How to Compost in Taos County, NM

By Stanley Yuen, Master Composter

Master Composter Program (USA)

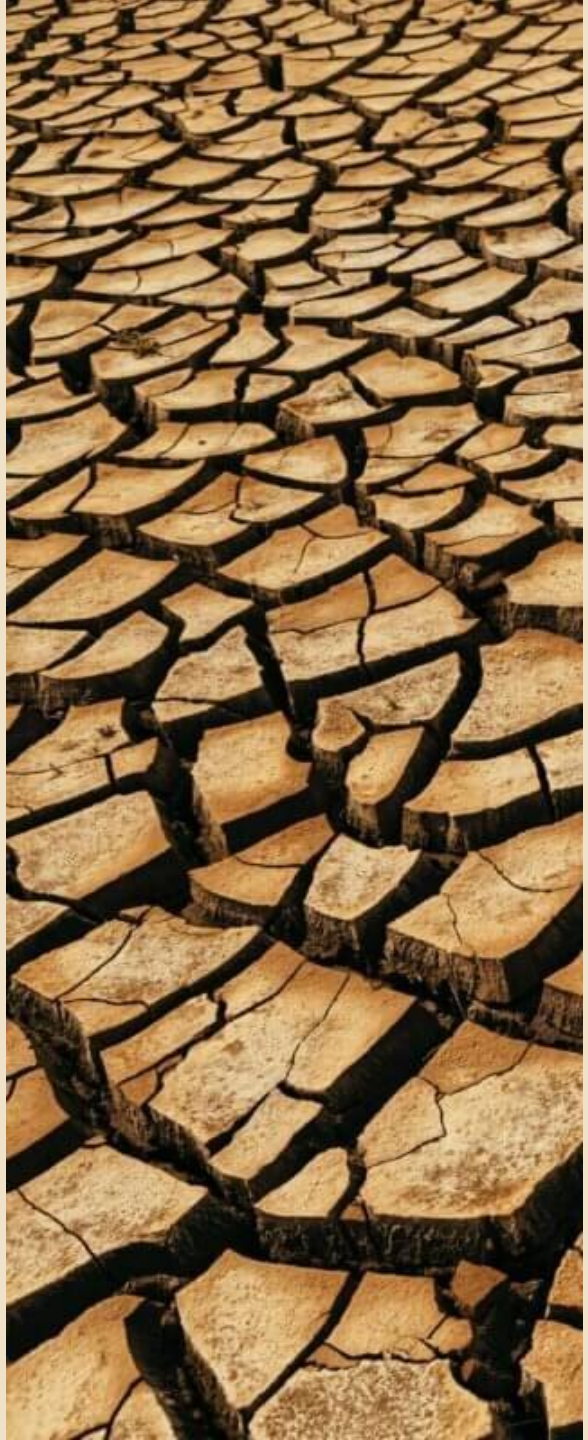
- Only one in NM: Bernalillo County (2010-today).
- Mission: To educate interested citizens on how to voluntarily channel organic home waste into a beneficial resource.
- Adapted to local NM climate & culture.
- Website: <nmcomposters.org>

My Goals For This Presentation

- 1) To cover composting topics that interest you the most.
- 2) Provide information that you can apply right away. (take notes and list immediate actions)
- 3) Build a culture of compost practices optimized for our high desert environment.

