

# WATERWAYS

FRIENDS OF CHATHAM WATERWAYS

DECEMBER 2018

## PRESIDENT'S LETTER

At our August, '18 annual meeting we celebrated our 35th Anniversary. If you attended, you received a special anniversary document highlighting our accomplishments called "Preserving and Protecting Chatham's Most Precious Natural Resource." (Now available on our web site – [www.chathamwaterways.org](http://www.chathamwaterways.org). FCW Directors thank you for being a member of FCW. You fund ongoing programs and start-up initiatives that help keep our fresh and salt waterways healthy. This is our 20th year of providing FCW volunteers to monitor our salt water estuaries. Our all-volunteer organization is made up of directors and you our members, many of whom are volunteers committed to being caretakers of the environment, water quality and adjoining lands.

2019 will be our second year with a cadre of 14 new volunteers doing research work on a new scientific fresh water pond testing program. 'FCW

Citizen Scientists' collect water samples using special equipment. Samples are then analyzed in the Chatham laboratory to identify concentration levels of cyanobacteria. High concentrations of cyanobacteria are toxic to pets, humans and pond life. If discovered by this early warning system, a pond is closed. This is an expensive program. If you are able, please use the enclosed envelope to give any extra amount you can and designate the check for the 'FCW Cyanobacteria Program'.

Thanks to all who volunteer in our programs and to every membership. What comes in goes to keep all of our programs vibrant.

Sincerely,

*Barbara*

Barbara Cotnam,  
President

## Annual Meeting Keynote Address - Seth Rolbien, of the Cape Cod Fisheries Trust

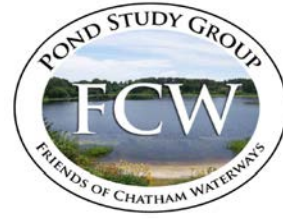
Mr. Rolbien gave a positive address about the resilient nature of our oceans - the size and biomass and oceans ability to adapt to changing environmental conditions. He spoke of aquatic species ability to adapt to warming water. Education is needed to lessen human activity introducing plastics and pollutants into the oceans. He stressed a need for a 12 mile year round buffer zone off Cape Cod shores to limit large trawlers with huge nets removing too many fish, raising havoc in the food chain by depleting the herring population.

*Note: The New England Fisheries Management Council voted for the 12- mile zone at their September 27, 2018 meeting.*



Mary's Pond Photo by Barbara Cotnam

WALTER BUTLER  
2018 CAPTAIN'S AWARD  
RECIPIENT



Walter Butler, PhD, is this year's Captain Award Recipient. Tom King announced the recipient at our Annual Meeting. Walter was present at the meeting while attendees listened to his impressive good works to protect Chatham's natural resources. A brief review follows, telling of his early years and retirement to Chatham in 1997 where he spent decades of dedication volunteering to improve and protect Chatham's natural resources.

In Walter's early years he enlisted in the U.S. Navy where he was trained to be an Electronics Technician. After leaving, he earned a doctorate In Electronics Engineering from McMaster University in Canada. After working at General Electric's Corporate Research & Development Lab he began a long career at the Lockheed Martin Aerospace Corporation. He was the co-holder of many U.S. patents and retired as V.P. and General Manager at Lockheed in 1997 and moved to Chatham with his wife and family.

He soon became Chairman of the Chatham Conservation Commission. Where he spearheaded the Town's hiring a full time Conservation Agent, helped write Wetlands Regulations for a 50 foot No Disturb Zone and helped write a stronger 100-foot jurisdictional zone for a natural resource area. He was also involved in writing the Waste Water Comprehensive Plan.

He served as FCW's Vice President and Treasurer using his leadership talent selecting a group of volunteers who together wrote FCW's Article II, which addressed unintended growth that can result from sewerage the town. 2005 Town Meeting approved Article II unanimously, these provisions are credited with the state approval of our new treatment plant and 20 year plan to sewer the town. FCW is grateful for his years of service to FCW and to the Town of Chatham.

