Urbanna Education Day for six area schools
- Chesapeake Bay Day at Matthews Middle School
- Belle Isle Field Trip for Lancaster sixth graders
- Earth Day at Ft. A. P. Hill for 800 students

Other outreach events are aimed primarily at helping oyster gardeners, particularly those just getting started, by providing access to spat vendors, grow-out devices, other equipment and expert advice. Examples include:

- Middle Peninsula Spring Fair
- Northern Neck Spring Fair
- Float-building Workshop
- Northern Neck Fall Workshop

TOGA also participates in a number of community festivals where TOGA volunteers educate the general

public on the beneficial impacts that oyster gardening has on the health of the Bay. Typically, we set up a tent and discuss oyster gardening with interested festival goers who stop by. Frequently, we are able to sign up new members eager to get started. Examples include:

- Urbanna Oyster Festival
- Hunt for Hampton History
- Tappahannock Rivahfest
- Boots & BBQ

Perhaps the most fun events, however, are those designed to educate the public on the delights of eating oysters. The historical decline of the Virginia oyster industry caused us to lose a generation of oyster eaters. With aquaculture now leading a reversal of that decline, it is important that an appreciation for Virginia oysters be reestablished. To that end, TOGA sponsors an Oyster Tasting Event in Gloucester each fall. This year, TOGA volunteers were also instrumental in introducing oyster tastings to the annual Stratford Hall Wine Festival, which is now called the Stratford Hall Wine & Oyster Festival. For opportunities to attend or participate as a volunteer at TOGA outreach events, watch this newsletter, the TOGA website and community communications media as the events and dates for the 2014 Outreach Program are established.

Would you like to be a TOGA Volunteer?

As Mike Sanders mentioned in his article above, we have many outreach activities coming up in the next year. And we need lots of people to help out at these many events! If you are interested in volunteering to help at one or some events, please let us know. This generally means manning a TOGA tent, or table, giving out information about TOGA, talking to people about oyster gardening and about our other upcoming events. Sometimes you may be asked to shuck oysters (training provided), or help set up or break down our display tables. There is a list of our upcoming activities on the TOGA Website, <u>www.oystergardener.org</u> under Major Annual Events page. If you are interested in volunteering your time to assist TOGA, please send your name and contact information to Natalie Kelly, <u>nshokie@aol.com</u>. Or, just click on the Volunteer button on the home page of the Website. Thanks very much!

TOGA's value to VIMS

It's been mentioned before but it's a subject that deserves more recognition – TOGA's added value to the scientific community. Think about it – a network of field sites numbering in the hundreds, spanning multiple river systems across the Tidewater region. Where else can oyster researchers get their hands on such an extensive set of connections? The answer is nowhere. And it's pretty simple on the part of gardeners – report algae blooms (with or without fish kills) and unusual oyster mortality in your garden. It may seem trivial, but often it's the long-term understanding of trends that have the most value in identifying potential issues. For more information on how you can participate – just go to the TOGA website and select "TOGA/VIMS Interaction" under the "More" tab.

Ostrea edulis Our Noble Guest

Taking census of intertidal Ostrea edulis populations in New England waters and what their existence implies for oyster growers.

O.edulis, or the European flat oyster has been growing in popularity and number over the past several years. For the past two years I have slowly been mapping the location and growth of natural *O.edulis* beds in New England. As a Fluid Dynamicist, I've used a study of current flows, water temperatures, and mapped salinity levels to see if I could anticipate the expansion of these prized invasives.

While *Ostrea edulis* can be found in depths of 9.2 m (30ft) so far I've limited my studies to shallow intertidal areas and have had some success in predicting where I can find new *O.edulis* beds and even indications that our local populations may, in fact, be adapting and evolving. Using a one meter square frame made of PVC tubing, I venture out during exceptionally low tides, placing the square meter over the beds I have been finding, and monitoring, so that I can gauge population densities. In areas with concentrations of over five per square meter (see photo) I have been measuring diameter and thickness of the *O.edulis*, as well as documenting what, if anything, the *O.edulis*, residing in New England waters, use for culch or cultch.

Like all good stories, the introduction of the *O.edulis* into our waters has been a bit mysterious. Some speculate that they came over on the hulls of old ships, while others claim their relatives carried them over from Europe. The most likely scenario is that the majority of our local *O.edulis* populations are the result of either escapees from Salem State's (Massachusetts) aquaculture labs in the 1970's, or the descendants of the Loosanoff experiments in Long Island Sound and Maine in the mid-forties.

