COMPOST: It Makes Plants Happy

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Special Thank You to Co-hosts:





What is your interest in this topic?





What to Expect...



So Many Benefits!

Helps the environment

Increases soil fertility which improves plant growth

Increases soil structure which allows soil to retain water

Saves money

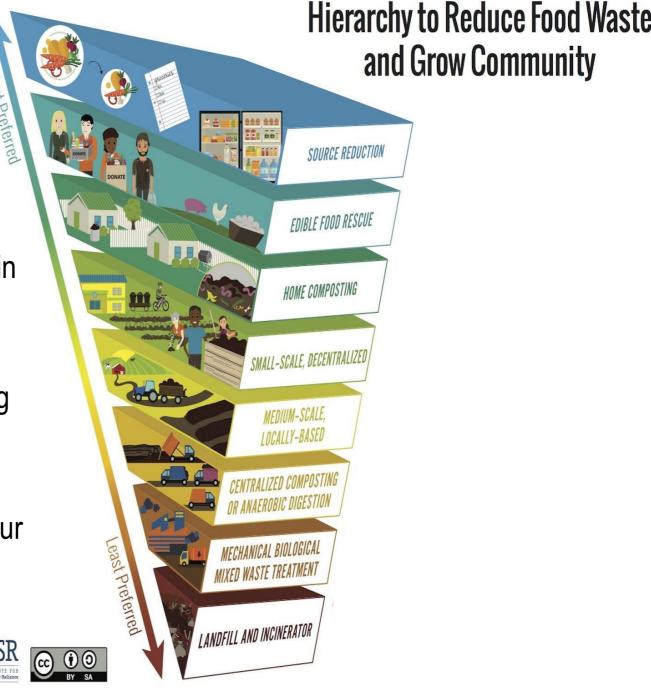
 Reduces the impact of climate change by storing carbon in the soil

• Increases your self-reliance

Provides a constant, dependable resource at your finger tips

Saves burning fuel in garbage trucks

Saves on landfill space



Recent Data

Studies indicate that 23 to 83 pounds per household per month could be diverted through home composting.

For every 10,000 households composting at home, between 1,400 and 5,000 tons per year could be diverted from curbside collection, with potential savings in avoided disposal costs alone ranging from \$72,000 to \$250,000.*

Source: ILSR, Yes! In My Backyard: A Home Composting Guide for Local Government, pg. 6

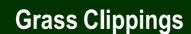


What is **compost**?

- It is NOT dirt
- It is NOT soil
- It IS a Soil Amendment

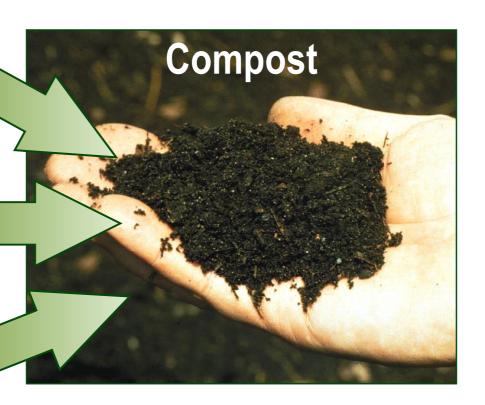


What is **composting**?









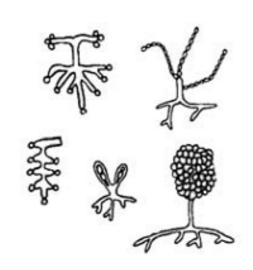
Recycling Naturally

Microbes are the Workhorses

Keep them happy and they will work for you!

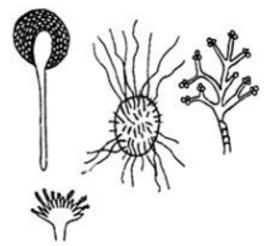
The Key to Composting

COMPOST MICROORGANISMS MAGNIFIED 1,000 TIMES

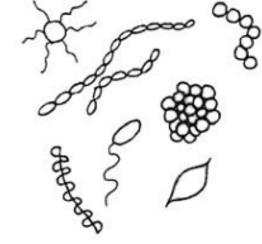


Actinomycetes

100 thousand - 100 million
per gram of compost



Fungi
10 thousand - 1 million
per gram of compost



Bacteria

100 million - 1 billion
per gram of compost



Keep Microbes Happy

WATER

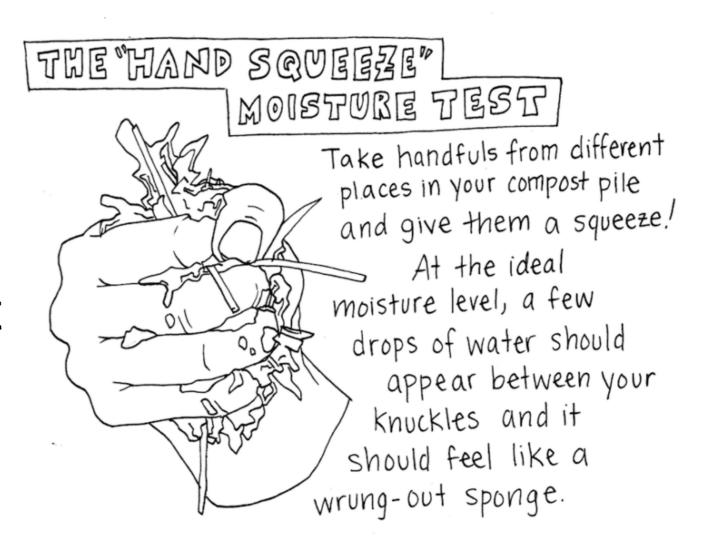
OXYGEN

FOOD

"HOME"

WATER

- Needed by decomposers
- Damp as a rung out sponge
- > 40-60% moisture



Source: ILSR Home Composting Basics





OXYGEN

Aerobic decomposers:

- Love O2
- Work fast
- Decent smell

Anaerobic

decomposers:

- Do NOT like O2
- Work SLOW
- Produce sulfur and other foul smelling gasses



FOOD - NITROGEN

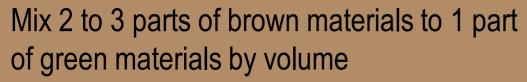
aka GREENS or FRESH



FOOD - CARBON

aka BROWNS or DRY







What NOT to compost?

