ecology action center news



ILLINOIS SUSTAINABLE LIVING &

WELLNESS EXPO

Creating Healthy Communities

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The Illinois Sustainable Living & Wellness Expo Returns April 11

By Jazmin Roman, EAC Intern

Don't miss the annual ISLWE! With 100 exhibitors and several excellent workshop, this is your place to learn about healthy living and green alternatives for

everyday life. There will be booths demonstrating green practices such as giving tips



to how to keep chemicals out of your home by using environmentally friendly cleaning products or how to make your lawn more sustainable and beautiful with native plants.

Also included are booths providing services for more sustainable transportation such as free bike repairs and tune ups and information on public transportation and

bike commuting. Numerous exhibitors feature products and services focusing on therapeutic ways and natural remedies to feel good and to feel healthy. There are also FREE yoga and dance sessions that are open to everyone, no previous experience needed, just come to learn and have fun! In case you get hungry, there are local food demonstrations (and samples!) and also a food truck ready to cook freshly made and healthy meals for you and your family to enjoy.

The ISLWE talks the talk and walks the walk—with the help of Midwest Fiber composting food waste, the ISLWE is managed to minimize the amount of non-recyclable or non-compostable waste, making it a <u>Zero Waste</u> event.

The ISLWE is FREE and only comes once a year! April 11, 2015 9 am—4pm at Illinois Wesleyan University Shirk Center

NOTE: Due to space restrictions this year, there will be no MEGA Recycling services provided at the 2015 ISLWE. Find out where to recycle non traditional materials at ecologyactioncenter.org or by calling 454-3169.







Mark Your Calendar

April 11 Illinois Sustainable Living and Wellness Expo

April 11-18 BN Cleanup Week

April 12 Anne McGowan Celebration of Life

April 18 EAC's Constitution Trail Clean Up

April 25 Dances of Universal Peace -Honoring the Memory of Anne McGowan

June 27 Yard Smart Garden Walk

Coming Soon: Rain Barrel Workshops!

More details on these events and more at ecologyactioncenter.org



Fruits, nuts and vegetables will be planted on May 9 at the new Food Forest in Normal

By Carl Roberts, EAC Volunteer

The Town of Normal has set aside the property, the land has been tilled, and the new Food Forest at One Normal Plaza is ready for planting. "Everyone is invited to participate in the Food Forest Planting Day on May 9," said Bill Davison, an educator with the University of Illinois Extension.

"Helping dig holes – and planting trees and berries – will give kids and adults an opportunity to be part of this project from the very beginning," Davison said. "We need volunteers. The Master Gardeners and Master Naturalists are going to be volunteering, but we can also use volunteers with minimal experience." **For information on how you can be involved in Planting Day, contact Bill Davison at the University of Illinois Extension at (309) 663-8270** Refuge Food Forest - Normal

or wdavison@illinois.edu.

Roughly an acre in size on E. Lincoln St. in Normal (east of Beech St.), the Food Forest is a partnership involving the <u>Town of Normal</u>, <u>University of Illinois</u> <u>Extension</u>, <u>Midwest Agriculture & Restoration Services</u> and the <u>Savanna Institute</u>. Anyone will be able to benefit from the Food Forest, regardless of whether they are a resident of Normal or Bloomington.



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Free food grown locally

"The Food Forest – which will provide free-of-charge, sustainable, nourishing, locally grown food – is the first urban Food Forest to be developed in a public park in Illinois," Davison said. "The idea is to grow perennial plants (which only need to be planted once) rather than annual plants (that need to be planted each year)."

Key examples of perennial plants are chestnuts (which provide similar nutrients as corn) and hazelnuts (which provide similar nutrients as soybeans). In addition to being used as food, chestnuts, like corn, can be used to make corn flakes, diapers and paint. Hazelnuts, like soybeans, can be used to make cooking oil, cattle feed and biodiesel fuel.



"We will be growing a couple dozen different plant species," said Kevin Wolz, CEO of Midwest Agriculture & Restoration Services (MARS) and a doctoral student at the University of Illinois. "MARS will be providing plants for various fruit, vegetables, nuts and herbs." The plants will range from apples to

raspberries, asparagus to pawpaw, and hazelnut to persimmons.

"Having a diversity of crops is significantly better than planting just one crop," Wolz said. "We're modeling the Food Forest after the prairie and oak savanna that used to grow here naturally." The diversity will keep the different plant species in balance. Falling leaves will be self-mulching and self-fertilizing, the diverse roots will provide a variety of nutrients, and insect control will be much easier (with beneficial insects eating the harmful insects).