## POND STUDY GROUP

FCW now has two dedicated groups of citizen scientists watching over our fresh water ponds. Twelve volunteers put their oars in the water to record data in six of our fresh water ponds for the sixth season this summer. Using specialized equipment their data collected could be compared with a ten year PALS study giving a total of sixteen years of statistics for (1) dissolved oxygen levels, (2) water clarity and (3) water temperature in six of Chatham's ponds. These three factors give a snapshot of the health of our ponds. Volunteers also look for aquatic and pond edge invasive plants or run-off problems that adversely impact water bodies. Our volunteers are generous with their time and talents.

## CYANOBACTERIA PROGRAM

This summer we began a new study using equipment purchased by Chatham's Natural Resources Department Director, Robert Duncanson, PhD. Fourteen FCW volunteers take water samples from five ponds. Samples are tested at the Chatham lab for levels of cyanobacteria (a blue-green algae that is toxic to humans and dogs at high levels). High levels of cyanobacteria have been found in some towns on the Cape, killing dogs that have come in contact with toxic algae. We will continue this important program next season. FCW has applied for a grant to help fund a portion of this program but we are not assured of the funds. We are asking FCW members to consider donating to this program today by writing a check of any amount but designating the amount to the "FCW Cyanobacteria Fund" send to: Robert Samuelson, Treasurer

Friends of Chatham Waterways  
PO BOX 472  
Chatham, MA, 02633-0472



## SIX NEW FCW DIRECTORS

We are pleased to welcome the following new Directors dedicated to the goals of the Friends and ready to work on projects that promote healthier fresh and salt waterways in Chatham.

**Mike Page** is an expert in computer programming. He is guiding us through the complex web site update process. FCW plans to launch a new web site in 2019, his knowledge is invaluable! Mike



and his wife live on Emery Pond and have been taking data from the pond for the last six years. Mike has a B.A. degree in Computer Science from SUNY Oswego. He is a computer programmer with experience developing software for neuroscience laboratories in New York and Pennsylvania. He founded Great Island Software in 2003 and is principal of the custom software and IT services company.

**Sandy Giorgetti** has a degree in Electrical Engineering from Boston University. She was a design engineer at the Digital Equipment Corporation, in advanced



development on projects including system level personal computer design, parallel processing, and microcomputer chip level circuit design and architecture. After years of lakeside vacations throughout New England with their three children, she and her husband, Charlie, now happily reside on Lover's Lake. For many years Sandy was one of the coaches at their middle school Science Olympiad

team. Hoping to inspire girls of that age realize that it can be fun and maybe even 'cool' to excel at math and science. Sandy is a working member of the Pond Study Group as a volunteer coordinator for two separate FCW Pond Study programs. She has taken data from Lovers Lake for 4 years. She also takes data for the FCW cyanobacteria study, pond water quality study and for the Chatham Water Watcher's Program. Sandy wants "Future generations to have the opportunity to share the experiences that clean and clear water can provide!"

**Michele Moloney-Kitts** lives near Lovers Lake and has been a full time resident for several years after an international career in the public health field. She holds a Bachelor's Degree from Boston College and a Master's from the University of Pennsylvania. She began her career as a nurse practitioner and a nurse midwife, with a particular focus on underserved populations, especially adolescents. Professionally, Michele has been a leader in international public health for over thirty years. She is an independent consultant serving on the BOD of Together for Girls partnership and is the Vice Chair of the Technical Review Panel of the Global Fund for Aids, TB and Malaria. Prior to her retirement she was the first Executive Director of Together for Girls, a private/public partnership dedicated to ending violence against children.



Michele was a career foreign service officer for USAID. Other USAID assignments included long term postings in Morocco, Cambodia, South Africa and Washington, DC. She was a Senior Advisor to the Executive Director of UNAIDS. She is an active member of Friends of Marconi/RCA Ryder's Cove Triangle Improvement Plan, serves as a volunteer land steward for the Chatham Conservation Foundation and is a member of the Marconi Maritime Center. Michele takes FCW Pond Study water samples/ data from Lovers Lake for the cyanobacteria program and is on the FCW Scholarship Committee.

