

SPECIAL POINTS OF INTEREST:

- This month's Eco-Office highlights some green tips for spring.
- Upcoming Sustainability Committee meetings in Lowell: 4/17, 5/15, 6/19
- March 20: First day of spring!
- April 22: Earth Day

INSIDE THIS ISSUE:

- Greenwashing 1
- Food for Thought 1
- Reusing Glass Bottles 2
- Air-Purifying Plants 3
- From the Chair: Disposables Decisions 4
- Pulling Chestnuts 5

Washing Green or Greenwashing? By Emily Bird

"WASHING GREEN..." At NEIWPC, we enjoy the sustainable option to use reusable dishes, cups, and utensils at our office day-to-day and when hosting meetings. However, we recognize that washing the dishes from lunch or breakfast following a meeting is a significant time commitment. To better spread dishwashing responsibilities among our staff, the Sustainability Committee has established a group of volunteers to wash dishes on a rotational basis following a workgroup or staff meeting in the office. Given that dishwashing is not in any NEIWPC employee's job description, we will also continue to offer the disposable option. The Sustainability Committee has been tasked with recommending the most sustainable disposable kitchenware options, considering both cost and environmental impact.

"GREENWASHING..." distributors of disposable kitchenware are often a culprit of greenwashing. Greenwashing – especially in the context of washing dishes – is as deceptive as it sounds. In fact, greenwashing is not related to dishwashing or cleaning of any kind, but is a relatively new expression for when a company or organization claims its products or activities to be "green" for public relations and marketing driven purposes. As a consumer, it is overwhelming to navigate the many product options chalk full of greenwashing buzzwords [environmentally-friendly; eco-choice; made with 100 percent post-consumer waste, recyclable, compostable...] and make

the right decision. The fact is that choosing the most sustainable options for disposable kitchenware needs to be done on a case-by-case basis considering the materials used, how they were produced, and finally, where they will end up.

NEIWPC's new Sustainability Committee Chair, Dan Peckham, makes specific recommendations, on behalf of the committee, for disposable kitchenware at the NEIWPC office, considering the lifecycle of various products from cradle to grave in the "From the Chair" article on page 4.

Photo credit: <http://theglobalfool.com>



Food for Thought on Eating and the Environment By Linda Allen

Most of us probably remember being admonished by our parents when we were kids for not cleaning our plates – wasting food was wrong given



Photo credit: <http://www.biocycle.net/2013/01/23>

the many needy and starving children elsewhere. There are still many starving children around the world that serve as poignant reminders to not waste food, but there are other good reasons we should clean our plates beyond the obvious. Not eating everything on our plates and wasting food more generally has important implications for the environment and natural resource usage.

According to a recent study by NRDC, 40 percent of food available in the U.S. is never eaten, which corresponds to 20 pounds of wasted food per person per month, worth a total of \$165 billion a year. The average American family throws out about 25 percent of the food and beverages they buy, but the U.S. is not alone in wasting food. The European Union, for example, wastes 90 million tons of food annually and has

designated 2014 as the “European year against food waste”. In general, this food wastage is spread across all stages of the food supply chain, from farming to harvesting, post-harvesting and packing, processing, distribution, retail, food service, and household, but the largest portion of wastage occurs at the household or food service levels.

Food wastage not only results in a loss of valuable food products, it also takes a significant toll on the environment and natural resources. Food wastage in the U.S. corresponds to usage of 25 percent of our freshwater sources and large amounts of

fertilizers, pesticides, land, and energy. Globally, agriculture is a major driver of environmental change, resulting in deforestation, loss of biodiversity, degradation of water resources, and release of toxics into the environment. These environmental impacts will only grow more significant with increased demand for food as the world population grows and becomes wealthier.

Addressing wastage throughout the supply chain will require changes in our supply chain operations, new government policies, increased public awareness, and adjustments in

consumer behavior. Practical solutions include creating incentives to promote complete harvests, standardizing and clarifying requirements for “use by” or “sell by” dates, developing new business models that sell food slightly past its “sell by” date, establishing tax credits for donations to food banks, implementing public education programs on food wastage, evaluating food producers or retailers operations to reduce wastage, and each of us making conscious effort to shop, store, and cook food with an eye towards reducing waste. Some food for thought the next time you don’t clean your plate!

How to Make Vases Out of Used Glass Bottles

By Lindsey Walaski

Here is a fun craft project to re-use your glass bottles to make sustainable and decorative products!

Materials:

- Cotton Yarn (Acrylic yarn does not work)
- Glass Bottles
- Nail Polish Remover
- Scissors
- Fine Grit Sand Paper (220 recommended)
- Ice water
- Lighter

Steps:

1. Wrap a piece of yarn around the bottle about 5 times around. Tie and cut the yarn.
2. Submerge the piece of yarn in nail polish remover for a couple minutes, making sure the entire piece is saturated.
3. Wrap the piece of yarn around the bottle again. Keep in mind this is where the bottle will break, so make sure it is straight.
4. Hold the bottle from the end furthest from the yarn, and light the yarn on fire. The fire is very controlled and only the yarn will catch on fire.
5. Rotate the bottle for about 30 seconds.
6. Submerge the bottle in the ice water, causing the bottle to break.
7. Sand the edges of the glass to smooth the rough sides.

