### **Green Bag Lunch: Composting Opportunities at Home**

# Putting good ideas to work for a carbon-neutral, flourishing campus **Sustainable** CWRU





### What the Office of Energy & Sustainability Works On

- Climate Action Plan Management
- Energy Efficiency Projects/Campus Energy Metering
- Recycling & Waste Education
- Sustainable Transportation Education
- Energy & Sustainability Data Collection & Reporting
- Green Building & Green Grounds Advising
- Working to Create a Culture of Energy and Sustainability Awareness
- Community Engagement in Energy & Sustainability
  - Sustainability House program, Student Sustainability Ambassadors, Green Bag Lunches
  - Bike committee, Scooter Committee, Recycling Committee, CAP Committee, Tree Committee

![](_page_1_Picture_11.jpeg)

![](_page_1_Picture_12.jpeg)

### **TODAY'S SPEAKERS:**

### Carin Miller, Education Specialist, Cuyahoga County Solid Waste District

### Zoe Apisdorf, Director of Residential Services, Rust Belt Riders

Laura Klingler, Assistant Director University Events, CWRU

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think beyond the possible"

Carin Miller Education Specialist Cuyahoga County Solid Waste District

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### CUYAHOGA COUNTY SOLID WASTE DISTRICT

We are the public agency helping the people of Cuyahoga County to reduce, reuse and recycle at home, at work and in our communities.

We serve the 59 communities within Cuyahoga County.

Learn more at CuyahogaRecycles.org

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![](_page_4_Picture_6.jpeg)

## Why Compost?

# It is an easy waste reduction strategy for households

- Food scraps & yard waste = 25% municipal solid waste
- Improves your ecological footprint (carbon sequestration)
- Organics in landfills produce methane gas

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![](_page_5_Picture_7.jpeg)

# Why Add Compost

# Good quality compost supplies organic matter, nutrients, and beneficial microorganisms

- Improves workability of soil and resists compaction for better aeration and water holding capacity
- Stimulates healthy root development
- Adds nutrients back into the soil to improve soil fertility
- Results in healthier food

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### **Composting is**

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Aerobic biological decomposition of organic material under controlled conditions

> A mixture of stable organic matter, minerals and microorganisms

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## **A Healthy Pile**

- Create a healthy environment that supports micro-organisms (bacteria and fungi) and macro-organisms (worms, insects, slugs)
- Physical and chemical decomposers break down organic waste
- Happy, healthy creatures reproduce, consuming your organic scraps more efficiently
- All living things need shelter, food and water

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### Location

- Level, well drained area
- Build over soil or lawn
- Discreet & accessible
- Sunny spot

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- Keep volume around 3 feet cubed
- Center of pile 90– 120 degrees F
- 50% moisture
- Oxygen turn/stir

![](_page_10_Figure_5.jpeg)

### **A Healthy Pile Balanced diet**

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![](_page_11_Picture_2.jpeg)

### A Balanced Mixture Affects quality and speed of decomposition

![](_page_12_Picture_1.jpeg)

![](_page_12_Picture_2.jpeg)

Vegetables, fruits, flowers, plant clippings, grass clippings, coffee grounds, manure, etc...

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## **A Balanced Mixture**

60-70% Brown, carbon based organic matter supplies energy in carbohydrates

![](_page_13_Picture_2.jpeg)

Dead leaves, straw, sawdust, wood chips, shredded newspaper, corn stalks, cotton rags, nut shells, pine needles, etc...

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# Compost Dos

**Grass clippings Plants** Fruits, vegetables and grains **Egg shells Coffee grounds** Hair (pet, human) Leaves Nuts Straw, hay **Tea bags (not plastic)** Sawdust Lint (natural fibers) **Shredded paper** 

![](_page_14_Picture_3.jpeg)

CuyahogaRecycles.org

# Compost Don'ts

Meats Dairy Products Oils and Fats Bones Cat and dog droppings Cat litter Diseased plants Weed seeds Branches or limbs Glossy paper Plastic tea bags

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### How to Start the Composter

Lay down base material (chopped brush or other coarse materials) on soil to allow air circulation around base of pile

Alternate layers of greens (nitrogen) and browns (carbon) around 3"- 6"

After each green/brown layer, add garden soil or compost

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# Is it working?