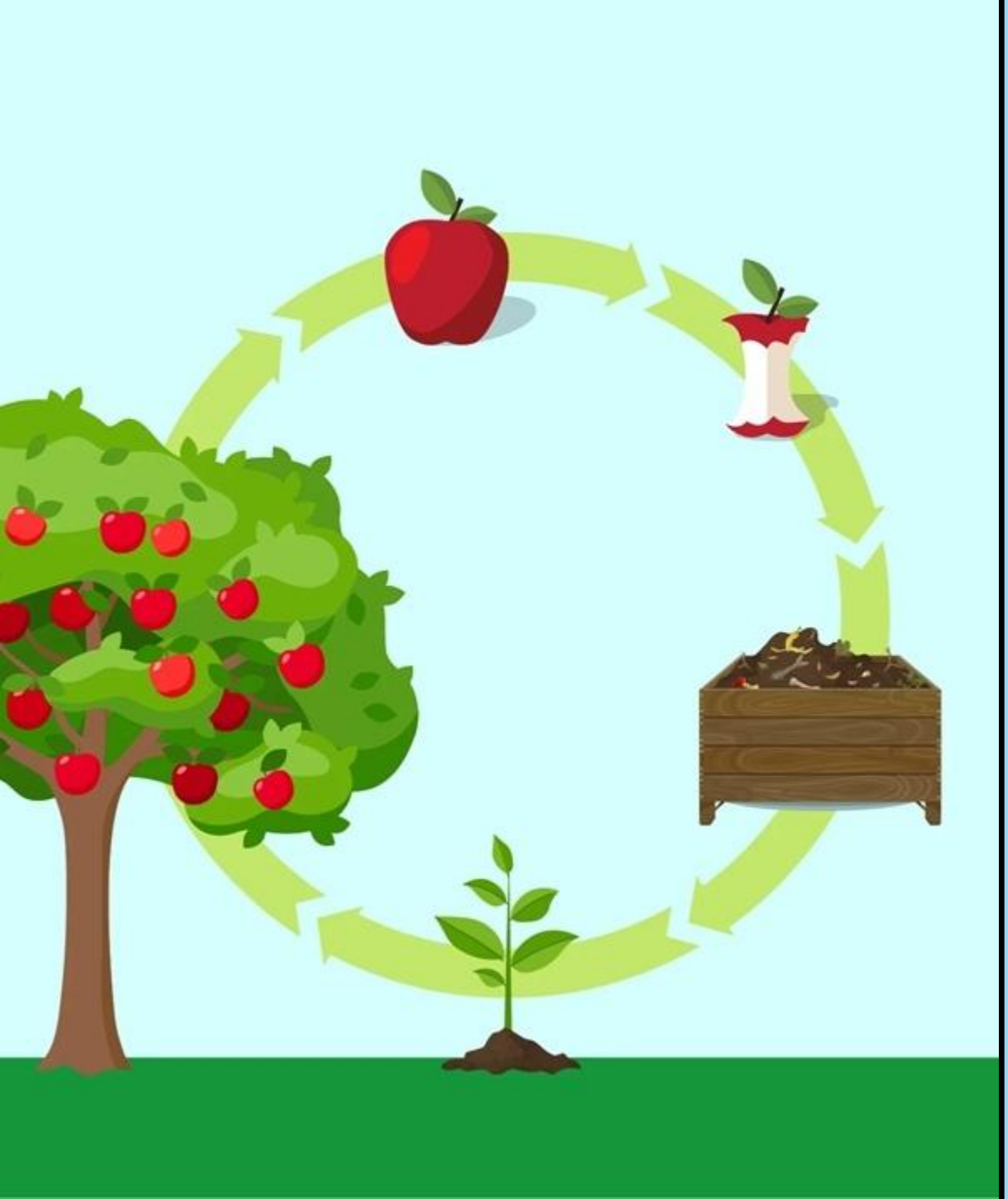
Recommendations

- You may ask questions at any time (please raise your hand).
- Be patient with people with different levels of experience. There are no bad questions.
- Take notes, focus on actions you can take right away.



Nutrient Cycle, Broken

- 40% of all landfill waste can be composted.
- “consume and dispose” culture
- More garbage AND resource scarcity.
- Dust bowls & landfills.