The most difficult part is to create a smooth break, so make sure the yarn is straight around the bottle. This can also be used to make drinking glasses and candle holders.



Photo credit: picklee.com

Top 5 Air-Purifying Plants for Your Home

By Monica Kacprzyk

Did you know indoor air quality can be up to ten times more polluted than outdoor air? Indoor spaces tend to harbor an array of unhealthy and often inconspicuous toxins from paints, plastics, upholstery, carpets, adhesives, and many building materials.

After a long and cold winter season, poor indoor air quality is at its height and can be a big problem for everyone that has spent the majority of their time indoors. Luckily, there is a natural solution that can help alleviate this problem and make indoor spaces more attractive!

These top 5 plants not only produce more oxygen from CO₂, but they also absorb the most common offenders found in the home including benzene, formaldehyde, and/or trichloroethylene.

If you want a more extensive list of air-purifying plants, check out [this](#) article that lists the best air-filtering houseplants according to NASA. Also, be aware that some of these plants can be poisonous to pets, so be sure to check the labels and warnings before purchasing a new plant for your home.

Peace lily – (top left) Not only is this plant beautiful and low-maintenance, but the peace lily is also a great air-purifier. It topped NASA's list for all three VOCs and it can also combat toluene and xylene. It enjoys 60-75 degree temperatures and thrives in both dim and bright light.

Areca palm – (top right) This plant is the most efficient air-purifying plant and is an excellent air humidifier. It enjoys semi-sun and temperatures between 65-75 degrees.



Rubber plant – (bottom left) Named after its glossy leaves, this plant is especially effective at removing formaldehyde from the air. It enjoys semi-sun to semi-shade and it can tolerate lower temperatures than the other plants on this list (60-80 degree temperatures, and as low as 40 degrees for short periods of time).

Bamboo palm – (bottom middle) The bamboo palm is particularly effective at clearing out benzene and trichloroethylene. It is also a great humidifier. It enjoys semi-sun and 60-75 degree temperatures.

Dracaena – (bottom right) Known for its bright red leaf edges in some varieties, this plant is one of the most effective at removing trichloroethylene from the air. This plant enjoys semi-shade and 60-75 degree temperatures.

Introducing our New Sustainability Committee Chairman

From the Chair: Disposables Decisions

By Dan Peckham



Greetings, and thank you for perusing this issue of the Bulletin!

For those who may not yet be aware, I am Dan Peckham, and I will be taking on the role of Sustainability Committee Chair in 2014. I would like to thank Emily for her hard work and dedication in the position, and for her support through the transition. As Emily's article on greenwashing in this very Eco-Office Bulletin describes, understanding the full life cycle of the disposables we use is vital to making a recommendation on the most environmentally friendly solution to provide disposable kitchenware for events here in the Lowell office. One must take into account the production process, the materials used (renewable/recycled materials?), the end of the end-of-life outcome (will it be added to a landfill, where even compostable products can't biodegrade in anaerobic conditions?), and the cost for NEIWPCC to purchase the product.

For example, in a recent visit to Boloco (a Boston burrito joint), I used a bevy of compostable disposables available for the consumption of my delicious Thai Chicken Burrito Bowl (utensils, napkin, and the bowl itself all said "Please compost if possible"). However, therein lies the rub – neither this establishment, nor any other in the vicinity, had a disposal bin for compostables. These will suffer the same end-of-life fate as anything else going into a landfill or incinerator if they are not properly disposed of... Not so eco-friendly after all!



Photo credit: <http://greenupgrader.com/10566/how-green-is-that-corn-cup/>

After looking into a variety of disposable products, some key themes emerged. Compostables and biodegradables will most likely have a similar fate here in Lowell as would anything else in the trash bin. If we want to guarantee our positive impact, buying products made from recycled or plant waste material ensures that we have already done the good deed by focusing on the input materials. Hence, the Sustainability Committee recommends the purchase and use of recycled plastic utensils, cups, and plates. Given that there seem to be no post-

consumer recycled content bowls on the market, the next best option is a compostable bowl made from wheat straw, a food process byproduct.

The impact of buying green is significant: prices range from -30% to triple the cost of the some of the cheapest standard options. However, the goal is to vote green with our dollars and to account for the environmental impact of products we use – in that sense, the price difference can be justified.

Guide to Buying Eco-Friendly Disposables:

Compostable – Will eventually break down into nutrients useful for plant growth. Be sure to note that this most likely only is guaranteed if deposited in an industrial composter, and not in your backyard compost!

