Food Recovery & Reuse; The Status of Composting in Illinois
7th Annual Metro East Health Forum

Sara Ryan Koziatek
Home Composting

- Fruits and vegetables only
  - coffee grounds and eggshells okay
- Backyard composting
- Indoor composting: special type of bin
Compost Benefits

- Improves soil structure, porosity and density, creating a better plant rooting environment
- Increases infiltration and permeability of heavy soils, reducing erosion and runoff
- Improves water holding capacity, thereby reducing water loss and leaching in sandy soils
- Supplies a variety of macro and micronutrients
- May help control or suppress certain soil-borne plant pathogens
- Supplies significant quantities of organic matter
- Improves Cation Exchange Capacity (CEC) of soils and growing media, improving their ability to hold nutrients for plant use
- Supplies beneficial microorganisms to soils and growing media
- Improves and stabilizes soil pH
- Can bind and degrade specific pollutants. The entire process is usually accomplished in 20 to 40 weeks
- Reduces the need for chemical fertilizers
- Reduces methane emissions from landfills and lowers your carbon footprint
St. Louis Composting Background

- Founded in 1992 as a result of Senate Bill 530, which banned yard waste from landfills and set a diversion goal of 40%
- Member of US Composting Council (USCC) since 2000
- Participant in USSC’s Seal of Testing Assurance Program and OMRI
- Region’s largest compost producer
- Retail outlets sell our STA-Certified compost, mulch products and soil blends
St. Louis Composting Facility Locations

Not Pictured: Lee’s Summit Facility (North-West Missouri)
Facilities

- Belleville, IL – 52 acre composting facility
- Eureka, MO – 80 acre topsoil operation
- Fort Bellefontaine Compost Facility – 19 acre compost facility
- Jonesburg, MO – 200 acre farm/compost facility
- Maryland Heights, MO – 9 acre transfer station
- Pacific, MO – 25 acre facility and mulch storage facility
- St. Louis, MO – 10 acre facility
- Valley Park, MO – 26 acre facility
- Lee’s Summit, MO – 9 acre facility
Belleville, IL Food Waste Composting Facility- 52 acres

• 115 acre facility
• 52 acres of compost pad
• Permitted to receive 600,000 cubic yards annually
• With up to 20% or 120,000 cubic yards in source separated organics
Food Waste

- Began receiving in 2010
- All food waste is currently composted at our Belleville, IL and Pacific, MO facilities
- Current volume is approximately 500 tons per week and increasing
Tiger HS 640

• Combines action of a shredder, screen and extrusion auger
• Wet or dry materials are loaded into the hopper, the Tiger separates the organic fractions from the inorganic packaging producing both solid and liquid extracts in the discharge.
• Can depackage up to 30 tons per hour
Depackagable Materials

**Acceptable Material**
- Aluminum cans
- Tin cans
- PET bottles
- Tetra pak packaging
- Any type of wrapping
- Any type of bag
- Contamination food waste
- Metal cans

