

Choosing a Compost System

Choosing the right method, or, better yet, a combination of compost methods, is important. There are a lot of different ways to compost organic waste. Some methods don't require any special tools or even a compost bin. Other methods rely on the design of a compost bin to speed up the process. Some cost a lot of money and some don't cost very much at all. Some methods are only suitable for small quantities of waste and others can handle large volumes. Some require more work than others and some require that you have a higher level of technical knowledge about the composting process. Not all composting methods are suitable for all types of organic wastes. The best thing you can do is to pick and choose a combination of the methods and tools available to create a compost system that will suit your budget, the type and volume of waste you have, your technical knowledge, and your enthusiasm.

Ask yourself some questions

- **What materials would you like to compost?**

Food scraps, Grass clippings, Yard and garden waste, Leaves, Livestock manure

- **How much waste do you have?**

Kitchen scraps from a two person household?

Or do you have a dozen kids, a half acre lawn and six horses?

- **How much space do you have?**

Allow room for your compost bin, room for storage of raw materials like wood chips and other bulking agents and you will probably need some room for a compost curing pile

- **Why are you composting?**

Are you highly motivated? Some people really want the compost for their garden, and they really want to keep all those valuable nutrients out of the landfill and they really like the idea that they are not only saving money but they are also saving the planet.

Other folks think all of the above are nice ideas but they really just want some place to put the grass clippings and would really just rather go fishing.

TYPES OF COMPOST METHODS



[Soil Incorporation](#)



[Mulch](#)



[Grass-Cycle](#)



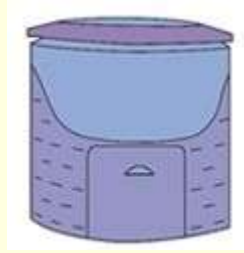
[Heap](#)



Wood Holding



Wire Holding



Plastic Holding



2-bin Block



3-bin Wood



Barrel Turning



Worm Bin

Dig a Hole and Bury It

PROS:

- Low cost
- Low maintenance (at least it is after you get the hold dug)

CONS:

- Not suitable for large volumes of waste
- Requires dedicated space for at least several months
- Recommended for a limited range of waste types, primarily food scraps



Mulching

PROS:

- Conserves moisture in the soil
- Suppresses weed growth and seed germination
- Moderate's soil temperature year round
- Prevents soil erosion and compacting
- Can be used for soft paving of paths and play areas
- Many times tree trimmers will unload a whole truck load for free

CONS:

- Woody mulch competes with plants for nitrogen
- Can spread weeds through seeds or spores if not composted first



- Grass clippings treated with weed killers may poison other plants if used as mulch

Grass-Cycling

PROS:

- Eliminates the need to bag grass clippings
- Adds nutrients to your lawn
- Reduces the number of grass clippings going to the landfill

CONS:

- May require more frequent mowing
- Works best with equipment designed for the purpose of mulching---a mulching mower



Heap

PROS:

- Inexpensive
- Low maintenance

CONS:

- Compost pile tends to spread out
- Heat loss reduces microbe activity
- Slow rate of composting---especially in winter



Pallet Holding System

PROS:

- Pallets are available free
- Diverts pallets from landfill and open burning
- Large capacity

CONS:

- Pallets are irregularly sized and sometimes broken
- Used pallets can look unattractive
- Heavy and bulky to move
- Due to the static holding system you should expect slower composting rate



Wire Mesh Holding Bin

PROS:

- Inexpensive
- Easy to build---should be at least 4' diameter/4' tall
- Light weight---use fairly small mesh wire
- Can be made from vinyl coated mesh or galvanized wire

CONS:

- Bin is easily crushed or bent
- Tendency for materials to dry out



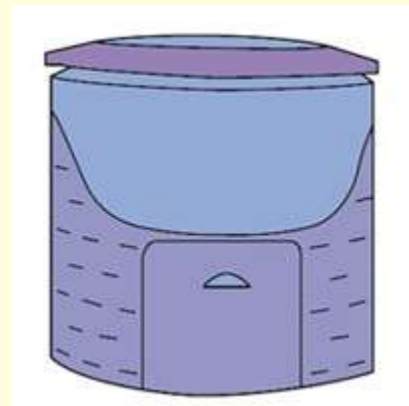
Plastic Holding Bins

PROS:

- Compact size
- Resistant to pests
- Lid sheds rain
- Plastic bin reduces moisture loss

CONS:

- Some have limited holding capacity
- Relatively expensive
- Door may not open easily, especially if compost has compacted at bottom of bin