BPI Certified – The Biodegradable Products Institute certifies that a product marketed as "compostable" lives up to the promise.

Continued on Page 5

Biodegradable – Will eventually break down into... who knows what?? ASTM International has information on labeling compliance and standards, but this term doesn't necessarily mean "eco-friendly."

Made from *% Post-Consumer Recycled Content** – Sometimes labeled as PCC, this refers to the percentage of the product made from recycled goods.

Bagasse/Wheat Straw – Sugarcane or wheat byproducts, which can be repurposed to make compostable plates and bowls



Made from *% Renewable Resources** – The material could be sugarcane or wheat byproducts, but it could also be trees, corn, or potatoes. Make sure to understand exactly which "renewable resource" is being used.

PLA – A plant-based plastic made from materials such as corn starch, which is generally compostable (in industrial composters).

Unbleached – Just because your bowl isn't white-as-a-sheet doesn't mean it isn't sanitary! An off-white bowl is a small price to pay for using fewer chemicals in the production process.

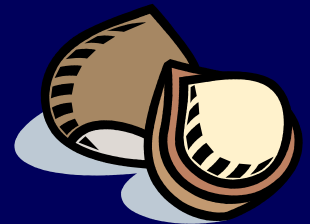
These Chestnuts Won't Be Roasting on an Open Fire! By Kristen Fitzpatrick

It's difficult to recall the joys of New England summer living when snow continues to blanket every visible square inch of outdoor space. Just for a moment, however, try to envision the light summer breeze, and the morning sun warming your skin, the birds chirping and the sound of the river running. The days become longer and sunnier, and we remain outside whenever possible hoping to soak up every ounce of summer for those few short months.

Summer for many New Englanders means time on the water, and further inland that means time on lakes, ponds and rivers in our own backyards. Swimming, boating and snorkeling, a few of my personal favorites are being compromised, by a water chestnut. Yes, a chestnut. The aquatic water chestnut has become an invasive species in much of the northeast, spanning an area of land from Virginia to the Quebec province and infiltrating every state in between.

This non-native plant is incredibly hardy, possessing the ability to withstand variations in pH levels and the cold climate of the Northeast's frozen water bodies. A single nut produced by this plant can produce another 10 – 15 plants and may remain viable in the water up to 12 years. The leaves of this plant, which float on the water's surface, create a thick mat of vegetation disturbing other plant species and marine life and preventing recreational use of the body of water. While the leaves are visible on the surface, the long rope-like stem that attaches those leaves to the lake bottom hides submerged in the water, similar to a garden weed. So, just like any other weeds in our garden, we must pull them out!

Due to a lack of funding in some areas, and the tedious process to remove these plants without using pesticides, volunteers have been organized to participate



Continued on Page 6

in various “water chestnut pulls.” These “pulls” take place in the summer months before the nuts disperse in the fall and are typically performed during the morning hours from within a canoe or kayak. This summer, the Nashua River Watershed Association will be hosting a few of these “pulls” taking place in Nashua, Pepperell and surrounding areas. The time commitment is usually a few hours once a month, so grab a friend, a NEIWPC co-worker, your children or reluctant significant other, and enjoy the beautiful New England summer while aiding our local waterways!

If you’re interested in learning more about this ongoing issue, please visit the [USDA Invasive Aquatic Species](#) page, and if you are interested in learning more about the efforts taking place in Nashua and the surrounding area please visit the [Nashua River Watershed Association](#).



Photo credit: <http://www.boston.com/news/local/articles/2011/07/17/>

Submit an article for our June summer issue!

NEIWPC staff at the Lowell office started putting together the Eco-Office Bulletin newsletter in September 2012 as a way for the sustainability committee to update the rest of the office on their activities, as well as to share news and tips on sustainable practices at the office and home. Distribution was expanded to include all NEIWPC employees in December 2012, and we are pleased that recent articles have come from staff in both Lowell and beyond. For future issues, we welcome article submissions from all employees. Please contact [Dan Peckham](#) if you are interested in contributing.

Sources for *Food for Thought on Eating and the Environment*:

<http://ecowatch.com/2013/11/11/grocery-restaurant-model-reduce-food-waste/>

<http://ec.europa.eu/food/food/sustainability/>

<http://news.blogs.cnn.com/2012/08/22/40-of-u-s-food-wasted-report-says/>

Tilman, D., et al (2001). Forecasting agriculturally driven global environmental change. *Science*, 292, 281-284.

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Established by an Act of Congress in 1947, the New England Interstate Water Pollution Control Commission is a not-for-profit interstate agency that employs a variety of strategies to meet the water-related needs of our member states—Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. We serve and assist our states by:

- Coordinating forums and events that encourage cooperation among the states
- Developing resources that foster progress on water and wastewater issues
- Representing the region in matters of federal policy
- Training environmental professionals
- Initiating and overseeing scientific research
- Educating the public
- Providing overall leadership in water management and protection