WATERWAYS

FRIENDS OF CHATHAM WATERWAYS NEWSLETTER

The mission of Friends of Chatham Waterways is to promote the protection, wise use and enjoyment of Chathams fresh and salt waterways and adjoining lands.

FCW Summer 2023 Newsletter

Water Monitoring Programs

Our saltwater and freshwater programs need more volunteers, so please consider volunteering.

Cyanobacteria Monitoring Program
Our first cyanobacteria sample date was May 30th. All five ponds (White, Lovers Lake, Stillwater, Goose, and Schoolhouse) came back acceptable. We will sample biweekly until the first week of November. **For more info visit** APCC cyanobacteria.

Pond Water Quality Monitoring

We will be sampling six ponds (Stillwater, Lovers Lake, Barclay, Emery, White, Goose and Schoolhouse) once in August for water clarity, dissolved oxygen and temperature. We need volunteers who have a canoe or kayak and who can do the sampling annually. **For information on volunteering, email** pondstudy@chathamwaterways.org

Secchi Disk Satellite Program
The remote sensing program investigates the use of satellite-derived imagery and existing pond water quality data through use of a secchi disk. (The secchi disk defines water transparency.) The goal is to use satellite information to learn more about the health of ponds across the Cape. We need volunteers who have a kayak or canoe to help us with this new pond testing program. We will sample about every two weeks at the time the satellite goes overhead. **For more information on volunteering, email** pondstudy@chathamwaterways.org.

The FCW Chatham Water Watcher program consists of volunteers who monitor salt water quality in Stage Harbor estuaries, south coastal embayments and Pleasant Bay. Five times during the summer volunteer water watchers first observe and record weather conditions, wind force and direction and water clarity. Next they use various testing equipment: a refractometer to note salinity values, a Secchi disk to measure testing station water transparency, and a dissolved oxygen meter to record oxygen saturation. Finally, using a Niskin, water samples are collected for nutrient and chlorophyll content. This testing is undertaken in collaboration with the town of Chatham. Samples and data are later taken to the University of Massachusetts School of Marine Science and Technology in Dartmouth for analysis.

The Coastal Water Nutrient Monitoring Program provides critical data on general water quality, conditions and trends in nitrogen loading. This data helps determine the health of the town's estuaries and embayments and track changes.

To become a Chatham Water Watcher or information, send an email to WaterWatcher@@chathamwaterways.org

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Summer Interns

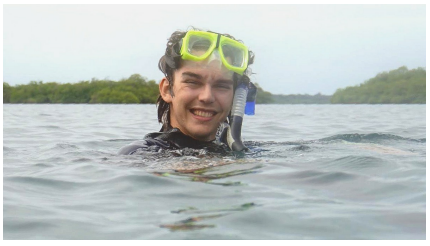
FCW has two interns working for us this summer. They will help advance our work focused on ponds an saltwater testing, as well as strengthen our communications and outreach, including our Facebook and Instagram social media and to organize our scholarship recipients into a

network, so that they can serve as "ambassadors" at FCW events. We are excited to welcome them as our first summer interns.

Brady Hill, is a rising junior at the University of Vermont studying Biological Sciences and minoring in Plant Biology and Chemistry. He's been a Cape Codder for almost his entire life and has a keen interest in protecting the critically important habitats and wildlife of his community. With experience in conservation interning for the Brewster Conservation Trust last year, Brady is excited to spend his summer helping maintain the serenity of Chatham's waterways and improving their health. He plans to continue his conservation journey after graduation, hoping to give back to Cape Cod's wilderness with all he has learned.

Callahan Coughlin is a recent graduate of UMass Amherst who studied abroad at the University of Otago in New Zealand to learn about marine biology in the Antarctic. He loves to travel and spends his free time tide pooling and reading about ecology. Callahan began his interest in environmental science as a lab assistant at UMass' Roy Aquatic Ecology Lab studying the ecological effects of dam removal on insects as a marker for stream ecology health. He hopes to one day work for WHOI aboard a scientific research vessel to study the effects of humans on ocean environments.

2023-2024 Lew E. Kimball, Jr. Scholarship Awardees



Liam Brister
Northeastern University
Ecology and Evolutionary Biology

Kaitlin Button
Paul Smith's College
Natural Resources Conservation (Master's)

Evangeline Gosselin
Mass Maritime Academy
Environmental Protection and Facilities Engineering

Colin Bostwick
Norwich University
Environmental Science

Tristan Matherly
University of Vermont
Environmental Science

Marissa Gonsalves
University of Rhode Island
Marine Affairs

Luke MacKay
Skidmore College
Environmental Science

Brady Hill
University of Vermont
Biological Sciences

Native Plants for Water Conservation

Native plants are necessary for our native wildlife and birds as they have evolved together. Native plants offer habitat, food and nesting areas that non-native plants do not. The research of Dr.Doug Tallamy, entomologist a t the University of Delaware, has shown the native oak trees support over 500 species of caterpillars and non-native tree species support very few, if any. Why is this important? Just one brood of chickadees needs upwards of 9,000 caterpillars just to fledge!

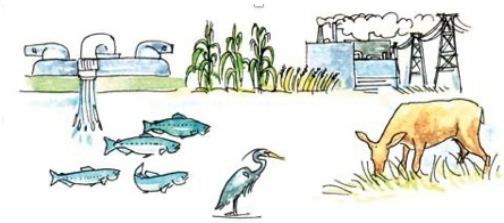
Because native plants are adapted to local environmental conditions, many are drought and salt spray tolerant. They do not require fertilizer and require far less water, saving our most valuable natural resource, water.

For more information go to Why native plants matter on the audubon.org site.

Water Conservation

Saving water is as important as keeping it clean.

The Cape's drinking water comes from a sole source aquifer. Although the demand for water increases, the capacity of the aquifer remains finite and its replenishment is dependent on annual rainfall.



Using less water saves more than just the water; it also saves you money.

Every day, each person who is not already conserving water uses about 65 gallons of water at home. Most of us can decrease water consumption in our homes by 15% to 20% without much discomfort or expense. All we have to do is acquire good water-use habits. For more information visit the Blue Pages.

Morris Island Dike Conservation Area

"In the late 1950s, Morris Island Dike was created and acquired by the Town of Chatham for public use and highway purposes. At the March 6, 1961 town meeting, an article was approved to dedicate the land to preservation and conservation purposes.

Morris Island Dike Conservation Area listed as being 18 acres in the assessors database, is split in two by Morris Island Road. The area consists of dune and salt marsh vegetation. The shoreline area around Morris and Monomoy Island has changed over time, due to varying sediment transportation patterns.

While Stage Harbor and Chatham Harbor have been connected at some points in time, the creation of the Morris Island dike stopped flow between the two. A portion of the property is protected by a Conservation Restriction. The entire property is in the coastal floodplain."

For more information go to the town web pageMorris Island Dike Conservation Area

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