



River News

Our Mission: To restore, protect, celebrate and sustain the natural resources of the Westport River and its watershed communities of Westport, Dartmouth, Fall River, Freetown, Little Compton, Tiverton & Adamsville.

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Nitrogen—A Tale of Too Much of a Good Thing

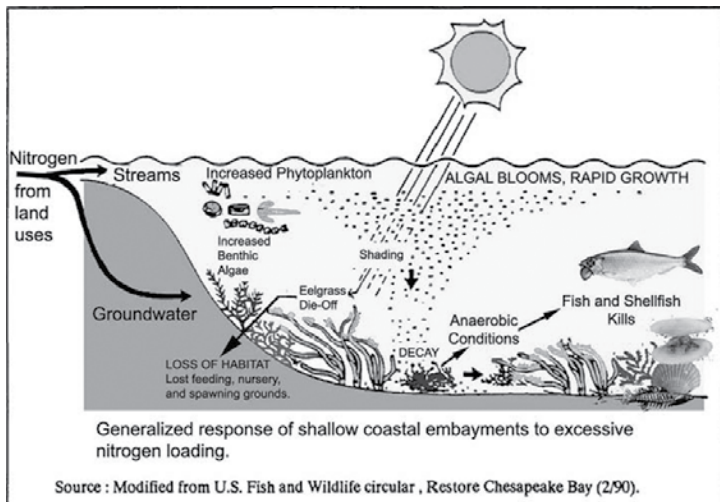
What do chocolate, rain, and nitrogen have in common? All are beneficial in limited amounts, but an overabundance of any of them is detrimental in one way or another. We all know about the effects of the other two, so let's look at nitrogen.

This element, which in its gaseous form is the most abundant component of air, is necessary to all life for the production of proteins and reproduction. Nitrogen occurs in nature in many forms, as a gas or as organic and inorganic material, and may be converted back and forth, or cycled through any of the three forms. The nitrogen cycle is the process whereby nitrogen passes from the atmosphere into living things, through the food chain and ultimately back into the atmosphere.

Nitrogen is a fertilizer, utilized for growth by both plants and animals. In the oceans and estuaries, it is a limiting nutrient—some nitrogen is needed but a little goes a long way. When there are the proper amounts of nitrogen in the water, there is an appropriate balance between the growth and decay of plants, allowing the animals which rely on healthy plant growth and good water quality to thrive. Among other things, plants provide oxygen by photosynthesis to the water column, thus sustaining the populations of animals which reside there

However, too much nitrogen results in blooms of algae, both within the water column and growing on the bottom. Excessive algal growth blocks vital sunlight from reaching underwater plants such as eelgrass, which provide food and habitat for many species. It covers shellfish beds, essentially choking them

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A Simplified Version of the Nitrogen Cycle in Estuaries

Seventh Annual River Run Canoe / Kayak / SUP Race and Family Fun Paddle Saturday, June 18, 2011 (rain or shine)

Start: Hix Bridge Landing, Westport.

Finish: Head of Westport River.

Enter a 3.5 mile Family Fun Course or an 6.5 mile Challenge Course.

Since 2004 WRWA and Osprey Sea Kayak Adventures have organized a fun morning paddle on the beautiful upper east branch of the Westport River. All skill levels, from novice to racer, are invited to participate in the race or family fun paddle. Non-motorized vessels including canoes, kayaks, rowboats, and paddleboards participate in the race piloted by people of all ages. (Participants 16 and under must be accompanied by an adult.) The race is fun, challenging and a great way as an individual, or with friends and family, to enjoy the river and support the WRWA. After the race an Awards Celebration is held, where trophies and ribbons are bestowed on the winners. For more information and to register visit our website. Discount prices offered for early registration.



Sign Up Now for Summer Programs

Our summer education programs are “hands-on and feet-wet.” We have different opportunities for kids ages three to fifteen.

Our one-day and week-long programs help us fulfill our mission to educate the public by teaching children about the value of the spectacular natural resources found within the region.

Our goal is to raise their awareness of the importance of environmental stewardship. Our summer programs offer children the opportunity to learn science, make friendships and build self-confidence, all while having fun in a relaxed, safe environment. Programs fill up quickly, so don't miss out.

For more information and to register visit our website: <http://westportwatershed.org/index.php/watershed-education/summer-programs>.



River News is published by the **Westport River Watershed Alliance**, a nonprofit citizens' organization working to protect the environment and improve the economic, aesthetic, and recreational value of the Westport River watershed and its coastal environs.

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Lees Market receipts
to the WRWA office.

Lees donates 1% of total receipts
to support WRWA. It helps us pay
for River News.

Thank you Lees Market!

