COMPOSTING

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COMPOSTING

- What is it?
- Why do it?
- Where do it?
- How to do it?
- Benefits of Composting?
What is Composting?

- Biological decomposition of organic matter.
- Decomposition occurs naturally, but can be accelerated.
- Microorganisms, worms, & insects break organic material into compost.
- Compost contains: nutrients used by plants.
- Nature’s way of recycling.
Why Compost?

- Is an opportunity to have a direct effect on waste management issues.
- Waste management issues bring out the NIMBY Syndrome
- Composting offers YIMBY solution
- Yard waste makes up 13% of
- Food waste makes up 10%
Why Compost?

- 200 lbs of yard waste/person/year
- 150 lbs. of food waste/person/year
- Landfill refuse could be reduced by 25%
- Composting efforts can be an economically sensible, environmentally sound, waste management strategy w/ a value added end product.
Why Compost?

- Composting breaks down organic material into their basic end products.
- It releases: Ca, K, & P
- Improves soils:
  - physical properties
  - Tilth
  - Infiltration
  - Drainage
  - Water holding capacity
Where to Compost?

- Composting can be done on a very small scale to ginormous.
- Back yard is most common.
How to Compost?

- No Turn methods - Easiest, but slowest
- Turning units - Faster, but require some labor
- Heaps - can be turned or not.
- Worm composting - smaller scale, can be done indoors in bins, plastic tubs, etc.
No Turn Methods

- Made of wire fencing, pallets wire together, cinder blocks, landscape timber, etc.
- Should be 3’x3’x3’
- Allow for air circulation
- Add yard & garden waste as it is generated
- NO food waste or woody materials
- Takes 6 months to a year.
Turning Method

- Can be bins or horizontally mounted rotating barrels.
- Fill bin or barrel w/ yard waste & kitchen scraps.
- Layer straw, then garden or kitchen waste, then manure or old compost & soil, then dry yard waste...water as you go.
- Keep pile moist not water logged.
- Turn every 2 to 5 days
Compost Heaps

- Should measure 5’ wide & 3’ high
- Add material as it becomes available
- Turn or not
- Covering w/ a layer of yard waste, mulch, sod, or soil helps prevent moisture loss.
Composting with Worms

- Worms digest food waste = vermicompost
- Worms work best between 60° & 80° F
- No flies or odor if managed properly
- Shallow wood box or plastic tub (at least 2’x1’x1’) w/ holes drilled for air & w/ a lid
- Bedding- shredded newspaper, add about ½ cup soil, moisten till it feels like a wrung out sponge.
Worm Composting

- Harvest when bin contents are uniform, dark, worm castings.
- Usually takes 3-6 months
- Add fresh bedding periodically.
- Dig shallow holes to bury kitchen scraps
- Bins work best if sized & stocked according to amount of waste to be handled.
- 2lbs of worms are needed for every pound of garbage produced/day
Benefits of Compost

- Improves soil structure
- Adds organic matter
- Helps sands & clays
- Soil surface resist crusting & erosion
- Attracts earthworms
- Contains plant nutrients & trace minerals
- Organic N & P slowly released, more available throughout growing season
Composting No-No’s

- Coal, BBQ ash - contains sulfur dioxide
- Dishwashing/laundry water - contains perfume, sodium, grease.
- Diseased plants - pile may not get hot enough to kill pathogens
- Whole eggs - attracts rodents
- Fish scraps - attracts rodents & other animals
- Grease/cooking oil - causes odor, slow decomposition.
Composting No-No’s

- Magazines - questionable paper-coating; inks
- Black Walnut sawdust - toxic to compost pile
- Pressure treated lumber sawdust - contains arsenic
Composting Conclusion

- Can reduce landfill refuse by 25%
- Provide excellent soil amendment
- Return nutrients to soil
- Attract earthworms
Questions??