

Backyard Composting Basics By Debbie Hager UCCE Master Gardeners of El Dorado County

Composting is the result of a natural process in which organic materials decompose. Backyard composting is the creation of an environment that encourages decomposition by beneficial microorganisms such as bacteria and fungi. Backyard composting transforms fallen leaves, grass clippings, kitchen vegetable and fruit waste, and even coffee grounds into a wonderful resource for our soil and gardens.

The benefits of our homemade compost are numerous. Compost mixed into the top layer of soil saves water by helping soil hold moisture and reduces water runoff. It benefits the environment by recycling organic resources while conserving landfill space. It adds nutrients and beneficial microorganisms while increasing the soil's organic matter. The use of compost will reduce the need for chemical fertilizers.

All ingredients for the compost pile can be divided into two types: browns and greens. The browns are rich in fiber and produce a slow-release energy source. The greens are rich in proteins and nutrients. A balanced mix of both browns and greens is what is needed to begin.

Browns are rich in carbon but low in nitrogen. They include dry leaves, dried landscape trimmings, cardboard and shredded newspaper.

Greens are the high-energy foods that act as a booster for your compost pile. They include grass clippings, fruit and vegetable scraps, and coffee grounds. Greens tend to be high in moisture and nitrogen. The nitrogen is needed by the composting microorganisms that use it as a nutrient during the composting process.

Items that should not be added to the compost pile are dairy products, meat, fish, fat, oils, and pet waste.

As microorganisms start to break up the pile's contents, the internal temperature of the compost pile will rise. This heat is created by the respiration of microorganisms as they break down organic materials into compost and it accelerates the composting.

Equal amounts of browns and greens should be layered to begin the compost pile. The pile should be a minimum of three feet by three feet by three feet, or one cubic yard. A smaller volume of compost will not heat. The particle size of the materials determines how quickly the materials will decompose, as smaller particles break down faster. The compost pile should be near a water source so it can be watered and turned by pitchfork to create uniform dampness, ideally as damp as a wrung-out sponge. In addition to evenly spreading the pile's moisture, turning the pile aerates materials to rekindle composting activity as decomposition slows down. The pile may be covered to retain moisture, keep out rain, and keep animals out.

Creating a batch of compost takes twelve weeks or more. The length of the composting process depends on the blend of materials, how often the pile is turned for aeration and the moisture content of the pile. The compost is ready when the pile no longer heats up when turned or moistened. Most of the finished compost material should look like dark, rich, crumbly soil and smell sweet and earthy.

In response to Coronavirus (COVID-19) and recent California Department of Public Health and El Dorado County Health & Human Services guidelines, UCCE Central Sierra will cancel all El Dorado and Amador County Master Gardener public events and classes. This cancellation remains in effect through May 10th, and will be updated as public health guidelines change.

We realize our public classes are valued by County residents and we especially appreciate your continued support and understanding during this public health challenge. We will attempt to offer our cancelled classes and events at a future time if feasible; please refer to our website http://ucanr.edu/edmg which will be updated with the latest changes as they occur.

Stay safe and follow recommended health and sanitation practices in the coming weeks.

For more information on the UCCE Master Gardeners of El Dorado County, see our website at <u>http://mgeldorado.ucanr.edu</u>. We are still available to answer home gardening questions via email <u>mgeldorado@ucanr.edu</u> or call (530) 621-5512, or contact us using the Ask a Master Gardener option on our website. Looking for garden inspiration, while our garden in closed due to COVID-19, our website has pictures, plants lists and much more. <u>http://mgeldorado.ucanr.edu/Demonstration_Garden</u> To sign up for notices and newsletters, see <u>http://ucanr.edu/master gardener e-news</u>. Master Gardeners are also on Facebook and Instagram; we hope you enjoy our postings and will share them with your friends.