

Chicago Conservation Corps Speakers Bureau  
Sustainable Backyards: Backyard Compost Bins



**Goals:**

1. Understand Chicago's waste challenges and the alternatives to landfills.
2. Develop hands-on experience with backyard compost bins.
3. Provide referrals for rebates and resources.

**Materials:** backyard compost bin, examples of greens and browns, *Backyard Composting*, *Composting Basics*.

**KEY TERMS**

Waste Diversion

Organic Waste

Compost/Composting

Backyard Compost Bin

**Step 1: Introductions**

**Time: 10 mins.**

**TIP:** Remember to always introduce yourself, smile and make eye contact

1. **Introduce yourself and the goals of the presentation.**
2. **Develop a leading question or quiz.** This will help you get a sense for your audience and peak their interest. **Review** the *Myth Busters* and *FAQ's* for assistance.

**Leading question examples:**

- a. How much waste is produced by each Chicagoan per day (on average)? **4.4 lbs**
  - b. How much waste was composted in Chicago last year? **4,000 tons**
  - c. Composting can reduce your waste output by\_\_\_\_? **30%**
3. **Group introductions:** Use these questions as an opportunity for group introductions.

**Step 2: Overview**

**Time: 10 mins.**

**TIP:** Use your experience and your enthusiasm about composting to encourage the audience to start.

**THEME: Composting is an effective waste reduction option.**

**Big Picture Overview:**

- The average person produces 1600 lbs of waste annually.
- 34 million tons of food waste is generated in the US annually.
- Decomposition of organic material in landfills produces methane, a potent greenhouse gas (GHG).
- Composting, a **waste diversion** strategy, reduces GHG emissions by removing **organic waste** from landfills and transforming it into **compost**, a soil conditioner rich in nutrients. Backyard composting also lowers GHG's by reducing the number of waste hauling trucks needed.
- **Composting** is a common technique that assists the natural process of decomposing organic waste by combining **Air, Water, Nitrogen (greens** –fresh yard waste and food scraps) and **Carbon (browns** - dried yard waste, straw) in a compost bin. A few months later, compost is created.
- **Compost Organisms:** pill bugs, earth worms, soil bacteria and fungi work together in the compost pile to digest organic material. The byproduct of their consumption is nutrient-rich compost.

(Source: US EPA)

**Chicago Specific Overview** (Point out diagram in *Backyard Composting* pamphlet)

- **The Chicago Composting Ordinance** approved small-scale composting like backyard operations.
- **The Chicago Climate Action Plan** waste goal is to reduce methane producing waste in landfill by 90%.
- Since 2007 Chicago has reduced its landfill waste by 26%.
- In 2010, Chicago welcomed the Illinois' first large-scale, food scrap composting facility.
- Chicagoans composted 4,000 tons of food scraps in 2010
- Chicagoans have access to education and resources through the DOE Sustainable Backyards Program.

(Source: The Chicago Climate Action Plan)

**Questions?**

**Time: 5 mins.**

**Step 3: Compost Bin Demonstration**

**Time: 15 mins.**

TIP: Compost bin models are diverse. This presentation is based on the Earth Machine model used in your demo. See the Backyard Compost brochure for bin models and DIY options.



**Earth Machine Key Parts**

- Top lid to open for loading
- Base grate
- Front sliding door for harvesting
- Fastener Pegs

TIP: Invite the audience to participate. Have participants familiarize themselves with materials. Encourage tactile experiences.

**Earth Machine Essential Points**

1. Choose a location that is easily accessible and atop a permeable surface (i.e., water can filter through).
2. Lay the base on the ground. Place the bottom piece upon it.
3. Insert pegs into the ground to hold the bin in place.
4. Attach the top piece and screw on the top lid for opening.
5. Slide the front door over the ridges.
6. Set aside a kitchen pail to collect food scraps.
7. Set aside leaves, grass clippings and other yard waste to dry. This will create an ongoing source of carbon rich browns.
8. Mix a 50/50 ratio of greens and browns into the bin.
9. Aerate by turning the material once or twice per month.
10. Add water so that the material is the consistency of a rung-out sponge. Adjust water levels based on season
11. After 4-6 months, compost can be harvested and distributed to raised vegetable beds, flower beds and houseplants.

