

Getting Back to Basics: 12 Benefits of Compost

Ask what is the most important benefit of compost and you are likely to receive a variety of answers. One person might answer with a discussion of how compost combats climate change by reducing greenhouse gases, or how it restores wildlife habitats, while another may talk about compost's role in saving money by reducing disposal costs and the need for chemical fertilizers. Compost truly gives back for the effort we put into it.

Compost is an earth friendly product that recovers the nutrients in the food and yard waste that makes up an estimated 20–30% of our total waste stream. By keeping these materials out of our landfills we save valuable landfill space and avoid the release of methane, a greenhouse gas 21 times more potent than carbon dioxide emissions.

It has been shown that applying compost to soil can help to remediate existing pollution¹ by degrading toxic chemicals, binding heavy metals, and cleaning storm water runoff. Compost can destroy human disease organisms as well as plant and livestock pathogens.

The Association of American Plant Food Control Officials (AAPFCO) has approved as valid the following benefits compost provides to soil:

- Improves soil structure and porosity for better plant root environment
- Increases moisture infiltration and permeability, and reduces bulk density of heavy soils for reduced water loss and runoff
- Improves the water holding capacity of light soils and reduces nutrient leaching
- Supplies organic matter
- Supplies beneficial microorganisms

All of these benefits contribute to helping plants

¹ EPA, Analysis of Composting as Environmental Remediation Tool, 1998

utilize nutrients more effectively, and encourage vigorous root growth.

The USCC and other organizations that promote composting urge compost producers to reach out to professional landscapers, landscape architects, sod farmers, and golf course and resort facility managers to help them understand how compost can benefit them. These end user groups represent an excellent opportunity to grow demand for finished compost.

Participation in the USCC's Seal of Testing Assurance (STA) program assures these and other end users, such as Departments of Transportation, that the finished compost they purchase will do the job and provide a high return on their investment.

Healthier soil and plant life can help us all by aiding in reforestation and restoring wildlife habitats. It has been used to help restore damaged wetlands and to prevent erosion on flood plains.

And of course, healthier soil and plant life means greater crop yields for farmers and higher quality produce for consumers. By reducing the need for water, chemical fertilizers, and pesticides it reduces expenses for professional and home gardeners alike.

Saving landfill space and reducing disposal costs is an economic benefit to our communities. Last, but not least, commercial composting creates green jobs and contributes to a robust economy.



Kessler Consulting, Inc. researches, writes and distributes the
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Legislative Update



New Jersey legislators are considering a ban on plastic bags that are not compostable or recyclable beginning January 1, 2015. The "Plastic and Paper Bag Reduction Act" impacts the operators of convenience stores, drugstores, supermarket or retail establishment that has more than 1,000 square feet of space. These stores would be required to charge a \$.10 fee for every disposable bag, and make reusable bags available for sale beginning January 1, 2013. "Compostable plastic bags" are defined as those that meet ASTM D6400 standard for compostable plastic, and "recyclable paper bags" must contain no old growth fiber, must be 100% recyclable overall, and contain a minimum 40% post-consumer recycled content.



Last year's attempt to repeal **Michigan's** yard waste ban was defeated and has not been reintroduced in this year's legislative session.

Market Price Update **\$\$**

Average Florida prices for compost products remained unchanged during the second half of 2012. The bulk retail price for yard waste compost held steady at \$20.37 per yard while the bulk retail price for food waste compost remained \$17.50 per yard during the last six months of the year. The highest price for bulk retail yard waste (\$55) was paid in the Northwest. The highest price for food waste was paid in Iowa (\$65).

The average market price in Florida for bulk wholesale yard waste and food waste compost stayed at \$10.50 per yard. The average retail price for a #40 bag of compost was \$1.99. The highest price in the U.S. for bulk wholesale yard waste was in the Southeast at \$25. The Northeast paid the highest prices for bulk wholesale food waste (\$37.50), and bagged retail compost (\$8).

USDA Value Added Producer Grant Program

The United States Department of Agriculture (USDA) Rural Business Cooperative Service manages a grant program that provides funding for value-added activities related to the processing and/or marketing of bio-based value-added products. For example, a project that includes funding of an anaerobic digester as part of a project that adds value to an agricultural product may qualify.

During 2012, the program provided \$14 million grant funding. The maximum grant amount is \$100,000 for planning grants; \$300,000 for working capital grants. The grant includes a 50% match requirement from the grantee.

The program funded 298 projects in 2011 ranging from \$3,000 to \$300,000. The 2012 submission deadline was October 15.

It's not too soon to begin planning a submission for the 2013 grant year. You can learn more about the program at the USDA site, including eligibility, the types of projects that are acceptable, a list of the 2011 grant awards with project descriptions, the application template, and procedures.

For additional information visit http://www.rurdev.usda.gov/BCP_VAPG.html

Reducing Food Waste at Home



A toolkit for the *Food: Too Good to Waste* pilot was published by the EPA sponsored West Coast Climate and Materials Management Forum in September 2012. The

toolkit is designed to assist a local government or other organization to implement a residential food waste prevention challenge, or to incorporate a campaign into existing programs. Following the EPA food waste hierarchy, it seeks to prevent waste first to avoid the need for composting.

