

Composting



Suzanne Smith Hirrel

RETIRED

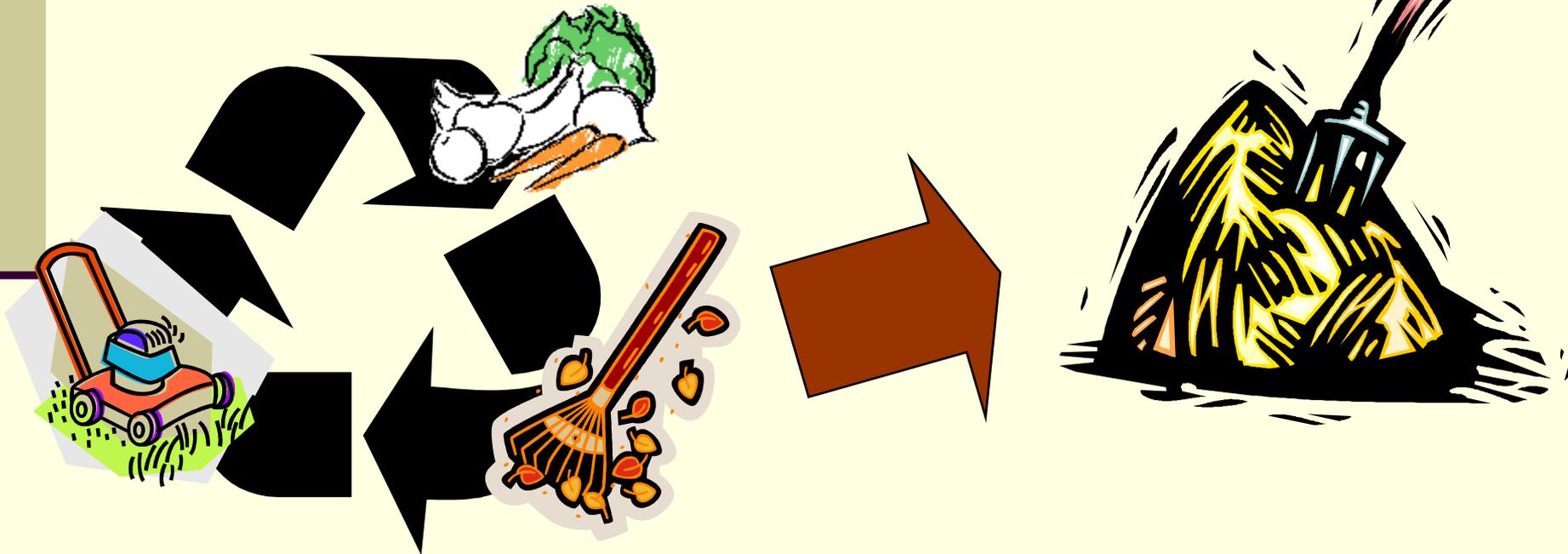
Associate Professor/Extension Specialist -
Environmental Management

Nature's Way of Recycling



Why Compost?

It converts leaves, grass, kitchen scraps and garden wastes into a usable product and keeps them out of the landfill.



What is it?

Compost: decomposed organic matter; also called humus

Composting: the controlled biological decomposition of organic wastes



Compost Benefits

- Improves soil structure & texture
- Improves drainage (clay soils)
- Improves moisture (sandy soils)
- Soil conditioner -- little/some fertilizer value
- Improves soil health
- Improves aeration; attracts earthworms
- Increased disease resistance or disease suppression

More Benefits

- Reduces need for chemicals and chemical fertilizers
- Conserves water
 - penetration and retention are improved
 - erosion and run-off are reduced
- Recycles organic wastes

Compost Happens



Materials Suitable for Composting

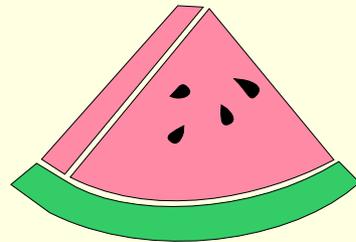
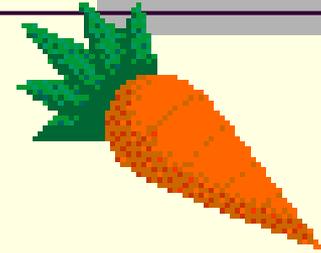
- Organic materials
 - **Greens (Nitrogen)**
 - **Browns (Carbon)**