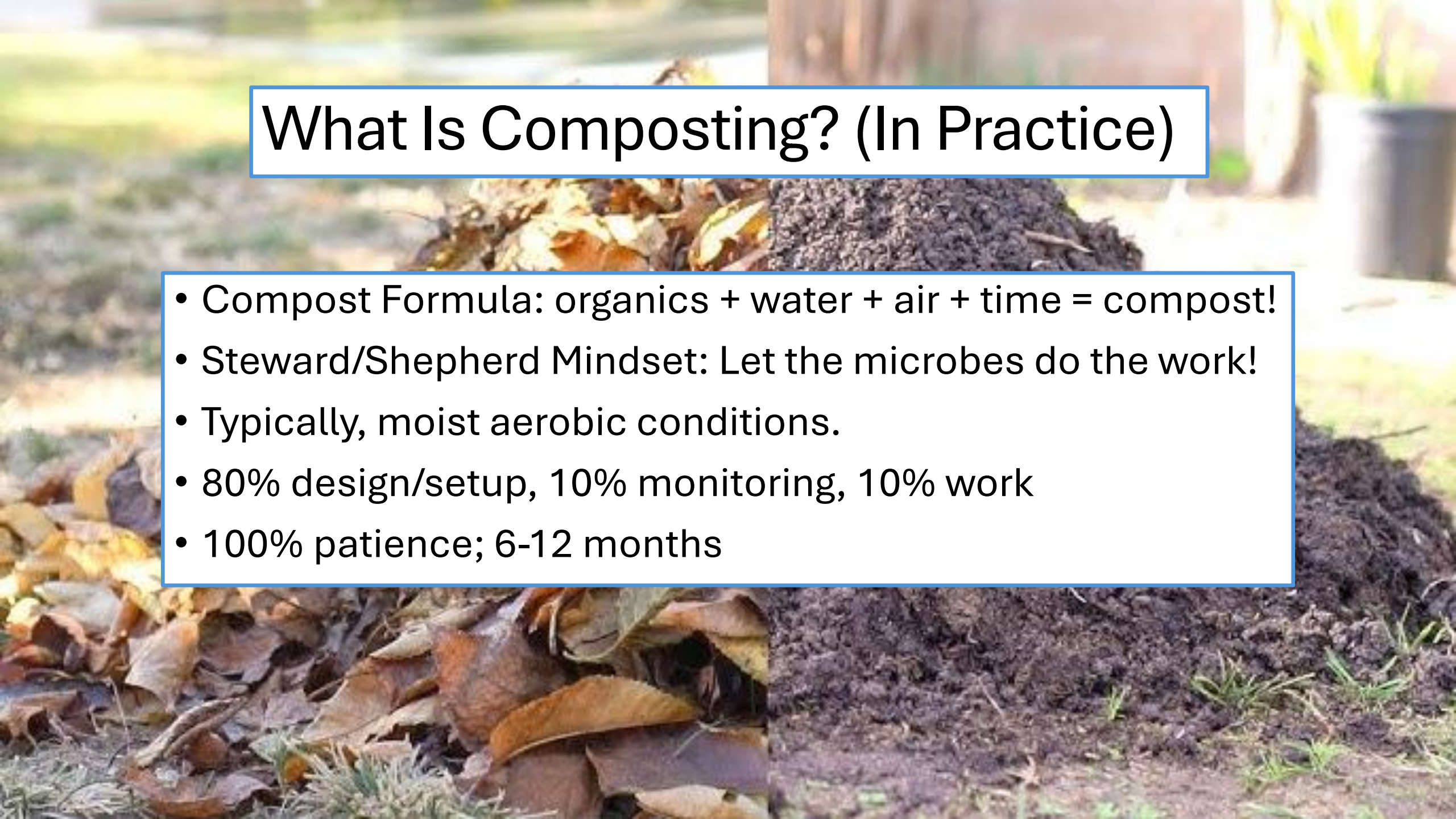


Nutrient Cycle, Fixed

- Composting solves 2 problems: waste stream & fertility in soils.
- Composting mimics Nature’s “circular economy”.
- What comes from the soil must be returned to the soil. - summation of Sir Albert Howard's "Law Of Return"

What is Composting? (Science)

- Biological decomposition of organic waste under controlled conditions.
- Organic Waste = kitchen scraps, yard waste, paper/cardboard, (animal/human waste)
- Decomposition = Into fertilizer that plants love.
- Biological = Assisted by bacteria, fungi, worms, etc.
- Controlled Conditions = To create favorable conditions for the right organisms to make your compost.