The mid-forties were exciting times of hope and change. The War to End All Wars had ended, Jackie Robinson was playing for the Brooklyn Dodgers and the Director of the newly expanded and congressionally funded Milford Laboratory, Dr. Victor Loosanoff, introduced *O.edulis* to our waters in the hopes of providing economic opportunities for Maine shellfish growers following such heavy losses in the *Mya arenaria* population that there was speculation that they might become extinct.

From these early introductions, the *O.edulis* populations have grown, perhaps adapting, over the past 67 years to an ever diverse range of conditions. Loosanoff had chosen *O.edulis* because European and American oysters belong to different genera and would not interbreed, and because they grow in waters too cold for American oysters to spawn.

To provide a broader perspective on *O.edulis* in New England for this short article, I was fortunate enough to be able to interview *O.edulis* fans from three states. All three interviews were so thought provoking they easily merit an article each.

The first interviewee was Dr. Robert Rheault, Executive Director of the East Coast Shellfish Growers Association, Professor at the University of Rhode Island, and founder of Moonstone Oysters in Narragansett, RI. His work at Moonstone is fundamental to any oyster grower wishing to broaden their crop options by including *O.edulis*. The European flat oysters are not native, and as such are classified "invasive". Depending on which state you work in, this factor may create serious permitting challenges. Despite the fact that he is a world leader in shellfish and environmental studies it took Dr. Rheault years to obtain a permit to grow *O.edulis*. As an expert in shellfish, watermen often bring him prize samples of "strange looking scallops" such as the outstanding specimen in the photo. To compensate for the weaker adductor muscle of *O.edulis* (as compared with *Crassostrea virginica*) Dr. Rheault devised better shipping and packing methods which included packing the oysters in layers of seaweed and cup side down.

In Massachusetts the next *O.edulis* fan I interviewed was Chris Sherman, president of Island Creek Oysters in Duxbury MA. Mr Sherman grew to love the unique flavor of the *Belon* (which is what *O.edulis* grown in the outlet of the Belon river in France are called) when he lived there. Island Creek cleverly avoided the bureaucratic challenges that Dr. Rheault overcame by simply harvesting from the naturally occurring beds found near Duxbury or by purchasing *O.edulis* from permitted growers in Maine. The scarcity of *O.edulis* means they command a higher price which is good for business. Sherman noted the almost "culty" following means fans will often order 20 or 30 of them at a time when they can find them, despite the price. He wisely fosters this passion by hosting special tasting events at his restaurant (soon to be two restaurants) which pair wines and five species of oyster.

Moving even further north our third interviewee, Dana Morse of the Maine Sea Grant Marine Extension Team, gave some insight into why Island Creek is able to find *O.edulis* in Maine. In Wallpole, Maine, Mr. Morse noted that *O.edulis* is grown (when seed is available) by several Maine farms including that of Tonie Simmons at Muscongus Bay Aquaculture, and by Bill Mook at Mook Sea Farm. Despite challenges of producing seed, it seems that Maine has fostered Loosanoff's original vision. *O.edulis* is in fact aiding local economies. While any aid of the working waterfront is welcome, perhaps another reason those wishing to grow *O.edulis* in Maine face fewer bureaucratic roadblocks is that, as Mr. Morse explained, in Maine, while they are not native, *O.edulis* is not treated as an invasive. Perhaps echoing Dr. Loosanoff's original careful considerations that being a different genus from *Crassostrea virginica* there would be very little risk of parasites, crossing over, or interbreeding. In Maine *O.edulis* are simply another option for growers, and one that commands a better price while still providing all the environmental benefits of our native oysters.

As for my own census work, it is clear that *O.edulis* is adapting well to our water with and without permits. It is clear that *O.edulis*' natural adaptation and steady expansion will continue to provide opportunity or concern depending on how the situation is viewed. *-- D. Nathaniel Mulcahy, MOG*





TOGA's Oyster Growth and Longevity Study

We are now close to concluding our final counts and measurements of the Growth and Longevity Study's four different oyster strains. This study consisted of two Triploid (sterile) oyster strains (LOLA & DEBY) and two Diploid (fertile) oyster strains (LOLA & DEBY). The volunteers counted and measured their oysters three times a year. We started this out as a 3 year study; predicting that as the timeline for a 3 inch market size average (based on the native wild growth data). Incredibly, some strains achieved the 3 inch size in 7 - 8 months! And surprisingly, fifteen months after deployment, most sites had achieved or surpassed the 3 inch market size with very low mortality rates. So we had to rethink our study plans with the unexpected results of these special, genetically selected, commercial strains spawned by VIMS.

With our market size goal met we decided to study what makes one site outperform others in growth. We know the water flow around the oysters plays a big part in development, as well as food source and salinity. While salinity can be checked very simply, food source and water flows are not easily monitored. Some high growth volunteers checked their water flow at their dock during incoming and outgoing tides and we are currently looking over that data. Another item researched was Google mapping sites to see the different characteristics and how they might influence growth. We will touch on the interesting results with a summary of the study soon after its conclusion.