Annual Meeting Wrap-Up

WRWA's annual meeting was held in March. WRWA president, Peter Kastner, spoke on the activities and accomplishments in the year 2010. He noted that WRWA provided awareness and advocacy on watershed resource topics such as the Lincoln Park redevelopment and we provided better advocacy in the town with various boards. We reorganized our water resource related activities around a single committee. Additionally we organized staff and volunteers for 2011 around helping the town assimilate the Westport Estuaries Report.

The new slate of Board Members and officers were elected. Sally Ann Ledbetter and Maury May will take over as new officers, president and treasurer respectively. After three years as WRWA board president Peter realizes how tough it is to "clean-up" the river. Everyone needs to have a mental set for long-term, steady battle to improve the river's quality. Peter sent his thanks to the staff for hard work and grace under pressure, to the board for confronting tough choices and making hard decisions, and especially to the members for their volunteerism and financial support.

This year the WRWA Environmental Awards went to State Senator Michael Rodrigues and Tim Gillespie for their work advancing the release of the Westport Estuaries report. Volunteer awards were given to Mike Bartlett and Sara Sampieri from SMAST's Coastal Systems Laboratory for their exemplary field work to assess constituent loads associated with stormwater run-off from the Westport Point area and its associated discharge to the Westport River Estuary.

—Suze Craig, Editor

How We Celebrated Earth Week

Mother Earth certainly threw all she could at us for our clean-ups this year. The 5th Annual WRWA Electronics Recycling Day was very windy and chilly; however, we had quite a few people come by who really wanted to get rid of their old electronics. Complete Recycling Solutions left after the three hour event with a truckload of items to take apart and recycle their components and extract certain materials, like mercury, for reuse.

The following Saturday we held our annual Earth Day Beach Clean-ups at Cherry & Webb Beach, Gooseberry Island, and East Beach. Despite the rain, we had a few hearty souls who helped collect bottles, broken glass, balloons, and even a patio chair and a tire or two off of our beaches. Thank you so much for all who helped out, picked up, and recycled.

If you missed these events and want to celebrate the earth another day, we can help. WRWA is seeking volunteers to help with various projects throughout the year. Please contact the WRWA office for information on volunteer opportunities.



FREE Organic Lawn and Garden Care Workshop Saturday, May 14th, 10 a.m.—Noon

Sarah LaValley will present an interactive lecture on organic lawn and garden care with the Westport River Watershed Alliance. Sarah will teach proper mowing techniques, how to select proper plants, how to control pests, when to water, and the basic steps to achieving a beautiful chemical free lawn and garden that also conserves water and saves you money. Organic lawns and gardens work to keep additional nitrogen from entering our streams and the Westport River.

The program will begin at 10 a.m. at the Westport Free Public Library, 408 Old County Road. Everyone interested is welcome to attend.

It's Finally Spring...

Here are Five 5 Green Tips for Natural Lawns and Yards

- 1. Get a Soil Test** — Don't spend money on fertilizers or soil additives without getting a soil test first. Find out your soil's pH and other characteristics by sending a sample to the soil lab at the University of Massachusetts; call 413-545-2311 or visit their website for complete details (www.umass.edu/plsoils/soiltest/). For a small fee, you will receive an analysis and recommendations for improving your soil. Some nurseries also provide soil testing services for a reasonable price, and can help you interpret the results.
- 2. Grow the Right Grass** — The most common lawn grasses in North America (Kentucky bluegrass and Bermuda-grass) also need the most water and fertilizer to grow well. In Massachusetts, lawns comprised of "turf-type tall fescue" grasses (chewings, hard, creeping red, and sheep) are a better choice than bluegrass lawns. Fescue lawns are drought tolerant and insect-resistant, and work in sun or shady areas.
- 3. Add Compost** — Nature's most magical soil additive, compost, contains all sorts of beneficial microorganisms that add life to the soil. These organisms will interact with the organic fertilizers to provide the green lawn many of us covet. Compost in liquid form, known as compost tea or extract, should be used in combination with dry compost because the liquid form is available to the soil and grass more quickly. This is especially important during the years of transition from a synthetic system.
- 4. Avoid Synthetic Materials** — Let nature provide the nutrients. Manufactured chemical fertilizers cause damage to rivers and streams. Fertilizers and soil amendments should come from natural materials.
- 5. Overseed Regularly** — In nature, plants produce seed to reproduce themselves. In a lawn system, where we mow regularly, grass is not allowed to reproduce and even the healthiest plants get tired. By overseeding in spring or fall, you are introducing robust young plants that will fill in bare areas and compete aggressively against weeds.

For more "green" yard tips and information see these websites:

<http://www.greenscapes.org>
<http://www.organiclandcare.net>
<http://www.safelawns.org>

Watershed Issues

Cockeast Pond Herring Run

Herring have been seen moving into Cockeast Pond via the newly restored culvert. They have been spotted moving up into the pond to spawn even during low tide, marking the success of the collaborative effort made over the past year. Several dedicated volunteers continue to monitor the herring run in order to gather more information about the movement and number of herring moving into the pond.

