In the Mainstream

Newsletter for Members of the Norwalk River Watershed Association [NRWA] New Canaan, Norwalk, Redding, Ridgefield, Weston, Wilton, CT, and Lewisboro, NY

www.norwalkriver.org

Fall 2015

THE EVER-GROWING PROBLEM OF MICROBEADS IN BEAUTY PRODUCTS

BY KRISTEN BEGOR

A popular ingredient in beauty products is creating a new environmental threat. bits of plastic known Tiny "microbeads" that act as a scrubbing component in face and body washes, skin exfoliants, moisturizers and even toothpastes are typically made of polyethylene (PE), polypropylene (PP), polyethylene terephthalate polymethyl methacrylate (PMMA), and nylon. It is reported that up to 300,000 microbeads can be found in one tube of face scrub. Scientists say that the beads soak up pollutants such as pesticides and chemicals after they are washed down the drain, flow into sewer systems and pass through the wastewater treatment plants that are unable to filter out the tiny plastics before making their way into rivers and canals and eventually into the lakes and oceans by the billions. It is here where the contaminated microbeads that are about the same size as fish eggs can be mistaken for food. As a result, they are ingested by fish and other marine life and passed onto humans and wildlife. It is reported that water treatment plants in New York cannot process the nearly 19 tons of microbeads

ANNUAL BUTTERFLY WALK DRAWS A BIG CROWD

Attendees at Redding lepidopterist Victor DeMasi's exciting introduction to Watershed butterflies and moths learned how to tell male from female butterflies, what it feels like to have a butterfly cling to your nose, and how to attract butterflies to your yard by cultivating the native plants pollinators need to survive and reproduce.



Photograph courtesy of Adirondack Council

that may be washing into New York's wastewater every year. The relatively small Norwalk River holds four such wastewater treatment plants.

Environmentalists say microbeads are a part of the plastic pollution in the ocean increasingly the Great Lakes, which contain more than 20 percent of the world's fresh water. The EPA is looking into potential dangers after high concentrations of microbeads were discovered in the Great Lakes. Testing on Lake Michigan found, on average, 17,000 bits of tiny plastic items per square kilometer in the Lake. The levels were much lower in Lake Huron and Lake Superior, but Lake Erie and Lake Ontario had much higher concentrations. Lake Ontario's levels are highest, with counts of up to 1.1 million plastic --continued on page 2



VOLUNTEER ACTION: BUILDERS BEYOND BORDERS TO RESTORE RIVERBANK OCTOBER 10TH

BY LOUISE WASHER

Builders Beyond Borders, based out of Norwalk, is an organization of dedicated area high school students who log dozens of volunteer community service hours both at home and abroad in places like Guyana and Costa Rica where they work side-by-side with residents to "help make their communities a better place to live."



B3 students removing invasive plants from the riverbank at Merwin Meadows in 2013.

The group will be returning to Merwin Meadows this fall to continue work begun there two years ago to help cut back invasive plant species such as euonymus (burning bush), Japanese knotweed and Asian bittersweet. They will also help plant native plant species along the banks of the Norwalk River at the park. Join us at Merwin Meadows on October 10th from 9:30 to

...Microbeads, continued from page 1

particles per square kilometer.

Producers have been asked to act responsibly and stop adding microplastics to cosmetics. Several major cosmetic companies, including L'Oreal, Procter & Gamble, Unilever, Johnson & Johnson, and Colgate-Palmolive have already pledged to phase out the use of microbeads and are testing alternatives like sand, apricot seeds, granules of sugar, salt, cocoa beans, and ground up seashells. In 2013, Johnson & Johnson pledged remove polvethylene microbeads, the most common type of microbeads, from its personal care products by 2017. Procter & Gamble, another global consumer products giant, has made a similar pledge. Multinational Unilever phased out the use of plastic microbeads from its Dove soaps and other products at the beginning of the year. For a list of microbead-free products see beatthemicrobead.org.