**Jeff Mason** came on board in January. He has a degree in Geography/Environmental Studies Program from Dartmouth College and a M.A. in Geography Program at U.C, Santa Barbara, CA. He is currently a Senior Environmental Scientist at Ecology & Environment, Incorporated. He also is a Professional Wetland Scientist. Jeff recently received his Certified Environmental Restoration Practitioner (CERP) certification from the Society for Ecological Restoration. He is a FCW Water Watcher for the Coastal Water Nutrient Monitoring Program, and collects data for both FCW Pond Study programs during the summer with his six year old son and wife. Caring for our waterways is a family affair!





## CYANOBACTERIA MONITORING RESULTS *by DeeDeeHolt*

Algal blooms have unfortunately become a regular story in national and local news. Many Cape towns have experienced toxic blooms, and several have begun proactive water quality testing. Chatham is now one of those towns. In the spring of 2018 Friends of Chatham Waterways (FCW) contracted with the Association to Preserve Cape Cod (APCC) to establish a monitoring program; and with assistance from the Chatham Department of Natural Resources, FCW volunteers gathered water samples which were then tested for the presence of cyanobacteria. The goal of the monitoring plan is to provide actionable data before a problem develops.

Cyanobacteria, often called blue-green algae, are a group of photosynthetic aquatic microorganisms that, when certain conditions occur, can multiply rapidly and release harmful toxins into the water. They are very common in freshwater ponds throughout Cape Cod. Due to warming temperatures and nutrient enrichment, conditions are

increasingly supportive of rapid growth and toxin release. Such excessive growth can result in dense surface blooms blocking light and degrading water quality and habitat. People and pets exposed to high levels of toxins through skin contact, ingestion, or inhalation can contract a variety of ailments ranging from minor to severe.

The waters of Goose, Schoolhouse, White, Stillwater and two sites on Lovers were sampled and analyzed every other week from June through October. All monitoring work conducted by volunteers strictly followed APCC's 2018 Step-by-Step Guide to Monitoring Cyanobacteria in Cape Cod's Freshwater Ponds. After receiving the samples, APCC analyzed them including separation, microscopy, and pigment analysis.



In December, FCW received APCC's final report detailing the findings for each site. In summary, cyanobacteria were found to be present in all five ponds. Most, however, were dominated by a bacterial form that produces only low amounts of cyanotoxin. White Pond was the only location with a consistent and notable population of the bacteria that produces significantly more cyanotoxin. Estimated toxin concentrations only exceeded the most stringent pet guideline six times out of a total of 42 samples. The EPA draft recreational guideline was exceeded only once. [The full report will be available on the FCW website.]

Based on our successful first season, FCW will continue to monitor Chatham ponds in 2019. FCW and the Natural Resources Department will assess the results of this year's testing and APCC's recommendations, and then develop a plan for 2019.



### New FCW Board Members, Continued

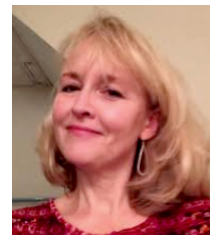
**Lisa Cody** has been a full time resident since 2014. She graduated from WPI with a degree in Civil Engineering with a focus on Environmental Studies. Her work experience includes a Licensing Engineer at the Millstone 3 Nuclear Power Plant project. She loves Chatham and is committed to keeping our



waterways healthy. She is a Pond Study Group member and has currently taken on the important work as Friends of Chatham Waterways Membership Chair. She is also a member of the FCW Scholarship Committee.

**Theresa Sull** became a new director this December, she supports FCW's goals of protecting its precious natural waterways and environment. She has a degree in American History and Literature from Harvard University.

She is currently a volunteer taking data from ponds, with her daughter for FCW's cyanobacteria program. A visitor to Chatham for over 30 years and a full-time resident since 2012, she will be working as the Chairperson of the FCW Scholarship Committee.



## COASTSWEEP SEPTEMBER 2018

For 31 years FCW has run CoastSweep working with the MA Office of Coastal Zone Management annual Massachusetts Coastal Cleanup held mid-September every year. Coastsweep, is part of the Massachusetts Office of Coastal Zone Management's (CZM) annual Coastal Cleanup in conjunction with the Ocean Conservancy's International Coastal

Cleanup. FCW provides grabbers to pick up trash, CZM donates bags and gloves, and the Ocean Conservancy supplies data cards for recording site findings. Data from the cleanup is analyzed by the Ocean Conservancy and used to develop programs to help reduce marine debris worldwide.

