Composting Workshop

Agenda

9:00 – 9:15: Sign-in and Arrival, Refreshments

9:15 – 12:00: Introduction, Discussion of hands-on Demonstration of Various compost methods

* Importance of soil and efficient waste management
* Traditional methods of composting and maintaining soil

- “Cold” Composting

- Lasagna

* Modern practices of composting and maintaining soil

- Vermacomposting

- “Hot” composting

* Main components of compost
	+ Carbon (Brown, dry stuff), Nitrogen(Green, soggy stuff), Water, Oxygen
	+ What not to compost

Items Needed to Facilitate:

* Healthy, Nutritious Refreshments
* Sign-In Sheet
* Info Sheets with what not to Compost
* 12 (5) gallon containers
* Newspaper
* Drill to drill holes in boxes

Budget for Workshop:

 $125

What Participants Should Bring:

* Close-toed Shoes
* A Hat
* Water Bottle
* Notebook if Needed

Step-by-Step Instructions:

9:00 – 9:15 - Sign-in and Arrival, Refreshments.

Description: Make sure that you have a sign-in sheet, set up a table to greet people as they arrive to the workshop. Refreshments – provide healthy nutritious food and beverages.

9:15: Introductions:

 - Introduce yourself and the purpose of the workshop.

 Purpose: This workshop is to present various types of composting methods and how to choose which one would best suit your garden space.

* 1. Have everyone introduce themselves and state why they are here and what they want to learn during the workshop.

9-ish – 12:00: Discussion and Hands-on Work:

Importance of soil and efficient waste management:

Project feed the hood feels it’s important to not only grow the crops but care for the soil, minimize waste by composting organic matter instead of throwing it away.

Part of our goals are to teach people how to compost and why it’s important.

We live in a convenience, throw-away oriented society where we don’t really consciously think about all of the waste we create.

By composting we minimize waste production and maximize our soil production, which adds valuable nutrients to our gardens.

Main Components of Compost:

 Carbon – brown, dry stuff – leaves, shredded paper, cardboard etc

 Nitrogen – green, wet stuff – food scraps, manure

 Oxygen

 Water

In general, the ratio of Carbon to Nitrogen should 3:1.

 → Sheet with “What not to Compost”.

Traditional methods of composting and maintaining soil:

For 1000s and 1000s of years people have been sustaining themselves through growing crops and through growing soil. and ultimately through a relationship with the earth. many cultures and groups of people have different methods and techniques, however they all focus on recycling organic matter to create nutrient rich soil. Many methods are based on growing soil. This could be applying manure and carbon material directly to growing beds. Now this is called “sheet mulching”, but has been an indigenous practice for 1000s of years. Also, crop-rotation and leaving land fallow for an entire growing season is another traditional method of maintaining soil.

Modern practices of composting and maintaining soil:

Lots of different methods and containers for Composting are available.

In particular, with above ground compost containers you can get special fungi powders that turn a five gallon bucket of food scraps into compost in weeks.

Different Methods:

Cold Method:

This method does not involve much work because you just let it sit. It takes much longer than alternative methods of composting.

Piling Nitrogen and Carbon together and not really doing much with it. Leaving it in a pile.

Lasagna method

This method is all about creating layers of carbon and nitrogen.

adding layers of carbon and nitrogen, add water occasionally and once it has settled for a week or two then mix it. If you stack it right, then it can generate heat.

Steps:

1. Begin first layer out of carbon base. Using something rough for this base, such as wood chips or big gravel. This helps with aeration.
2. The next layer should be some Nitrogen, follow the 3:1 Carbon to Nitrogen ratio.
3. Continue alternating Carbon and Nitrogen layers.
4. Spray with water occasionally to ensure that the pile is moist.
5. Idea is you “cook” it, because it’s decomposing and generates heat.
6. You can create a corrugated tin to place as ring around lasagna stack, this helps contain heat although may hinder mixing everything together.
7. You should turn the piles depending on your own discretion. If you're into it, mixing the layers once or twice a week. This oxygenates the piles, breaks up the pockets of condensed nitrogen and carbon. This facilitates the digestions and heats it up. You can leave it for longer periods, however it will take longer to compost your material.

You can put about 6-8 inches of soil on top, and you can plant through the winter on it.

“Hot” Composting:

 In order to get a hot compost, it must be at least 3 cubic feet. The steps are similar to the Lasagna method. This method is faster than alternative methods of composting because of the microorganisms that are digesting all of the material in the compost pile. This method is also good because it allows for weed seeds to be “burnt” out.

Vermaculture:

This method is one of the most efficient and nutrient-rich methods of composting. “Verma” is the utilization of worms to decompose organic matter in your compost pile. Red Wriggler Worms are the most common worm used for Vermacompost. If you have completed composted, running it through worms will only serve to enhance the pile.

* + When using worms, you must be careful about what you add to your pile. Citrus, meat, cooked food, and oily food should be avoided.
	+ If stirring your worm pile, be sure to use a fork and not a shovel. There is a common misconception is that a cut in half worm is able to be two worms, but that is not the case.
	+ If you are keeping your worms well fed, compost should take about 30 days.

There are two methods, the Box method and In-ground method:

Box Method:

Steps:

1. Make sure that you have holes punctured in bottom of container to assist with drainage.

1. Put bedding in. This can consist of moist shredded newspaper, shredded cardboard, leaves, and other carbon material. You can sprinkle already created compost or soil, this helps get everything started.
2. Make sure your box is located in a shady, cool spot. (Under the kitchen sink, outside, in a closet, wherever is convenient for you).
3. To feed the worms, you want to put in raw food scraps such as banana peels, potato skins, old bread, eggshells, coffee grounds, etc,. Do not feed your worms citrus, meat, oily/cooked foods, or dairy.
4. The amount of food that you put in will determine the amount of worms that you can sustain. If you are putting in lots of food scraps you will have lots of worms, if you forget about your worms and aren't putting in lots of food scraps your worms' population will lessen. → The worms maintain appropriate population according to the amount of food in the container.
5. The worms will begin to create vermacompost. You must choose how you want to collect the compost created in your container.
	* + 1. One method is to put your food scraps on one half of the box, and keep doing that for a week or two on the same side. Eventually all of the worms will move into that side of the box. Then you can use a screen to separate the already prepared compost from scraps and organic matter that may still be on the side without worms.
			2. Lay out a tarp and dump all of your box contents on top. Leave it in a semi-sunny spot. All the worms will move towards the middle of the pile to avoid sun and heat. You can then gather the organic matter and prepared compost after the worms have had time to go in towards the middle.

In-Ground Method:

With this method, instead of using a container you are creating an area to contain your compost and worms. You want to make sure your area is well mulched and does not have too much direct sun.

Steps:

1. Create your area. Your area size will depend on how much material and how many worms you put into it. Turn your soil appropriately so that the worms can travel freely and have plenty of oxygen.
2. Place bedding of carbon on top of your area, enough to cover everything with about an inch of material.
3. Place your worms on the bedding and add Nitrogen (food scraps, etc). You can also add some already made compost.
4. Cover your worms and nitrogen with another ½ inch layer of carbon.
5. You can turn your pile to help oxygenate and mix everything. DO NOT use a shovel, because you will most likely kill your worms by cutting them into pieces. USE a digging fork or a pitch fork.
6. To harvest the finished compost, refer to previous step number one.

Reflection Questions:

* + What can you compost?
	+ Why is composting important?
	+ How can we create more efficient systems of composting? (In schools, businesses, organizations, city/state/nation)