**NOT Acceptable Material**
- Glass
Tiger depacking snacks and expired potato chips

Tiger depacking plastic bottles
Residential Composting

You don't have to be a gardener to be a composter
<table>
<thead>
<tr>
<th>Municipality</th>
<th>County</th>
<th>Population</th>
<th>Households</th>
<th>Hauler</th>
<th>Type of Program</th>
<th>Cost ($/household/month)</th>
<th>Year Started</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deer Park</td>
<td>Lake</td>
<td>3,200</td>
<td>978</td>
<td>Groot</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>4/1/2016</td>
</tr>
<tr>
<td>Grayslake</td>
<td>Lake</td>
<td>20,957</td>
<td>6,674</td>
<td>WMI</td>
<td>Ride along with LSW sticker or subscription service, option for year round</td>
<td>No increase in cost</td>
<td>4/1/2016</td>
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<tr>
<td>Highland Park</td>
<td>Lake</td>
<td>29,763</td>
<td>9,300</td>
<td>Lakeshore</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>4/1/2016</td>
</tr>
<tr>
<td>Lake Bluff</td>
<td>Lake</td>
<td>5,722</td>
<td>2,120</td>
<td>Groot</td>
<td>Year round program, part of basic service</td>
<td>No increase in cost</td>
<td>4/1/2017</td>
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<tr>
<td>Island Lake</td>
<td>Lake</td>
<td>8,080</td>
<td>2,892</td>
<td>Prairieland</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>4/1/2016</td>
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<tr>
<td>North Barrington</td>
<td>Lake</td>
<td>3,047</td>
<td>1,140</td>
<td>Prairieland</td>
<td>Ride along with LSW sticker or subscription service, year round ongoing</td>
<td>$4.25 for year round, Ride along no cost</td>
<td>4/1/2016</td>
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<tr>
<td>Port Barrington</td>
<td>Lake</td>
<td>1,517</td>
<td>518</td>
<td>Prairieland</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>4/1/2016</td>
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<tr>
<td>Tower Lakes</td>
<td>Lake</td>
<td>1,283</td>
<td>430</td>
<td>Prairieland</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>4/1/2016</td>
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<tr>
<td>Highwood</td>
<td>Lake</td>
<td>5,405</td>
<td>979</td>
<td>Lakeshore</td>
<td>Year round program, part of basic service</td>
<td>$3.90</td>
<td>5/1/2017</td>
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<tr>
<td>Hawthorn Woods</td>
<td>Lake</td>
<td>7,663</td>
<td>2,099</td>
<td>WMI</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>2016</td>
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<tr>
<td>Bannockburn</td>
<td>Lake</td>
<td>1,583</td>
<td>451</td>
<td>Lakeshore</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>2016</td>
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<tr>
<td>Riverwoods</td>
<td>Lake</td>
<td>3,660</td>
<td>1,228</td>
<td>Lakeshore</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>2016</td>
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<tr>
<td>Mundelein</td>
<td>Lake</td>
<td>31,064</td>
<td>8,809</td>
<td>Groot</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>2016</td>
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<tr>
<td>Volo</td>
<td>Lake</td>
<td>2,929</td>
<td>1,297</td>
<td>Groot</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>2017</td>
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<tr>
<td>Fox Lake</td>
<td>Lake</td>
<td>10,579</td>
<td>3,912</td>
<td>WMI</td>
<td>Ride along with LSW sticker or subscription service</td>
<td>No increase in cost</td>
<td>2017</td>
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<tr>
<td>Barrington</td>
<td>Cook</td>
<td>10361</td>
<td>3390</td>
<td>Groot</td>
<td>Landscape cart, initial year</td>
<td>Apr-16</td>
<td></td>
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<tr>
<td>Arlington Heights</td>
<td>Cook</td>
<td>75994</td>
<td>18169</td>
<td>Groot</td>
<td>Subscription service in Landscape cart</td>
<td>$150/annually for 65 gallon cart: $165/95 gallon</td>
<td>Feb-16</td>
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<tr>
<td>Glenview</td>
<td>Cook</td>
<td>45417</td>
<td>14843</td>
<td>Groot</td>
<td>Subscription service in Landscape cart: starts when 30% of SWANCC communities implement</td>
<td>$145/65 gallon cart</td>
<td>Jun-16</td>
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<tr>
<td>Oak Park</td>
<td>Cook</td>
<td>52008</td>
<td></td>
<td>WM (not sure)</td>
<td>Subscription service in Landscape cart</td>
<td>$14/month</td>
<td>Apr-12</td>
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<tr>
<td>River Forest</td>
<td>Cook</td>
<td>11208</td>
<td></td>
<td>Roy Strom Collection</td>
<td>subscription service, with cart during season</td>
<td>$18/month</td>
<td>May-15</td>
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<tr>
<td>Glen Ellyn</td>
<td>DuPage</td>
<td>27761</td>
<td></td>
<td>Republic</td>
<td>subscription service with yard waste</td>
<td>$11.31/35g $13.4/65 g $17.4/95g all per month</td>
<td>Apr-16</td>
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<tr>
<td>Naperville</td>
<td>DuPage/Will</td>
<td>146128</td>
<td></td>
<td>WM</td>
<td>subscription cart service with landscape</td>
<td>$108/65 cart &amp; $128/95 cart</td>
<td>2016</td>
</tr>
<tr>
<td>Wheaton</td>
<td>DuPage</td>
<td>53648</td>
<td></td>
<td>Lakeshore</td>
<td>in yard waste bag or cart</td>
<td>per tip or sticker</td>
<td>Oct. 2016</td>
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<tr>
<td>Mill Creek SSA</td>
<td>Kane</td>
<td>2260</td>
<td></td>
<td></td>
<td></td>
<td>No increase in cost</td>
<td>2017</td>
</tr>
<tr>
<td>Dekalb</td>
<td>DeKalb</td>
<td>43,849</td>
<td>87</td>
<td>Advanced</td>
<td>ride along in landscape cart - seasonal</td>
<td>No increase in cost</td>
<td>2017</td>
</tr>
</tbody>
</table>
Status of Composting - Statewide

Yard waste ban in place since July 1, 1990 which contributes to over 500,000 tons of organic waste being composted each year.

While recognition of composting and education about its benefits are important, it is equally important to have the infrastructure to manage organic waste streams. This is neither nationally nor in Illinois.

In Illinois, a composting facility, through notification to the IEPA, is able to include food scraps up to, but not exceeding 10% of the volume of organic materials being accepted for composting.

Many Illinois composting facilities do not operate year round.
Unlike dead-end disposal and incineration, composting creates a value-added product that supports gardening, landscaping, farming, green infrastructure projects and other end markets that also build Illinois’ economy and support additional environmental, aesthetic and economic goals.

- Illinois landfills running low on space
Status of Composting - Nationwide

- 4,713 total composting facilities in US.
  - 2,364 compost less than 5,000 tons/year
  - 429 compost between 5,000 and 30,000 tons/year
  - 194 compost over 30,000 tons/year

findacomposter.com
Status of Composting - Nationwide

- California, Connecticut, Massachusetts, Rhode Island and Vermont have statewide organics bans
  - Austin, TX, New York, NY, Portland, OR, San Francisco, CA, Seattle, WA have city-wide bans
- Whether on a per-ton basis or on a per-dollar-capital investment basis, composting sustains more jobs than other waste handling options such as landfills and incineration.
Moving Composting Forward

• Illinois Food Scrap Coalition [IFSC] illinoiscomposts.org
  – Illinois Soil, Food, Water and Composting Summit Nov. 3 – Chicago
  – Pumpkin Smash Nov. 4 – Statewide

• Composting and Organics Association of Missouri [COAM] coam-mo.com
  – Using Compost to Create Sustainable Landscape Sites and to Manage Drought, Stormwater and Erosion Workshop Nov. 16 – St. Louis
Contact Information

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