Greens - Nitrogen

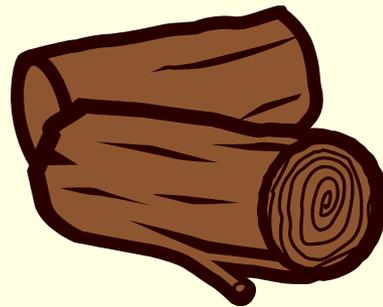
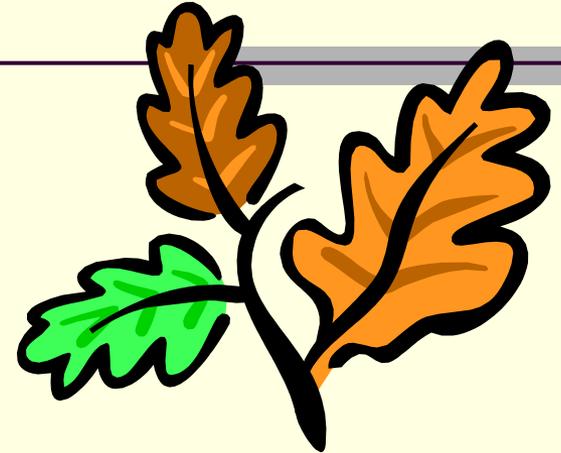
- Fresh grass
- Green plants
- Livestock manure
- Kitchen waste

- Fertilizer high in N
 - Blood meal, alfalfa meal



Browns - Carbon

- Fall leaves
- Woody materials
- Straw
- Paper



Yes -- Compost These Materials

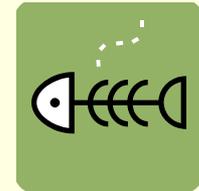
- leaves
- straw
- grass clippings
- wood chips
- paper *
- garden wastes *
- sawdust
- egg shells
- coffee grounds
- vegetables
- fruit peels
- weeds *

*** NO diseased plants, weeds with seeds or magazines or bright colored paper**



-- to These Materials

- Bones
- Dairy products
- Oils/grease
- Pet manure
- Fish scraps
- Meat scraps
- Lime