What Is Composting? (In Practice)

- Compost Formula: organics + water + air + time = compost!
- Steward/Shepherd Mindset: Let the microbes do the work!
- Typically, moist aerobic conditions.
- 80% design/setup, 10% monitoring, 10% work
- 100% patience; 6-12 months


Many Paths < --------- > One Goal
• Cold Compost Bin (outdoor)
• Hot Compost Bin (outdoor)
• Vermiculture/Worm Bin (indoor/outdoor)
• Bucket-In-A-Hole (outdoor)
• Bokashi (indoor)
• Fertile Soil, Happy Plants
• Household scale
• Minimize odors & yuck factor
• Safe for people & pets
• Light, simple work

Last Step First: How do I use my compost?

- Top dressing/mulch (no-till, reduces evaporation).
- Mix into top 4-8” of soil.
- Indoor pots & planters.
- Compost tea.
- Give to neighbor/local garden.

Cold Compost Bin

- Most common compost system. The “lazy way”.
- High capacity/Low maintenance.
- “Straw shoes/straw hat": for insulation, reduced evaporation, aeration
- Keep damp & cover (straw, cardboard, burlap).

Hot Compost Bin

- Starts at 111F, can be as high as 150F. (Steamy!)
- Hot compost is a Phase. Still requires a cold compost period to fully decompose.
- Kills pathogens & weed seeds!
- Higher maintenance.

3-Bay System

- High-capacity for cold & hot compost
- Bay 1: last year’s compost
- Bay 2: this year’s compost
- Bay 3: “browns” storage for managing C/N ratio (dried leaves, sticks, paper, cardboard)

Vermiculture/Worm Bin

- Indoor/outdoor, scalable/portable.
- Veggie kitchen scraps, small amounts of meat/dairy.
- Live worms yucky or fun?
- Breeds red wiggler worms; great for live fish bait!

Bucket-In-A-Hole

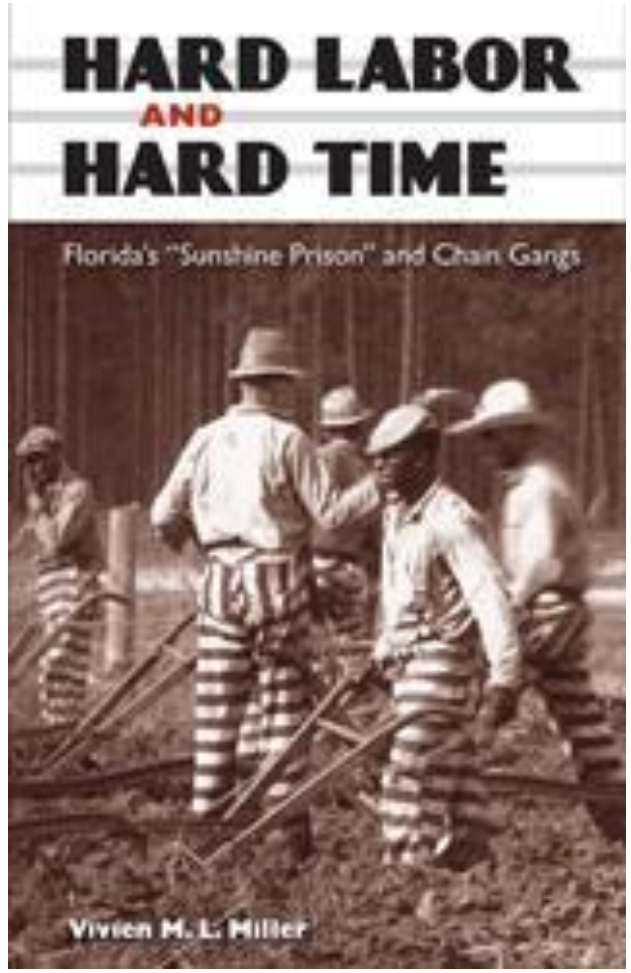
- Variation on cold compost & vermicomposting.
- Low minimum capacity & scalable.
- Great in raised garden beds.
- Can double as an olla!