This year 44 volunteer's collected debris from 21 sites along Chatham's shoreline, resulting in over 40 bags of trash totaling approximately 350 pounds.

FCW would like to thank these dedicated volunteers: Ginny Nickerson, Sherrie Bush, Lisa Edge, Jay Stahl, Wayne Jostrand, Bob Simonds, Mia Caolo, Grace Caolo, Carolyn Sorz, Kate Sorz, (shown at right with T shirt saying "The Ocean Is Our Everything"), Zoe Eldredge, Joanne Hinesley, Leslie Massa, Rebecca Arnold, Robert Storey, Cheryl Lubin, Dave McNally, Jeanie Gillis, Elizabeth Bourget, Louise and Keith Wasley, Eileen Fitzgerald, Rich Swatton, Drew Carey, Nat Mason, Stephanie and Chuck Bartlett, Ellie and Peter Mullen, Barbara Doyle, Pat Hogan, Debbie Swenson, Ellen Burnham, Cindy Knight, Pam Carlton, Tom King, Pam and John King, David MacAdam, Peter King, Lindsey and Jeff Dill, and Janice and Bob O'Connell.

Also:

- ◆ Judy Hoyt contributed the use of her Port Fortune boat landing for debris drop off,
- ◆ Chatham Park and Recreation Director Dan Tobin arranged for trash pick up by Josh Pelletier and Damain Gray of the Chatham Transfer Station.

Coast Sweep volunteers help to bring an awareness of the abundance of trash on the town's beaches and of the consequent need for people to be responsible about picking up not only their own debris but that of others too. To volunteer for Coast Sweep 2019, contact Betsy Mosser at [betsymosser@aol.com](mailto:betsymosser@aol.com).



Kate Sora, Grace & Mia Caolo of Girl Scout Troop 75476 at the CoastSweep!



### FCW OFFICERS and BOARD OF DIRECTORS

Barbara Cotnam, President  
Tom King, Vice President  
Frank Messina, Vice President  
Kristin Andres, Secretary  
Robert Samuelson, Treasurer

Ron Bergstrom ◆ Lisa Cody  
Debbie Ecker ◆ Sandy Giorgetti  
Deedee Holt ◆ Paul Kelley  
Michele Moloney Kitts ◆ Jeffrey Mason  
Bob Montbach ◆ Betsy Mosser  
Michael Page ◆ Theresa Sull

*Emeritus:*  
Walter Butler  
Kurt Hellfach  
George Olmsted

## Bill Coleman Retires from FCW Board of Directors



As a founding member of FCW, the Rev. Dr. William C. Coleman (known to us as Bill) has given many years of his time and abundant energy to advance FCW programs. With his impressive ministerial voice

and friendly way with people, he served with distinction as FCW Vice President for many years and chaired both the Pond Study Group and the Scholarship Committee. His leadership was crucial when discussing critical issues and mediating differing opinions. Bill had a winning way with people, whether successfully persuading selectmen or committee members to make decisions for the common good to protect the environment, e.g., the adoption of Chatham's Comprehensive Plan. He was instrumental in helping FCW set up new programs such as Chatham Water Watchers. We will miss Bill and wish him well as he pursues his many other interests such as teaching sailing at Pleasant Bay Community Boating, keeping native bees and working in the greenhouse attached to their home in N. Chatham.

## LEWIS E. KIMBALL ENVIRONMENTAL SCHOLARSHIPS 2018-19

Elie B. Jordi, of West Tisbury will complete his Bachelor of Science degree at the University of Vermont in May, 2019. He is majoring in Environmental Studies with a minor in Political Science. This fall semester he spent taking course work at the School of International Training in Geneva, Switzerland, to study multilateral diplomacy and international studies. His goal is to work as a diplomat, focusing on environmental issues at the international level.

Directors run the successful Lewis E. Kimball Scholarship Program. In eleven years twenty-seven scholars have received a scholarship, all told, \$70,000 has been awarded to appreciative students. Our recipients thank you, and FCW Directors do too! It's a rewarding program that helps scholars with the high cost of education. FCW thanks the Max and Victoria Dreyfus Foundation Incorporated – for six out of the eleven years, the foundation has awarded grants to this FCW program to help fund this successful program.