A fun place for adults and children

The Food Forest will provide a beautiful park with thousands of plants for people of all ages to enjoy. Hazelnut trees and chestnut trees will form a border around the park. Areas of the park will be designated for growing specific fruits, vegetables and herbs. The park will include a prairie, which is native to central Illinois, and a colorful Shrub Willow Rainbow.

The heart of the park will consist of concentric circles of plants. This maze-like area will have a magical appeal to children. At the middle of the maze will be an enclosure of hybrid poplar trees, where children will be able to play. The Food Forest will also be a fun place for schools to go on field trips.

In addition to providing free food, the Food Forest will produce seeds to be shared through a Seed Library. Also, grafting workshops will be given. People will learn how to grow their own fruit trees, and they will be given roots and branches from the Food Forest's trees to take home and use to start their own fruit trees.

Normal Public Library houses the Seed Library

A Seed Library has been established at the Normal Public Library by John Fischer, the Normal Library's adult services and circulation manager. "I got the idea from reading about other libraries around the country doing this," Fischer said. "We took an old card catalog to house the seeds, and we are in the process of

setting up a section of gardening books right next to the card catalog."

The Seed Library will operate just like a book library. "People are able to check out envelopes of seeds, bulbs and root stocks to take and plant in their own gardens," Fischer said. "The seeds we collect include fruit-bearing plants, vegetable-bearing plants and ornamentals (decorative plants such as flowers). After the borrowers have grown their plants, we hope they will return seeds from their plants to the library."



In addition to housing the seeds and books, the Normal Public Library is hosting

programs to teach people how to plant and cultivate their trees and bushes. "We had more than 50 participants at each of the two programs offered so far," Fischer said. "The Master Gardeners have offered to help when questions arise following the programs."

The Food Forest developed from a seed of an idea

Bill Davison of the University of Illinois Extension was familiar with Food Forests being developed on farmland, and he read about urban Food Forests being developed in Seattle, WA, and other cities. This planted the seed of an idea in Bill's mind. The more he learned, the more excited he became about developing a Food Forest right here in central Illinois.

"I could just see little kids picking and eating strawberries, and how the experience would affect them," Davison said. "I could see them getting outside, enjoying the park and learning about nature. People have no idea how good fresh berries can taste if all they've had is berries from a grocery store." To make the idea of a Food Forest into a reality, Davison contacted Kevin Wolz. A doctoral student at the University of Illinois, Wolz is involved in developing Food Forests on a number of farms through his work with Midwest Agriculture & Restoration Services, Savanna Institute and the U of I.

"We work directly with farmers, and we connect them with other farmers, resources and researchers," Wolz said. "We develop educational materials, put on demos and advise farmers about which species of plants work best." Because farmland is larger than urban Food Forests, farmers are able to mechanically install one tree per second using a special tree-planting machine.

The remaining piece of the plan was the question of where the Food Forest would be located. The Town of Normal offered the use of an acre of its park on E. Lincoln St. Right now, the Food Forest consists of tilled land with nothing growing on it yet – all ready for the Food Forest Planting Day on May 9. Approximately three years from now, the Food Forest will have grown from a seed of an idea into a fully developed agricultural wonderland.

Endocrine Disruptor

By Sandra Lindberg, Citizen and Activist

Chemicals on Your Fingers

It's the end of the month and you've been paid. Fantastic! Time for that shopping trip you've been planning. You head to your local grocery store.

At the check-out line, as the clerk loads groceries into the bag you've brought with you, but takes a break to hand you a grocery receipt. You're rubbing a sanitizer into your hands, but pause to take the receipt and look it over for a few seconds as the clerk finishes bagging what you've bought.

You're in a hurry, so you finish the shopping trip by eating at a fast-food restaurant. After you tuck the restaurant receipt into a pocket, you sit down to have some fries, absorbing through your fingers the receipt's endocrine disrupting chemicals. Your hands transfer some of the hormone disruptors to your food. As you eat your quick meal, you absorb these chemicals through your skin, your mouth and your digestive tract.

By handling those receipts—especially right after applying hand sanitizer—you have absorbed BPA, or BPS. These endocrine disrupting chemicals have been linked to obesity, diabetes, heart disease and cancer. <u>http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0110509</u>

Now turn this story around and imagine how much more BPA you have absorbed if you are the clerk tearing off and handing out thermal paper receipts all day.

