



University of Arizona
Yavapai County Cooperative Extension
Master Gardeners Program



Backyard Composting

Benefits of Composting

- Composting is the aerobic decomposition of organic materials by microorganisms under controlled conditions
- Improves soil structure, drainage and water holding capacity
- Provides nutrients for plant growth that are released slowly and less likely to be leached away

7 Steps to Successful Composting

Step 1. Select Composting Site

- Sunlight, Critters, View and Water

Step 2. Choose Container

- Shape: Heap, Hoop, Bin or Barrel
- Size ideally 1 cubic yard

Step 3. Select Raw Materials

- Acceptable: grass, leaves, coffee grounds, wood, bark, stems, stalks, garden waste, kitchen scraps, eggshells, newspapers, cardboard
- C:N ideally 25:1 to 40:1
- 3 Reps of Layers: Brown, Green, Manure, Native Soil

Step 4. Aerate the Pile

- Turn to re-introduce oxygen
- Weekly will finish in 1-2 months; Monthly 4-6 months

Step 5. Keep the Pile Moist

- Moist like a damp sponge

Step 6. Keep Proper Temperature

- Mesophilic or Cold composting (50F to 105F)
- Thermophilic or Hot composting (above 105F)
- AZ! Beware of spontaneous combustion

Step 7. Cure the Compost

- Allow the finished pile to sit UNDISTURBED for 1 month



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Carbon-rich materials		Nitrogen-rich materials	
Wood chips	400:1	Fresh leaves	40:1
Cardboard	350:1	Garden waste	30:1
Sawdust	325:1	Fruit waste	25-40:1
Newspaper	175:1	Horse Manure	30:1
Straw	75:1	Coffee Grounds	20:1
Dried leaves	60:1	Grass Clippings	20:1
		Cow Manure	20:1
		Vegetable Scraps	12-25:1
		Chicken Manure	7:1

Problem Solving

- Always start with turn the pile
- Is the pile too dry or too wet?
- Unpleasant Odors: turn the pile; Add carbon if ammonia smell
- Slimy or Waterlogged: turn the pile; reconsider drainage
- If pile is damp but won't heat, add nitrogen
- Slow breakdown of organic materials: insulate sides if cold; may need more nitrogen; may need a bigger sized pile

How to use Compost

- Should be dark, crumbly and have earthy odor
- Pile should feel only slightly warmer than ambient air temp
- Pile will reduce in size up to half
- Hot Composting creates a soil-like compost for soil amendment in gardens, containers or turf; use a 1:1 ratio with existing soil
- Cold Composting creates a chunky compost with larger bits of organic matter to use as a top dressing or mulch; place around planting to improve water retention and cooler soil

Yavapai County Cooperative Extension	
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