It was collectively decided (even though our goal of 3 inch averages came early) to push on and review the other segment of the study a little more: the mortality rate of these study oysters. We experienced very little mortality in the first year; with less than 10% overall average. As the second winter came and went we saw some expected increase in loss. But the biggest surge in mortality happened in early summer; especially in the lower salinity sites, probably due to the heavy spring rains. Still the numbers are pretty respectable compared to the oysters available ten years ago.

With 2013 July's reports (a month shy of two years of our G&L study) we haven't seen the huge jumps in length as was experienced in the first year. Many now average 4.5 inches. Instead, what we see is the girth (thickness or cupping) of some of these oysters steadily increasing. These results lead us to another question. Since we are comparing Triploid versus Diploid (with slightly different growth rates) which oyster in November carries the most weight and by how much?

It wouldn't be fair to do this experiment in summer months as the Triploid retains all its weight (being sterile) and the Diploid loses a lot of body mass due to spawning. But in November the Diploid should have regained most of its weight. So for another study within a study, we have selected sites where volunteers are going to donate six oysters so we can measure meat yield. If you eat your oysters in the winter months, is there a huge advantage to growing Triploids over Diploids in meat yields? Is the difference of meat produced by the Triploid so considerable that it outweighs (as some gardeners advocate) growing Diploids for spawning and passing their seed along to help in some repopulation?

With 52 volunteers between the G&L Four strains oyster study and the other T & T (Triploid versus Triploid study) we have learned a lot. But we also have as many questions as we have answers.

All fun stuff! Through communicating with our volunteers we learned about plastic Aussie cages and the excessive fouling than occurs with them versus the wire cage Vic Spain developed (wire downunder). Fouling was different at different sites at different times. And some plastic Aussie cages failed due to rapid growth of oysters. We got reports of heavy barnacle strikes, sea grapes, sponges, oyster strike, many kinds of different algae and growth. We also received stories of small crabs getting into cages, becoming big crabs devouring study oysters. Plus many strange creatures VIMS helped us identify. And much, much more has been shared. After November's count when all data is in, we will prepare a final report of growth, meat weight, mortality rates and finally the disclosure of the different strains for all to see.

Our sincere appreciation goes out to our Growth and Longevity volunteers for all the hard work. We surely couldn't have amassed all this data and accomplish this significant oyster study without you. Stay tune for the final G&L results and possible upcoming studies performed by TOGA volunteers.

-- Brian Wood, MOG and Lynton Land, MOG





John Ambrose on Whay's Creek with Growth & Longevity Study Oysters which average 4.5 inches in two years! Pre-Built Floats and Devices will again be available for pick-up at the Annual Meeting, January 11, 2014. Proceeds will go to the TOGA/VIMS Student Endowment (<u>http://www.oystergardener.org/#!</u> togavimsendowment/c1hnw). Please place your order by December 20, 2013. You may mail this order form to TOGA, P.O. Box 2463, Gloucester, VA 23061, or email a detailed request to Vic Spain (<u>vicspain@rocketmail.com</u>). Please call (804-642-6764) or email Vic if you have questions or suggestions. Remember that all labor and transportation of supplies are donated by our float-building volunteers. **Please pay when you pick up your device.**

Please see our website <u>http://www.oystergardener.org/#!devices-and-desgns/c2ir</u> for information about the various types of Pre-Built Floats and Devices.

Qty Co	ost Each	Description	Qty	Cost Each	Description
	\$90	Taylor Float		\$15	Top for Taylor Float
	\$105	Taylor with Top Float		\$60	Flip Float Lifter
	\$60	Flip Float		\$45	Bender 42 inch
	\$45	Bottom Cage		\$50	Bender 50 inch
	\$40	Downunder			

.....cut here.

Membership Dues are Due for 2014

Following your name on the address label should be a number such as 2012, 2013 etc. This is, according to our records, the last year for which you have paid dues. If your number is 2013 or earlier and you wish to continue your TOGA membership, please fill out and mail in the membership form below by the end of January 2014. If you have questions or believe we have made an error, please contact Vic Spain (vicspain@rocketmail.com, 804 642-6764). Or you may share this form with a friend.

TOGA Membership Application: \$10.00/family	
Renewal orNew Member (Please check)	
Name:	_Email:
Telephone:	
Mailing Address:	
Body of Water Where Oysters Are Grown:	
Please make checks payable to TOGA and mail to: TOG	GA, PO Box 2463, Gloucester, VA 23061

Your best source of Oyster Gardening information- www.oystergardener.org



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



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