The toolkit includes an implementation guide, behavior change messaging, tools to foster behavior change and measure progress, background research, and logos to be used for program branding. The principal message,

that food is too essential to throw away, is demonstrated in a variety of activities intended to enact small behavior changes in everyday life that will reduce food waste. Behavior changes include shifting how you can shop and store food so that you throw out less and still eat well, simplify your life, save money, and keep a most valuable resource from going to waste.

A storage guide teaches which fruits and vegetable stay fresh longer inside and/or outside the refrigerator, which do better stored alone or with other foods, and how to use storage bags and containers to extend produce life. A shopping guide helps to reduce waste through meal planning and cooking, and how to shop your refrigerator and cupboards and pantry first to avoid buying food already in stock. Measurement tools include waste collection bags and worksheets.

The toolkit also includes signage and a workshop presentation for community participants. Mobile apps and web based tools are also available.

You can access the toolkit through this link:
ftp://ftp.epa.gov/reg10ftp/Food_Too_Good_To_Waste/

Reducing Food Waste at Schools



This year's back-to-school season included a growing trend—food waste composting in the cafeteria. Schools across the country are initiating programs or extending pilots.

The Cambridge, MA Green Schools Initiative continues to increase participation in its "Food to Flowers" program. Five elementary schools and six other charter schools/academies currently participate. From March 2009 through January 2012, Cambridge Public Schools have kept over 34 tons of food scraps and dirty paper out of the landfills.

All 7,000 students in grades K-12 in Maine's Portland Public Schools can participate in that district's food waste composting program. This year the students also use paperboard lunch trays that are supplied locally. The program expects to save \$50,000 through composting this year.

The City of Bakersfield, CA has implemented a collection and composting system at its 53 schools to handle all types of food packaging in addition to food scraps. This program was seven years in the making and is contributing to the city's effort to achieve its goal to divert 50% of organics.

The Charleston County, SC School District initiated a food waste recycling pilot program last year with technical assistance from Kessler Consulting, Inc. The successful program had expanded to 11 schools by January 2013.

Eight pilot schools in NY City's District 3 public schools reduced waste 85% by composting food scraps in the cafeteria and replacing polystyrene trays with a compostable substitute. Based on this success, the program has expanded to 20 schools in the Upper West Side.

Food Waste Composting Makes Progress in the SE

An article in the October issue of *BioCycle* magazine explored the progress being made in the development of food waste composting programs in the Southeastern United States. Miriam Zimms of Kessler Consulting, Inc. (KCI) authored the piece based on research and KCI's work helping local governments plan for and implement food waste collection programs.

Mecklenburg County, NC is using data from a food waste diversion study conducted by KCI to evaluate the feasibility of a food waste recovery pilot program to help meet its 35% waste reduction goal by 2018. Based on the study's results, the county is reaching out to local businesses to conduct a commercial food waste pilot within the next year.

Charleston County, SC has implemented the first commercial food waste recovery program in that state. The program accepts both pre and post consumer food waste which is mixed with yard waste and composted in windrows. With both a recycling program and the organics program for compostable material, the county estimates it can recover 82% of all materials from the commercial sector.

The article also provides an update on the progress composting has made in the state of Florida, as local jurisdictions turn to composting to help achieve the state's 75% recycling goal. Sustainability initiatives by large food waste generators such as Publix Super Markets are providing feedstock, while new processing facilities are being developed under new registration, rather than solid waste permitting, regulations. The FORCE project was instrumental in bringing about the changes that allow composting facilities processing source separated food waste to operate under a registration which greatly reduces costs and barriers to facility operation.

You can read the complete article available online at <http://www.biocycle.net/2012/10/food-waste-composting-progress-in-the-southeast/>.

Upcoming Events

Southeast Recycling Conference & Trade Show, March 10–13, 2013

Hilton Sandestin Beach Golf Resort & Spa, Destin, FL
<http://www.southeastrecycling.com/>

Biocycle West Coast Conference,

April 8–10, 2013
San Diego, CA

<http://www.biocycle.net/conferences/west-coast-2012/>

SWIX Food Waste Recycling Workshop

April 17, 2013
Winter Haven, FL

https://safe.fusionserver.com/SWIX/step_002.cfm?PID=627090&IID=498

42nd Annual Environmental Show of the South,

April 24–26, 2013
See FORCE website for additional information

Florida Native Plant Society 2013 Conference,

May 16–19, 2013
University of North Florida, Jacksonville, FL
<http://www.fnps.org/conference/2013>

Waste Expo 2013, May 20–23, 2013

Ernest N. Morial Convention Center, New Orleans, LA
<http://www.wasteexpo.com/wasteexpo2013/Public/Content.aspx?ID=1040276&sortMenu=102001>

SWANA Florida Summer Conference,

July 28–30, 2013
Hyatt Regency, Sarasota
Information coming soon!

SWANA's WasteCon 2013

September 17–19, 2013
Long Beach, CA
Information coming soon!

61st Florida Turfgrass Association Conference

Central Florida—*Information coming soon!*

For more information about organics recycling in Florida, please call Kessler Consulting

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