Bokashi = controlled fermentation

- Indoor, portable. Ideal for condos.
- High maintenance, fast results.
- Can handle meat/dairy/oils.
- Anaerobic! Controlled fermentation.
- Requires specialist microbes (bokashi bran).
- 2 weeks to garden, 4-6 weeks to decompose in soil.
- Keep away from pets!

Myth: Turning The Pile

- Hinders decomposition.
- Heavy labor that discourages would-be composters.
- Instead, aerate by adding “bulking material”.
- Best practice = Turn the pile 0-2 times in 6-12 months.
- Always wear a face mask.



Myth: Inoculants

- Only required in Bokashi.
- $$$ for very short-term improvement.
- Living soil/food waste has all the microbes you need!
- Best practice = Maintain a moist, aerobic environment.

Troubleshooting: Too Dry

- Outdoor systems in the desert. Porous pallet bins.
- #1 cause of slow decomposition.
- Water periodically.
- Close the gaps.
- Cover & insulate. Straw, hay, cardboard, burlap.

Troubleshooting: Too Wet

- Indoor systems: worm bin, Bokashi.
- #1 cause of bad odors. (peat bog)
- Add bulking material: shredded cardboard/paper, straw, dry leaves.
- Drain regularly (spigot or 2-bin system).
- Leachate should be diluted if used on plants.

Troubleshooting: Bugs & Critters

- Food chain. Can partially control.
- Worm bins: 1/16” vent holes. Keeps worms in and most bugs out.
- Outdoor bins: control bin location, gaps, insulating layer.

Summary, Q&A

- What can I do this week to improve my composting practice?
- What key principle can guide my practice?
- How is my compost system adapted to the high desert?
- More Questions? Email me at <iamstanleyyuen@gmail.com>.
- (If there's time, do Advanced Concepts.)