A March Scientific Study Quantifies the Health Costs of Hormone-Disrupting Chemical Exposures

In February *National Geographic Magazine* reported on a recent scientific study that estimates Europe spend \$175 billion (U.S.) per year due to serious health problems caused by hormone disrupting chemicals.

Linda Birnbaum, director of the U.S. National Institute of Environmental Health Sciences, responded to the European study by stating that health costs in the U.S. associated with hormone-disruptors would be as high, or higher, than European figures.

Studies link hormone-disrupting chemicals to a host of diseases including attention deficit disorders, obesity and diabetes, male reproductive disorders and infertility.

The neurological effects of these chemicals prove to be the most costly: treatment for the effects, costs of special education and services for children and others with lower IQs or learning and/or behavioral disorders.

Europe is considering banning all endocrine-disrupting chemicals. This will affect the manufacture of hard plastics, food -can linings, paper receipts; two phthalates used as plasticizers in vinyl products; DDE, the breakdown product of the banned insecticide DDT; organophosphate pesticides, including one called chlorpyrifos used on grain, fruit, and other crops; and brominated flame retardants known as PBDEs that were extensively used in furniture foams until they were banned in Europe and the United States.

Scientists estimate that 90% of U.S. citizens will demonstrate that they have absorbed hormone-disrupting chemicals. <u>http://news.nationalgeographic.com/news/2015/03/150305-chemicals-endocrine-disruptors-diabetes-toxic-environment-ngfood/</u>

The National Resources Defense Council reports that hormone-disrupting chemical exposure can come from, "Exposure to endocrine disruptors can occur through direct contact with pesticides and other chemicals or through ingestion of contaminated water, food, or air. Chemicals suspected of acting as endocrine disruptors are found in insecticides, herbicides, fumigants and fungicides that are used in agriculture as well as in the home. Industrial workers can be exposed to chemicals such as detergents, resins, and plasticizers with endocrine disrupting properties. Endocrine disruptors enter the air or water as a byproduct of many chemical and manufacturing processes and when plastics and other materials are burned. Further, studies have found that endocrine disruptors can leach out of plastics, including the type of plastic used to make hospital intravenous bags. Many endocrine disruptors are persistent in the environment and accumulate in fat, so the greatest exposures come from eating fatty foods and fish from contaminated water." <u>http://www.nrdc.org/health/effects/qendoc.asp</u>

Those with less income struggle more to avoid hormone-disrupting chemical exposure

Books and articles by Michael Greenberg, Michael Gelobter, Luke Cole, Lauretta Burke, Robert Bullard, Ivette Perfecto, Marianne Lavelle, Charles Lee, Sheila Foster and others strongly support the relationship between race and exposure to toxic chemicals and polluting facilities. Pavel, M. Paloma, ed., *Breakthrough Communities: Sustainability and Justice in the Next American Metropolis*, MIT Press, 2009, 38-39.

A 2010 article found that hormone-disrupting chemicals are more prevalent in lowincome families, and among firefighters, manufacturers of flame retardant products, people involved in recycling flame retardant products, computer technicians, and carpet installers. Zota AR, Adamkiewicz G, Morello-Frosch RA. "Are PBDEs an environmental equity concern? Exposure disparities by socioeconomic status." *Environmental Science & Technology* 2010; 44:5691-5692

Organic products are more expensive. Those with lower incomes often cannot limit their exposures to these chemicals because they cannot afford to buy organic.

How do we reduce our exposures to hormone-disrupting chemicals?

Educate yourself about endocrine disruptors, and educate your family and friends.
Buy organic food whenever possible. In addition, grow as much of your fruits and vegetables at home, organically.

Avoid using pesticides in your home or yard, or on your pet -- use baits or traps instead, and keep your home especially clean to prevent ant or roach infestations.

I Find out if pesticides are used in your child's school or day care center and campaign for non-toxic alternatives.

Avoid fatty foods such as cheese and meat whenever possible.

If you eat fish from lakes, rivers, or bays, check with your state to see if they are contaminated.

 Avoid heating food in plastic containers, or storing fatty foods in plastic containers or plastic wrap. Alternatively, switch to glass or metal containers, and reduce the use of plastic.
Do not give young children soft plastic teethers or toys, since these leach potential endocrine disrupting chemicals.

☑ Support efforts to get strong government regulation of and increased research on endocrine disrupting chemicals.

Only donate to others what you would choose to consume.

Further Reading

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