Eight states have banned microbeads and several more have bills pending, including California. Environmental advocates may get their way even if only a few large states enact such bans. Consumer product companies cannot afford to make multiple versions of the same product and could decide to manufacture the version that will be

STATES THAT BAN MICROBEADS

Eight states—Colorado, Connecticut, Indiana, Maine, Maryland and New Jersey—have enacted legislation to restrict the use of microbeads, while bills are pending in other states, including New York, California, Ohio, Michigan, Minnesota, Washington and Oregon. Environmentalists say many state bills do



not go far enough, because they allow companies to come up with biodegradable, but insufficiently tested, alternatives. Conservation groups have argued that allowing even biodegradable beads to move through the environment is problematic. Like New Jersey's ban, if the California bill becomes law, it would ban not only synthetic particles but also the biodegradable ones that many companies have been developing as alternatives by 2020. Connecticut's ban requires further study by the Commissioner of Energy and Environmental Protection to determine if biodegradable microbeads adversely impact the environment and may also ban those depending on the outcome. If no such study is completed by December 2017, the ban will become effective. In March, representatives from Michigan and New Jersey introduced federal legislation to ban synthetic plastic microbeads effective in January 2018.

acceptable under the strictest state standard. Researchers say that banning microbeads in consumer products is an important first step, but that there are many more plastic products that end up in waterways and there's a long way to go to get rid

of them. Until these bans are fully approved, consumers should look at labels. If they have polyethylene or polypropylene on the labels, that indicates there's plastic in them. Sometimes it says "Microbeads" right on the front.

MEMBERSHIP FORM

☐ Enclosed is my tax-deductible, annual membership contribution of \$ I would prefer to receive the semi-annual newsletter, <i>In the Mainstream</i> , via: ☐ The name and address written below, or ☐ The email address listed below.				M111
Riparian Society Steward \$1000 and up Protector \$500-\$999	Basic Membership Supporter \$50-\$99 Donor \$30-\$49		Oyster	· Shell Park by Sara da Silva
Patron \$100-\$499	Other \$		Onwou	on donata on lina
Yes, my company has a Matching Gift Program. Company Name Please make check payable to: NRWA, Inc., and mail to the Norwalk River Watershed Association, Inc., P.O. Box 197, Georgetown, CT 06829			Or you can donate on-line using PayPal through our website! www.norwalkriver.org	
Norwalk River watersned Association	i, Inc., P.O. Box 197, Georgetov	VII, C1 00829		
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SCHEDULE OF EVENTS

NRWA programs highlight the importance and features of the Norwalk River and its watershed and ways people collectively and individually can improve the region. free, unless Programs are specified, but space may be limited: reservations suggested. Call the leader listed or NRWA at 877-NRWA-**INFO** (877-679-2463) or email us at info@norwalkriver.org for information, directions, and reservations. Updates and more events at *norwalkriver.org*.

Saturday, **September** 10AM-4PM Sunday, Sept. 20, 10AM-4PM. Live Green Connecticut. Visit the NRWA table on Sunday and learn to 'Live Green' at this two-day family festival for all ages, at Taylor Farm Park located at 45 Calf Pasture Beach Road in Norwalk. Enjoy delicious food, eco-friendly live music, shopping, environ-mental speakers and exhibits! More info at livegreenct.com.

Saturday, September 19. 9:30AM to 3PM. Oyster Shell Shoreline Cleanup. Park Come help clean up Oyster Shell Park! Afterwards we will weigh the collected, bagged trash, categorize it and report it the Ocean Conservancy to help them track and eliminate ocean debris as part of International Coastal Cleanup Day. Volunteers meet at Heritage Park by Ann and North Water Streets in Norwalk. Waterproof footwear advised. Families welcome. Rain date: Sunday Sept. 20. The residents of Jefferson at 55/77 Water have kindly offered pizza and sandwiches in their

clubhouse, restroom access and limited parking at 55 Water Street for all volunteers. Cosponsored by NRWA, Norwalk Land Trust, HarborWatch at Earthplace and Jefferson at 55/77 Water. For more info, call 877-NRWA-INFO.



Come help clean up Oyster Shell Park near the Norwalk Aquarium September 19, International Coastal Cleanup Day.

Saturday & Sunday, October 3 & 4, 11AM-5PM. Audubon Greenwich's **HawkWatch** Festival & Green Bazaar. Come celebrate the annual hawk migration over Audubon Greenwich's "Quaker Ridge Hawk Watch." There will be live birds of prey shows, games and activities for all ages, ecofriendly business exhibits, great food and music. Rain or shine. More information greenwich.audubon.org.

Saturday, October 10 9AM-12PM. Riverbank Restoration at Merwin Meadows. Join volunteers from NRWA and Builders Beyond Borders in cutting back invasive plants and planting native replacements along the banks of the Norwalk River in Wilton. We will begin with an overview of how to identify invasive plant species in our area and why native plants are important to the health of the watershed. Wear long pants and sturdy shoes,

bring clippers and gloves, though some will be available. Meet in the parking lot at the bottom of Lover's Lane, Wilton. For more information, call 877-NRWA-INFO.