Advanced Concepts in Composting & Nutrient Cycling

By Stanley Yuen, Master Composter

Community Compost

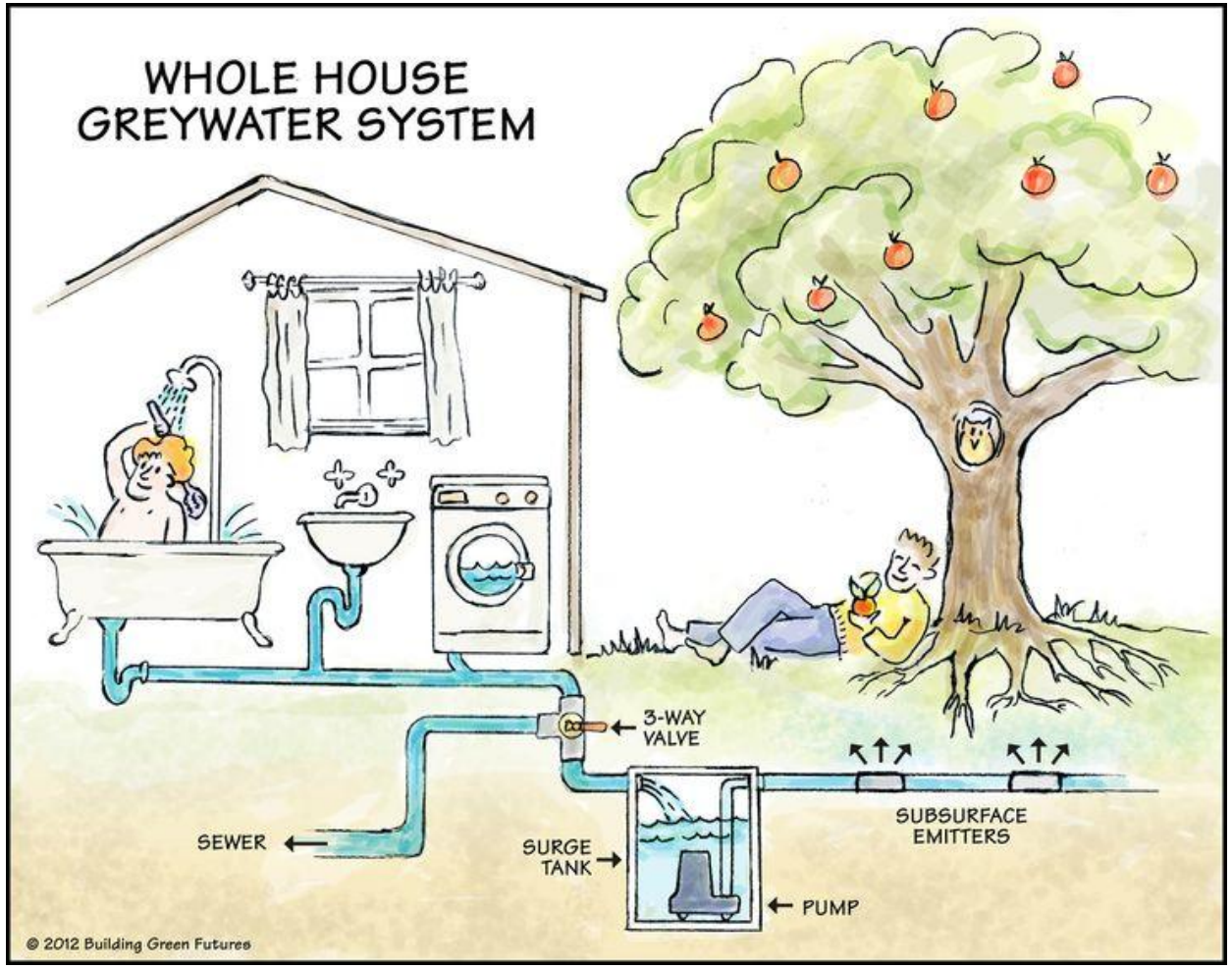
- Community Centers & Bins
- Collection & Processing Companies
- Services for restaurants, grocery stores, farms
- Municipal Services

Natural Human Burial

- Natural Burial New Mexico
- Natural or accelerated "human composting". Since 2019, 12 states (including CO and AZ) have legalized what is called "natural burial" or "human composting", and 15 states (including NM and TX) are considering it.
- Sci-fi! Generational Spaceships. (2018, Record Of A Spaceborn Few)

Greywater

- Nutrient Cycle/Law Of Return.
- ~60% of potable water becomes greywater.
- Laundry-to-landscape incentives in Santa Fe, ABQ.



Blackwater & Humanure

- Blackwater systems and arborloos feed directly to non-edible plants
- Composting humanure: more sanitary overall, though potentially risky because of proximity to humans
- Modern methods account for sanitation, safer than traditional “night soil”

Policies

- Incentives for greywater (laundry-to-landscape etc).
- Incentives for biodegradables.
- Halloween pumpkin collection & composting.
- Xmas trees into compost or firewood.
- Food waste prevention & food banks. (Why compost it when we can feed a hungry person?).
- NM House Bill 291 promotes a “circular economy”, passed in 2025!

Resources

- Master Composters (https://www.nmcomposters.org)
- Albuquerque Area Extension Master Gardeners (https://abqmastergardeners.org).