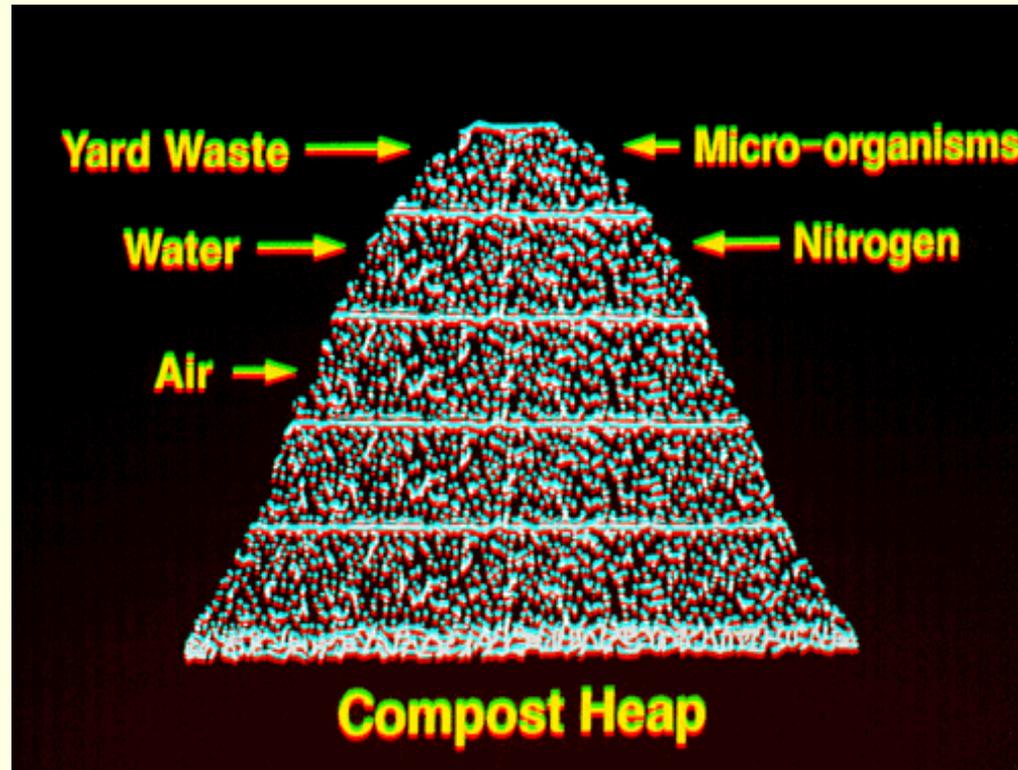
Compost Recipe

- **1/4 - 1/2 Green Material**
- 1/2 - 3/4 Brown Material

30:1 C:N Ratio



Building the Pile



Manufactured Bins



Homemade Bins

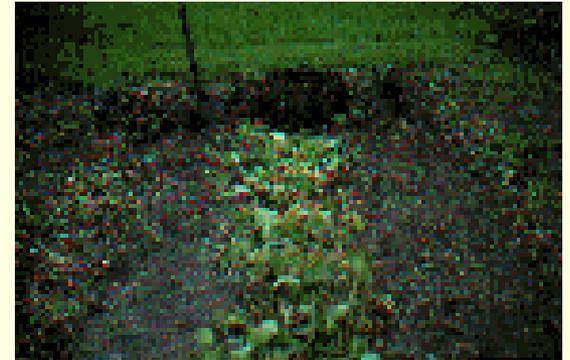


Rotating Bins



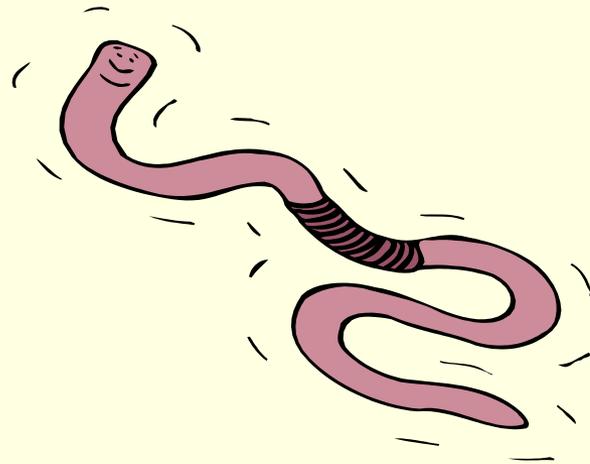
Bury in Yard

- Trench composting
- Sheet or in-the-garden composting
- Compost holing



Worm Composting

- Utilizes redworms
 - (*Eisenia fetida*)
- Great for food scraps
- Also recycles paper



Site Selection

- Near a water source
- Consider how you will get materials to the pile
- Make it convenient
- Roots can be a problem under trees



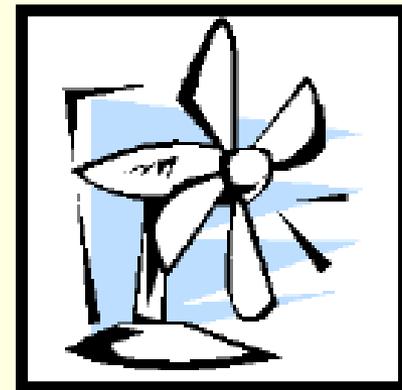
Volume

- Minimum - 3 ft. x 3 ft. x 3 ft.
 - 1 cubic yard
- Maximum - 5 ft. x 5 ft. x any length



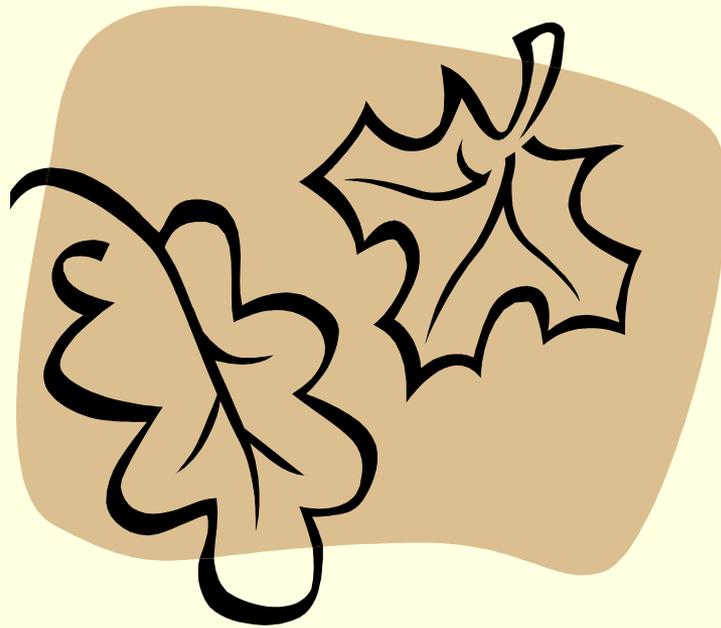
Moisture & Aeration

- 40 % - 80 % optimum
- Wrung out sponge test
- Oxygen is critical
- Turning
- Air pipes or stacks



Particle Size/Surface Area

- Smaller materials have more surface area
- Smaller particles decompose faster



When is it Ready?