Hix Bridge

The U.S. Army Corps of Engineers (USACOE) is investigating the potential effects of the debris under the Hix Bridge on the shellfish habitat in that area. The granite block debris is the remains of the bridge after it was destroyed in the 1938 hurricane, and was not removed when the bridge was recently rebuilt. The ACOE will look at water quality, ecology, hydrodynamics, and geology as part of the study, to see if removing the granite block restrictions is economically or environmentally warranted.

Westport Middle School 319 Grant

Massachusetts Department of Environmental Protection's (MassDEP) Section.319 Non Point Source Competitive Grant program has awarded \$389,994 to the town for stormwater solutions at the Westport Middle School complex. Stormwater from the site's impervious surfaces, roofs and parking areas currently contributes over 50% of the untreated stormwater that flows into the river on the west side of the Head Bridge.

Free Storm Water Seminar

WRWA has teamed with a consortium of stormwater professionals from Vanasse Hangen Brustlin, Inc., The Center for Watershed Protection, Horsley Witten Group, Inc., and Stacey DePasquale Engineering to provide free Storm Water Training Seminars in our region. The seminar is Wednesday May 25, 2011, 8 a.m.—1 p.m. at the Westport Town Hall Annex, 856 Main Road. Topics that will be covered are:

Low Impact Development (LID) Design and Implementation for Residential and Nonresidential Properties—Storm water retrofits for storm water management for residential/municipal/commercial/ industrial/institutional properties.

Choosing the Right Storm Water Treatment Practice—Learn appropriate storm water treatment practice selection based on several factors, including land use, physical feasibility, climate/regional factors, watershed factors (including TMDLs), storm water management capability, pollutant removal, and community/environmental factors.

Building an Effective Storm Water Maintenance Program—Minimize future maintenance through the planning, design, review, construction and post construction phases of storm water management. Instruction on designing a maintenance tracking system, establishing maintenance easements and agreements, and developing inspection checklists.

If you plan to attend, please contact us at 508 636-3016 or outreach@wrwa.com.

SAVE THE DATE
WRWA 2011 Summer Gala



Moon River
Saturday, August 13,
5-8 P.M.
Coggeshall Lane
Off River Road,
just south of Cross Road

Featuring

Our popular Silent Auction
 Music by City Lights
 Open Bar by Perfect Pour & Lees Market
 Fine Food from Wilhelmina's Catering
And the August full moon!
 Additional contributions from
 Coastal Roasters, Formaggio Kitchen, Green Gal Catering,
 Lafrance Hospitality, The Back Eddy, The Bayside Restaurant,
 and Wicked Kickin' Savory Cheesecake.

Many thanks to Corporate Benefactor, Lees Market, and Corporate Sponsors: Citizens-Union Savings Bank, Elegant Restrooms of Rent-A-Jon, Fiduciary Trust Company International, Katzenbach & Company Real Estate, Lees Oil Service, Inc., Sovereign Bank, Waring-Sullivan Homes of Memorial Tribute, and Westport Federal Credit Union for their early and enthusiastic support of this special evening.

For advance reservations, call the WRWA office (508)636-3016 or visit www.westportwatershed.org. Benefactor*: \$500 per person; Patron*: \$300 per person; Sponsor*: \$175 per person; Attendee: \$80 per person.

*Listed in 2011 Gala Invitation if received by 6/1/11.

Nitrogen-A Tale of Too Much of a Good Thing Continued

by interfering with their ability to filter water. As algae die, they sink, adding to biomass covering the bottom. Bacteria which feed on the algae as part of decomposition take up oxygen from the water. If decomposition occurs more rapidly than photosynthesis, oxygen levels decrease to a level where animals can no longer survive. In addition, decaying algae can create foul smells and unattractive floating or bottom mats, reducing the aesthetic value of an area.

One of the most common pathways by which nitrogen enters oceans and estuaries is by surface runoff, especially as storm water. Fertilizers, road contaminants, septic systems, animal waste, and the atmosphere all contribute nitrogen to water bodies. By controlling the types and number of sources, as well as the amounts of nitrogen pollution, we will be better able to achieve that proper balance needed for a healthy water system.

—Betsy White

WRWA Calendar of Events	
Programs Require Registration please call the office or visit our website to sign up.	
05.14 ~ 10 a.m.	Organic Lawn and Garden at Westport Public Library
05.25 ~ 8 a.m.	Storm Water Seminar
06.04 ~ 9 a.m.	Kayak Program with Osprey Sea Kayak Adventures
06.18 ~ 9 a.m.	River Run Paddle Race
08.13 ~ 5 p.m.	2011 Summer Gala - Moon River
July-August	Westport River Eco-Boat Tours

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