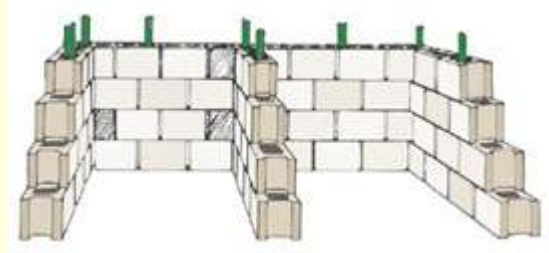
2-bin Turning System

PROS:

- Can produce high-quality compost in a shorter amount of time
- Allows composting of large volumes of yard debris
- Concrete block system is durable and long-lasting

CONS:

- Labor intensive
- Moderately expensive to build using new blocks
- Requires careful attention to composting guidelines in order to achieve rapid composting



3-bin Turning System (the Cadillac)

An example of this system can be found at Oak Forest Elementary in Atascocita. (Kings Parkway and Kingwood Glen)



PROS:

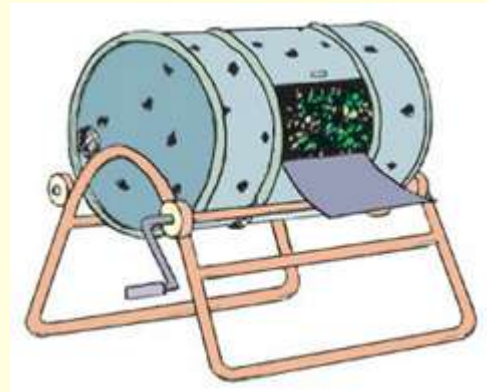
- Can produce compost in a shorter amount of time
- Allows composting of large volumes of yard debris (students produced 1.7 tons last year)
- Concrete block or Hardy Plank lumber systems are durable and long-lasting

CONS:

- Can be expensive to build---\$500 for the bins at Oak Forest made of Trex recycled plastic lumber
- Requires careful attention to composting guidelines in order to achieve rapid composting
- Labor intensive (should measure temperatures consistently and use an aeration tool to introduce air into the pile.
- Requires fairly large amount of space

Barrel Turning System

(One of these is also on display at Oak Forest Elementary but is not in use)



PROS:

- High degree of pest resistance
- High tech
- Makes turning of materials easier
- Finished compost in short period of time

CONS:

- Requires careful attention to composting details in order to achieve rapid composting
 - Relatively expensive
 - Full barrel is heavy
 - Must compost in batches, so you may have to stockpile fresh materials
 - Must turn daily for best results
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Worm Bin

PROS:

- Can compost food and paper waste year round
- Produces high quality worm castings
- Can be scaled to match volume of food waste
- Rapid composting rate with minimal effort

CONS:

- Must protect worms from hot sun and freezing weather
- Requires timely attention to maintenance
- Moderately expensive to get started
- Too much moisture or over feeding can kill worms



Comparing the Types of Compost Methods

You can divide the composting methods into two groups: Passive and Turning.

Passive Systems tend to cost less and require less work. They are called passive systems because you take a passive role in the compost process, that is, you pretty much don't intervene once the process is set in motion. The trade off is that the rate of composting tends to be fairly slow.

Turning Systems are designed to accommodate your intervention into the process. Theoretically your intervention, mostly turning the composting materials and maintaining moisture levels, will accelerate the rate of decomposition.

There are two tables for each of the Passive and Turning compost method groups. One of the tables shows which waste types are suitable for the methods that can be employed. The other table gives relative values for

- **Volume:** of waste the method is capable of processing
- **Cost:** of equipment needed to employ the method
- **Work:** physical labor required to keep the system working
- **Complexity:** the level of technical knowledge required
- **Space:** the amount of space the method requires

Passive Systems

System Type	Attributes of Systems				
	Volume	Cost	Work	Complexity	Space
Soil Incorporation	small	low	medium	low	medium
Mulch	medium	low	low	low	medium
Passive Pile	small	low	low	low	small
Passive Wire Holding	medium	low	low	low	small
Passive Plastic Holding	medium	medium	low	low	small

Turning Systems

	Typical Home Waste Material				
	Food	Grass	Yard Waste	Leaves	Livestock Manure
Turning Wire	X	X	X	X	X
Turning Plastic	X	X	X	X	X
One Bin Turning	X	X	X	X	X
Two Bin Turning	X	X	X	X	X
Three Bin Turning	X	X	X	X	X
Barrel Turning	X	X	X	X	X
Worm Bin	X				X

Turning Systems

System Type	Attributes of Systems				
	Volume	Cost	Work	Complexity	Space
Turning Wire	medium	low	med-high	medium	medium
Turning Plastic	medium	medium	med-high	medium	medium
One Bin Turning	medium	low-medium	med-high	high	medium
Two Bin Turning	Large	low-high	high	high	large
Three Bin Turning	Large	low-high	high	high	large
Barrel Turning	medium	high	med-high	high	medium
Worm Bin	small	low-high	low	high	small

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