- Meat, bones, or fat
- Dairy products
- Oils
- Whole branches, logs
- Dog/cat or human waste
- Charcoal
- Treated wood
- Persistent weeds
- Kids ☺



Bedding / Manure

Bedding and manure are great for composting

- Chickens, guinea pigs, rabbits, cow, horse, etc.
- Heat pile to 140-160 degrees F
- Must balance Nitrogen(manure) / Carbon(bedding)
- Turn often wearing gloves, good footwear, and mask or bandana when turning



HOME

PILE

PROS:

Easy!



CONS:

- Ugly
- Slow
- Attracts pests
- Can get out of hand

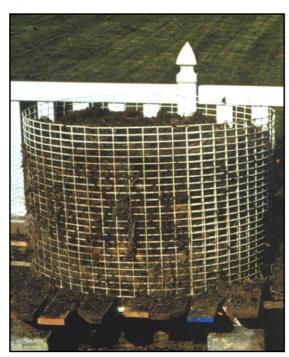


HOME

DIY Bin

PROS:

- Cheap
- Easy
- Does the job







CONS:

- Time
- Can be unsightly
- Finding materials
- Common Mistakes



HOME

PROS:

- Easy
- Durable
- LooksNice

Purchased Bin



CONS:

- Expensive
- Parts lost or damaged

Placement

- Sunny or Shade?
- Convenient
- Near garden with space for material storage
- 2' away from building
- Not directly against a fence
- Near water source
- Good drainage



Lasagna Layering

Mix 2 to 3 parts of browns (carbon/dry) materials to 1 part of green (nitrogen/wet) materials by volume



Cold Composting

- Passive (Layer it and leave it)
- Low-effort
- Little attention to watering and creating optimal conditions
- Slower (takes a year minimum)
- Weed seeds may persist



Hot Composting

- Layer browns and greens Turn pile every 5-7 days (winter months not applicable)
- Water when turning (if needed)
- Finished compost in 6 weeks 6 mo.
- Temperatures Hot active composting happens between 130 to 160°F. The pile needs to reach
 over 150°F for 3 days straight to prevent many seeds from sprouting



Finished Compost:

- is dark brown, crumbly & you don't recognize leaves, grass, food scraps
- smells earthy like a greenhouse
- doesn't reheat



Compost Troubleshooting ~ Odors

Rotten odor

- Putrid smell or rotten egg smell
- Usually results from anaerobic conditions
- Excess moisture, compaction
- Turn pile, add dry porous material (browns), cover kitchen scraps

Ammonia odor

- Too much nitrogen (greens)
- Add high carbon material (browns) & turn pile



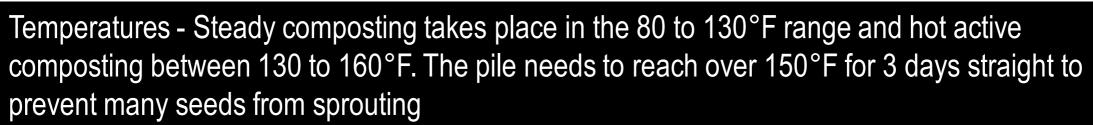
Compost Troubleshooting ~ Temperatures

Low pile temperature

- Pile too small, cold weather, too dry, poor aeration, or lacks nitrogen
- Make pile bigger or insulate sides, add water, turn the pile, add greens or manure

High pile temperature

- Pile too large, insufficient ventilation
- Reduce pile size, turn





Compost Troubleshooting ~ Animals

Pests: raccoons, rats, insects

- meat scraps or fatty food waste, rotten odors
- Compost in an animal-proof bin
- Use worm composting (vermicomposting) for food scraps







Bins You Can Count On!

- Employee's Top Pick for 20 years
- 100% recycled plastic made in North America
- Black to absorb heat quickly
- 128 gallon capacity (can hold six to eight 30-gallon bags of yard material)
- Easy to use, simple to assemble and move
- Long-lasting
- A door that slides open at the bottom giving you easy access to finished compost
- A tight lid keeping pests out; yet is well vented to decompose organic material well
- Comes with a copy of the book "The Composting Cookbook"



Bins You Can Count On!

Discount available:

- Farmshed Plant Sale
 www.farmshed.org/plantsale/
 Upon check-out, add this discount code "startcomposting"
- Reserve online & pick up at Recycling
 Connections
 www.recyclingconnections.org/online-store
 and select "pay upon pick-up" at Recycling
 Connections and write "startcomposting" in the
 comments box upon ordering

(Offer Expires May 31st. Limited to 1/customer. While supplies last.)







growing

PLANT SAIF

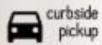
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Upcoming Webinars

Reducing Confusion on Packaging & Food Ware by Karin Sieg, Executive
Director May 27th at 6:30pm on Zoom

Waste & Recycling in Portage County by Kelly Adlington, Project Coordinator Date/Time TBD on Zoom







Happy Composting!

QUESTIONS ???

Like what you heard? Consider a donation today

www.RecyclingConnections.org

Special thanks to the following for some photo and slide information:









Making

Connections