**Step 4. Compost Tips**

- HAVE FUN
- Encourage experimentation

DO	DON'T
<ul style="list-style-type: none"> <li>- Fallen Leaves</li> <li>- Woody prunings</li> <li>- Untreated wood sawdust</li> <li>- Black &amp; white newspaper</li> </ul>	<ul style="list-style-type: none"> <li>- Meat, bones or fish</li> <li>- Dairy products or grease</li> <li>- Grains, breads or beans</li> <li>- Dog, cat or bird feces</li> <li>- Plywood or treated wood sawdust</li> <li>- Diseased plants</li> <li>- Weeds that went to seed</li> <li>- Invasive plants</li> </ul>
<ul style="list-style-type: none"> <li>- Fruit &amp; vegetable scraps</li> <li>- Young weeds</li> <li>- Coffee grounds &amp; filters</li> <li>- Egg shells</li> <li>- Citrus rinds</li> <li>- Tea bags</li> </ul>	

**Time: 5 mins.**

TRADITIONAL COMPOST BIN		
Symptom	Problem	Solution
Pile not composting	Too dry	Add water until slightly moist and turn (mix)
	Too much brown matter	Add fresh green matter or organic nitrogen fertilizer and turn (mix)
Pile smells rotten/attracts flies	Too wet; too many food scraps or lawn clippings	Turn (mix) and add browns (dry woody mtl's) or dry soil
	Food scraps or lawn clippings exposed	Bury and mix food scraps and lawn clippings in pile
	Problem materials	Remove meat, dairy, grease, etc. and turn (mix)
Rodents in bin	Bin not rodent resistant; problem materials; too many fruit and vegetable trimmings	Use traps or baits and a rodent-resistant bin (no holes larger than ¼ inch). Remove meat, dairy, grease, etc. and add browns (dry woody mtl's).

<b>Questions?</b>	<b>Time: 5 mins.</b>
<b>Step 5: The Rebate Process</b> 1. Identify the rebate form in the packet of information. 2. Provide contact information to the Sustainable Backyards program <a href="mailto:rainbarrel@cityofchicago.org">rainbarrel@cityofchicago.org</a> or the Rot Line (listed below) for troubleshooting assistance. 3. Audience members will have to purchase their own compost bins at local garden shops or hardware stores. Remind them to <b>SAVE THE RECEIPT</b> . 4. Fill out the rebate form, attach the receipt and return to the Department of Environment by 12/31/2011: Department of Environment Compost Bin Rebate Program 30 N. LaSalle, Suite 200 Chicago, IL 60602 5. Take action: install the compost bin and start composting immediately. 6. The rebate will be processed and disbursed within 120 days of receiving the rebate and receipt.	<b>Time: 10 mins.</b>
<b>Step 6: Questions and Wrap Up</b> <b>TIP:</b> <i>Sum up the theme of the presentation-Composting is an effective waste reduction option.</i>	<b>Time: 5 mins.</b>
<p><b>Additional Resources</b></p> <p><b><u>City of Chicago Publications</u></b>  <i>Chicago Home Composting</i> pamphlet  <i>Rain Barrel and Compost Bin How-To</i> twosided hand-out  <i>List of Participating Garden Shops and Hardware Stores</i> one- pager</p> <p><b><u>Local Resources</u></b>  DOE Sustainable Backyards Hotline: 312-743-9283, <a href="mailto:rainbarrel@cityofchicago.org">rainbarrel@cityofchicago.org</a>  Chicago Conservation Corps: 312-743-9283, <a href="mailto:conservation@cityofchicago.org">conservation@cityofchicago.org</a>  Green Tech U Workshops: 312-746-9642, <a href="mailto:greentech@cityofchicago.org">greentech@cityofchicago.org</a>  Chicago Home Composting Program Rotline: 773-265-9587  Garfield Park Conservatory: 773-638-1766  The Resource Center DIY Bin Supplies: 773-821-1351, <a href="mailto:info@resourcecenterchicago.org">info@resourcecenterchicago.org</a>  U of I Extension Master Composter Program: 773-233-0476, <a href="mailto:nkreith@gmail.com">nkreith@gmail.com</a></p> <p><b><u>National Resources</u></b>  US Compost Council <a href="http://compostingcouncil.org/">compostingcouncil.org/</a>  US EPA Composting Basics <a href="http://www.epa.gov/epawaste/conserve/rrr/composting/index.htm">www.epa.gov/epawaste/conserve/rrr/composting/index.htm</a>  National Sustainable Agriculture Information Service  <a href="http://www.compost-info-guide.com/make_better_compost.htm">/www.compost-info-guide.com/make_better_compost.htm</a>  Ohio State University Soil Carbon Sequestration Fact Sheet <a href="http://ohioline.osu.edu/aex-fact/pdf/0510.pdf">ohioline.osu.edu/aex-fact/pdf/0510.pdf</a></p>	