- No heat produced after turning
- Material is dark, earthy smelling
- Does not contain distinguishable plant parts, like leaves
- About 30-45-60-100+days,
depends on your management



Trouble Shooting

- Rotten odor
- Ammonia odor
- Low pile temperature
- Pests



Compost Resources

The screenshot shows a web browser window displaying the Cooperative Extension Service website. The address bar shows the URL <http://uaex.edu/yard-garden/default.aspx>. The website header includes the University of Arkansas logo and the text "Cooperative Extension Service". A navigation menu at the top lists various services like "Event Calendar", "Publications", and "County Offices". The main content area is titled "Yard & Garden" and features a large photograph of people working in a garden. Below this, there are several featured articles and publications, including "Compost Happens", "Arkansas Master Gardeners in Costa Rica", "A Chat with a River Valley Master Gardener", "Flowering Annuals", and "Cedar Apple Rust". The browser's taskbar at the bottom shows several open applications, including "Yard and Garden re...", "Copy of List of 600...", "LR Churches databa...", "20150609_174256.jp...", "Removable Disk (E:)", and "Microsoft PowerPoi...". The system clock in the bottom right corner indicates the time is 10:36 AM.

http://uaex.edu/yard-garden/default.aspx

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Cooperative Extension Service

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SHRPE

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Extension Home > Yard & Garden

Yard & Garden

There's an irresistible link between people and the soil beneath our feet. Beyond the necessity of growing food, there is knowledge and a sense of accomplishment that comes from cultivating the earth. The Cooperative Extension Service, part of the University of Arkansas System's Division of Agriculture, nurtures this relationship in many ways including school gardens, the **Master Gardener** program and the annual **Arkansas Flower & Garden Show**.



Compost Happens

This playful music video by Washington County Master Gardeners shows how compost happens.



Arkansas Master Gardeners in Costa Rica

View the beauty of this Central American country through the eyes of Arkansas Master Gardeners.



A Chat with a River Valley Master Gardener

Vegitate.com interviews River Valley Master Gardener, Bob Watson, and learns the basics for any new gardener.



Publications

Flowering Annuals

Flowering Annuals can be a showstopper if cared for and planted correctly. Learn more about how to add them to your home landscape.



Cedar Apple Rust

The spectacular fruiting bodies of cedar apple rust appear in spring.



Yard and Garden re... Copy of List of 600... LR Churches databa... 20150609_174256.jp... Removable Disk (E:) Microsoft PowerPoi... 10:36 AM

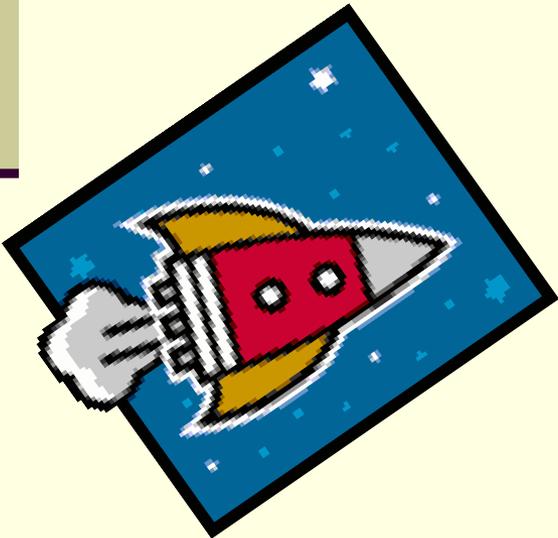
Additional Compost Training

- Do the Rot Thing Workshops
 - July 15, Arkadelphia, 8:30-3:30
 - July 23, Camden, 8:30-3:30
- Contact Betsy Spetich @ ADEQ to register
- spetich@adeq.state.ar.us
- 501-682-0822

Composting

“It’s not rocket science...
it’s ROT science”

Paul James, HGTV’s Gardener Guy



Happy Composting