- The pile will heat up
- Materials no longer look like the original stuff you put in the pile
- Little to no odor other than an earthy one

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![](_page_17_Picture_5.jpeg)

# Problem Solving

Refer to section in Composting Brochure or online sources

#### **Pile Too Wet?**

- add sawdust, straw or wood chips, and aerate

#### **Pile Too Dry?**

- Turn pile, and add water, or leave top off

#### Pile Damp & Sweet Smelling? Won't heat up?

- It needs nitrogen so add fresh grass clippings, manure, blood meal or urea fertilizer

#### **Pile Smells Like Ammonia?**

- add brown leaves, sawdust, straw or wood chips.

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![](_page_18_Picture_11.jpeg)

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## **Bins Available**

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Ultimate Dirt Machine (Digester bin) = \$55 Go Plastics, Georgia Retail value over \$100

![](_page_19_Picture_3.jpeg)

Wishing Well Composter = \$50 Covered Bridge Organics, Ohio Retail value \$74 or more

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# **Other Equipment**

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### Yard Butler - Compost Aeration Tool \$20

# Compost Thermometer \$10

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### Sure-Close Pail = \$5

Retail value \$20 Add a pail to hold your food scraps in the kitchen until you're ready for a trip to the compost bin

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CuyahogaRecycles.org

## Ultimate Dirt Machine Digester Model

- 70 gallons, 29"X39"
- 100% recycled plastic
- Good for passive composting or someone who does not need the soil amendment
- Takes all food scraps and yard waste
- Minimal maintenance
- Good second bin, especially with large lawn, lots of trees and/or eat mostly vegetarian meals

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### How to Start the Digester

- Select a sunny location with good drainage
- Dig a pit 3" wider than digester
- Position composter and backfill with dirt to cover 3" over flange
- Clean out and spread material after a year and start again or move bin

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\*Instructions are on a sticker on the bin.

It could even be placed in a raised bed

![](_page_22_Picture_9.jpeg)

# **Wishing Well Composter**

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\* Instruction booklet comes with each composter in a plastic bag.

- 135 gallons, 30"X36"
- 100% recycled plastic
- Ease of access to top, good for active composting to turn pile
- Follow dos and don'ts of food scraps and yard waste composting
- Requires a bit more maintenance
- Good bin for households with large lawn, lots of trees and willingness to maintain carbon to nitrogen ratio

![](_page_23_Picture_9.jpeg)

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### Resources

The PDF of our Composting Guide is attached. If someone wants to request a hard copy they can do so via this link: <u>https://cuyahogarecycles.org/PublicationRequest.aspx</u>

Backyard composting Webinars: <u>https://cuyahogarecycles.org/compost\_workshops\_and\_bins</u>

Info on composting equipment sold by the district: <u>https://cuyahogarecycles.org/buy\_a\_compost\_bin</u>

Equipment order form:

<u>https://cuyahogarecycles.org/Documents/PageContent/Composting/Composting\_Equipment\_Order\_Fo</u> <u>rm.pdf</u>

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Zoe Apisdorf Director of Residential Services Rust Belt Riders

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### **Rust Belt Riders**

#### RUST BELT RIDERS COMMUNITY SUPPORTED COMPOSTING PROGRAM

# **DROP-OFF**

#### FIND THE PLAN THAT'S RIGHT FOR YOU.

#### • \$10 PER MONTH

- 24/7 ACCESS TO CONVENIENT DROP-OFF LOCATIONS
- 10% DISCOUNTS ON ALL TILTH SOIL PRODUCTS
- ACCESS TO WORKSHOPS + PERKS

#### RUST BELT RIDERS CURBSIDE COMPOSTING SERVICES

# PICK-UP

#### WEEKLY PICK UP WITH BIN SWAP.

- STARTING AT \$30 PER MONTH.
- A CLEAN, LINED 5-GALLON BUCKET DELIVERED TO YOUR DOOR.
- 24/7 SUPERIOR CUSTOMER SERVICE, ANSWERING ALL COMPOSTING QUESTIONS.
- 10% DISCOUNTS ON ALL TILTH SOIL PRODUCTS
- ACCESS TO WORKSHOPS & PERKS.

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### Laura Klingler Home Composter & Assistant Director University Events at CWRU

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think beyond the possible"

### Laura's Compost Bin

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### CWRU Sustainability Team <u>sustainability@case.edu</u> & <u>energymanager@case.edu</u>

- Stephanie Corbett, Director of Energy & Sustainability
  - Erin Kollar, Assistant Director Sustainability
    - Erika Weliczko, Energy Manager

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