**Composting 101 with Rose Roots Garden**

**What is Compost?**

Compost is the material that results from organic material decomposition. This organic material is a wonderful fertilizer and enriches the soil. “Microorganisms such as bacteria, fungi, and actinomycetes account for most of the decomposition activity in a compost pile,” explains Dave Wilson, research agronomist at the Rodale Institute.

Decomposition is also cultivated by airflow, heat, and the combination of carbon and nitrogen elements. Even though Colorado has a cooler climate, the microorganisms in the compost pile can actually self-generate heat if layered correctly.  If you see your pile steaming, don’t worry! It actually means that your compost is alive and well.

Anything that has grown from the earth can be put into your compost, but not everything will be beneficial for your compost. For example, perennial weeds and diseased plants should not be added because they can actually spread with the compost when you use it on your soil next year – yikes!

Food items can be a great addition to our compost, but generally you don’t want anything super processed or covered in pesticides in the pile, and food tends to attract animals, so at Rose Roots we don’t use food or coffee grounds and eggshells, though they are great materials to use because they are nitrogen-rich.

Composting Steps

1. **Start your compost pile on bare earth.** This allows worms and other beneficial organisms to aerate the compost and be transported to your garden beds.
2. **Lay twigs or straw first**, a few inches deep. This aids drainage and helps aerate the pile.
3. **Add compost materials in layers**, alternating moist and dry. Moist ingredients are food scraps, tea bags, seaweed, eggshells, coffee grounds etc. Dry materials are straw, leaves, sawdust pellets and wood ashes. If you have wood ashes, sprinkle in thin layers, or they will clump together and be slow to break down.
4. **Add manure**, green manure (weeds, clover, buckwheat, wheatgrass, grass clippings) or any nitrogen source. This activates the compost pile and speeds the process along.
5. **Keep compost moist**. Water regularly or let rain do the job.
6. **Cover** with anything you have – wood, plastic sheeting, carpet scraps. Covering helps retain moisture and heat, two essentials for compost. Covering also prevents the compost from being over-watered by rain. The compost should be moist, but not soaked and sodden.
7. **Turn**. Every few weeks give the pile a quick turn with a pitchfork or shovel. This aerates the pile. Oxygen is required for the process to work, and turning “adds” oxygen. You can skip this step if you have a ready supply of coarse material like straw. Once you’ve established your compost pile, add new materials by mixing them in, rather than by adding them in layers. Mixing, or turning, the compost pile is key to aerating the composting materials and speeding the process to completion.

**Our Compost Bins**

The bottom of our bins are open so that our first layer of your bin is the natural ground. Start your compost with the dead leaves you rake up this fall, and then add the rest to the top as you go.

The ideal compost mix has layers of brown and green, or carbon and nitrogen ingredients. Carbon ingredients, also referred to as brown ingredients, are things such as leaves, straw, cardboard, wood chippings, etc. Nitrogen ingredients, or green ingredients, are moist plants (freshly picked or mowed that have not been sprayed with weed killer) or manure. Most likely you will be adding large amounts of grass and leaves in at a time, so make sure you use a rake to mix it well with your other materials so that they can aerate properly.

An active compost pile has a carbon (brown) to nitrogen (green) ratio of 30:1. It is important to keep that balance because too much carbon can slow composition, and too much nitrogen will put off a strong stench.

**WHAT KIND OF MAINTENANCE DOES MY Colorado COMPOST NEED?**

In cooler climates, it is best to not disturb the pile in order to retain heat in the center. Keeping straw and other coarse materials throughout the pile will keep the material aerated without turning. As you add new material in the cooler months, simply add to the top and do not turn until the temperature warms. Especially in the cold, dry Colorado climate, keeping the pile moist is also essential to the decomposition. Make sure your pile is damp at all times, but not [soggy](http://eartheasy.com/blog/2010/03/how-to-fix-a-soggy-compost-pile/).

Once the warmer months arrive, you should aerate your pile by turning it every few weeks with a rake. As you add in new materials during the warm temperatures, turn the pile as you add them so they are dispersed evenly. Continue to maintain moisture during this time as well.

Protect and cover the compost in order to retain moisture and heat. There needs to be some airflow, but you don’t want the compost to be totally exposed because it can dry out.

**HOW DO I KNOW WHEN MY COMPOST IS READY?**

The color of the material should be very dark, almost black, and should be a consistent texture and composition. When your original materials are unrecognizable, that’s when you know it is ready to use. In cooler climates where the temperature never really rises it could take up to two years to compost fully. In warmer temperatures, it can take as little as two months if aerated and composed properly.

Source: <http://eartheasy.com/grow_compost.html>

https://www.timberlinelandscaping.com/colorado-composting-guide/