Friday October 23, 5:00-9PM. **Howl Prowl Woodcock** Nature Center. Come for hayrides, flashlight scavenger hunts, fireside s'mores, night spotting raft rides, and the chance to meet a few permanent Woodcock residents. Children are invited to come in their Halloween costumes. This is a non-scary event. Preregistration and payment are required. More information at woodcocknaturecenter.org. Woodcock is at 54 Deer Run. Wilton.

See *norwalkriver.org* for more fall and winter events.

Interested in Volunteering?
River Rangers, Hike or Kayak
Leaders, Trail Workers, Board
Members, Grant Writers,
Environmental or Website Writers,
Graphic Designers, Gardeners,
Scientists...these are just some of the
volunteer positions we would like to
fill. The more help we have, the more
we can do. You can make the
difference! Let us know your interests,
expertise, and where you would like to
help. Contact info@norwalkriver.org.

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Norwalk River Watershed Association, Inc. The Norwalk River Watershed Association, incorporated in 1996, is a not-for-profit membership organization whose mission is to improve the water quality and aesthetic value of the 40,000- acre Norwalk River watershed; to encourage recreational use of the existing trails and open space; and to promote research, education, cooperation, and action on the part of the stakeholders in the seven watershed towns in CT (Ridgefield, Redding, Wilton, New Canaan, Weston, and Norwalk) and NY (Lewisboro).

Officers of NRWA Board of Directors Kristen Begor, President (Wilton) Louise Washer, Vice President (Norwalk) Kitsey Snow, Treasurer (Ridgefield) Elizabeth Craig, Secretary (Wilton)



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Protect our surface water and ground water. Do NOT flush medicines down the drain or toilet. Instead, turn them in at your town's Drug Take-Back Day, your local pharmacy's take-back program or locked box located at your police station.

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HOW ARTIFICIAL TURF PLAYING FIELDS AFFECT WATER QUALITY

BY WOODSON AND TINA DUNCAN

Once deemed safe, artificial turf, which consists of a "plastic carpet" with crumb-rubber or another infill material, has come under scrutiny, and recent studies raise questions about its safety. In almost all cases, the crumb-rubber consists of ground-up scrap tires, which contain known carcinogens and countless other chemicals. Recent studies show that exposure to crumb rubber fields causes multiple risks to players' health including skin infections. National news reports are linking artificial turf and cancer in young athletes. What about our water and our environment?

In June 2007 following a request by Environment and Human Health Inc. (*EHHI.org*), a non-profit organization headquartered in New Haven, the Department of Analytical Chemistry at the Connecticut Agricultural Experiment Station (CAES) examined crumb rubber to determine if organic and elemental components are leached from the tire crumbs by water. The results support the conclusion that under relatively mild conditions, components of crumb rubber from tires are leached into water and off-gassed into the air. The ingredients that passed into the water included heavy metals: zinc, selenium, lead and cadmium and over 200 other compounds. Lead is a well-known neurotoxin and was removed from paints and gasoline years ago for safety reasons. Zinc has been shown to be detrimental to aquatic life including fish, frogs and plants. Many of the other ingredients in tires have not been studied for their safety. A partial list of chemicals and compounds found in scrap tires is listed by the EPA on their website *http://www.epa.gov/nerl/features/tire_crumbs.html*.

As a result, many communities and professional sports franchises are choosing to remove artificial turf playing fields. At this point, the evidence can be equated to anecdotal information linking cigarettes and lung cancer. For years the detrimental health effects of smoking were known. However, no study conclusively linked cigarettes and lung cancer. Eventually the link was unequivocally determined. Today most studies cited by proponents of turf are narrow and funded by industry or waste bureaus dealing with the massive scrap tire problem (300 million tires discarded annually). In 2003 the EPA partnered with California, other states and rubber manufacturers to create the Scrap Tire Workgroup. It promoted the use of recycled tires, including in playgrounds. To counter toxicity and volatility concerns, the group designated the EPA as chief marketer compiling studies to respond to concerns. In 2009 the EPA issued a study on the health effects of crumb rubber, saying it found low levels of concerns. But in 2013, the EPA backed off that statement, saying the study was limited in scope and that no conclusions should be drawn from it. In 2014 the EPA ended all involvement with the Scrap Tire Workgroup.

Most proponents of turf point to a narrow 2010 study of five fields conducted by the Connecticut Department of Public Health that states: "The current results are reasonably representative of conditions that can be encountered at indoor and outdoor crumb rubber fields, although this tentative conclusion could benefit from the testing of additional fields." There is ample evidence to, at a minimum, stop installing additional turf fields until further comprehensive studies can be concluded.