## BARBARA STREIBERT ENVIRONMENTAL EDUCATION GRANTS

Barbara Streibert Environmental Education Grants are awarded each year to teachers in the Monomoy Regional School District. 2018 is FCW's 8th year of giving grants in remembrance of Director Barbara Streibert.

This year science teachers Melinda Forist and Nancy Gifford received funds for seventh grade field trips to Muddy Creek and the Cape Cod National Seashore for students to test water quality, observe area biodiversity, conduct plant inventories, learn about blue carbon and the impact of sea level rise and climate change. This grant also included funds for a dissolved oxygen meter and pH meter for student field testing.

A second grant was given to fifth, sixth and seventh grade librarian and teacher Cheri Armstrong for the annual science and humanities weekend Writers' Retreat at Cape Cod Sea Camps. Sixty students learned and wrote about Chatham's waterways and the inter-connectedness to all waters on the Cape because of our sole-source aquifer. They also learned about environmental concerns and their impact on our aquifer. This year students focused on the impact of the seal and shark population.

Funding provided for the program's bus transportation, whale watch, Audubon scientists' salaries, and student scholarships.



Monomoy Middle School 7th Graders  
at the Writer's Retreat



## FCW CHATHAM WATER WATCHERS PROGRAM

Each year FCW Water Watchers monitor 15 testing stations in Chatham's estuaries. 2018 was the 20th consecutive year of the Coastal Water Nutrient Monitoring Program.

Using refractometers, secchi disks, dissolved oxygen meters, niskins, collection bottles and filters, trained volunteers test and record results for water clarity, salinity, dissolved oxygen content and temperature and collect water samples. These samples are then analyzed by the School of Marine Sciences and Technology at the University of Massachusetts at Dartmouth. The data collected helps determine the health of Chatham's estuaries and track changes as the town implements its wastewater management plan. Since it is important to monitor water quality over a long period, Chatham Water Watchers will continue their work for the years to come.

FCW would like to recognize and thank the following volunteers for their dedicated efforts:

**Stage Harbor Estuaries:** Jay Stahl, Bill Horrocks, John Trimble, Larry Capodilupo, Cameron Koblish, Nat Mason, Chris Corthouts, Bob Simonds, Bill Hayes, Kelsey Shakin, Lisa Patten, Maureen Vokey, Drew Carey, Sandy Giorgetti, Betsy Mosser, Bri Carstens, Pippin Griscom and Douglas Fields.

**South Coastal Embayments:** Frank Messina, John DeLeonardis, Don Phinney, Juris Ukstins, Sherrie Burson, Dick Hosmer, Dave Holden, Roger Donald, John Garey, and Peter Barry;

**Pleasant Bay:** Bob Samuelson, Bill Coleman, Roz Coleman, Tom Parker, Denise Yokum, Carole Ridley, Trevor Ridley, Natalie Coleman Fuller, Nick Harris, Deedee Holt, Lisa Holt, Michael Reilley, Lisa Cody and Jeffrey Mason.



Pippin Griscom collecting water samples 2018

If you are interested in becoming a Chatham Water Watcher, contact one of the following area coordinators:

Betsy Mosser (betsymosser@aol.com), for Stage Harbor,

Frank Messina (franksmalabar@gmail.com) for South Coastal Embayments, or

Bob Samuelson (rjsamuelson@mac.com) for Pleasant Bay.

### FCW Membership Renewal Form

Return to FCW, Box 472, Chatham MA 02633

\$25 individual     \$40 family     Additional donation \$\_\_\_\_\_

Name/s: \_\_\_\_\_

Street/P.O. \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

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

**Email\*** \_\_\_\_\_

\*Your email will help us save money by communicating via ConstantContact

Cape Residence \_\_\_\_\_

Please make checks payable to FCW.

Contact me about becoming a volunteer

Contributions are tax deductible to the full extent of the law. FCW is a 501(c)(3) tax-exempt organization

*Thank you for your support.*



*Happy Holidays! from FCW*