

## Maintaining the compost

### ■ Moisture

The best environment for good decomposition is a damp environment. The microbes responsible for breaking down the plant matter and turning it into compost prefer a “moist, wrung-out sponge” type of environment—damp, but not wet. Therefore, especially during the summer months, it will be necessary to add small amounts of water to the mixture to keep it damp. Also add water as you add materials to your container.

### ■ Temperature

Material will begin to decompose, and will reach a maximum decomposition rate when the material's temperature is between 110 and 160 degrees Fahrenheit. The hotter the pile, the faster the decomposition.

### ■ Aeration

The material must be mixed occasionally to incorporate air into the decomposition process. Otherwise, as the air is used up, the microbial action that turns the material into compost slows down dramatically, which can create odors.

## Controlling odors

■ Odors occur when not enough air (oxygen) is present in the materials. This can be prevented or corrected by

incorporating more brown material and thoroughly mixing or turning the batch, which allows more air into the material.

## Using your compost?

■ It will take about two months to generate your first batch of compost, depending upon how much work goes into it. It may then be used in vegetable and flower gardens, on lawns, or around trees and shrubs. No special processing is needed, but if desired, you may want to sift the compost before adding to your soil or remove large undecomposed materials and throw them back into the bin.

You may also add other soil amendments, such as gypsum, sulfur or fertilizer.



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CITY OF PHOENIX

# Backyard Composting

**B**y choosing to compost, you have taken a big step in *reducing* the solid waste stream, *reusing* valuable organic resources right from home, and *recycling* their rich nutrients by returning them to the soil and thereby enriching your little garden corner of the earth.

## What is compost?

Compost is the resulting product of the natural decomposition process of organic matter. It is an excellent way to recycle organic matter or dead plant material. What begins as household organic materials becomes compost—a dark, crumbly, sweet smelling, humus-rich soil enrichment.

## What are the benefits?

When introduced into gardens and flower beds your home grown compost:

- Significantly increases the soil's ability to combat diseases and environmental and seasonal hardships
- Boosts the nutrients upon which plants depend on to survive and flourish
- Improves the soil structure, allowing oxygen into the soil by loosening clay-like soil, which promotes healthy root growth
- Helps sandy soil to hold more moisture, permitting plants to take stronger root
- Helps prevent soil erosion and improves moisture retention

## All this is accomplished

without additives or

chemicals!

## What materials are good?

A general rule of thumb when composting is to include only plant-derived substances that will break down easily. A list of the most common of these includes

### ■ Food scraps

Discarded fruit and vegetables, grain scraps (bread, pasta, rice), crushed eggshells, coffee grounds (with filter), tea bags and fruit juices

### ■ Yard waste

Grass clippings, leaves, bush trimmings (stems should be less than ¼" thick), "barnyard" manure, sawdust, wood chips, straw, cactus clippings, waste from vegetable and flower gardens

## What materials are NOT good?

### ■ Animal waste

Pet feces, lard, butter, grease, meat or fish wastes, cheese, milk, oily food or cooking grease

### ■ Weeds

...with seeds and invasive plants like Bermuda grass, since they take longer to decompose. Place these in a black garbage bag and allow them to sit in the sun for several weeks as the contents of the bag must reach temperatures of 120 degrees Fahrenheit or higher for a period of about a week before being added to the compost.

n Avoid large amounts of **acidic plants** that are toxic to other plants, such as eucalyptus, oleander, juniper, acacia, pine needles, and cypress.

### ■ Glass

### ■ Plastic

### ■ Diseased plants



## Mixture contents

The carbon/nitrogen (C/N) ration will determine how long decomposition of The organic matter will take.

**BROWN materials**, which provide carbon, consist of dead leaves, twigs, sawdust, straw, shredded newspaper, and other dry organic materials.

**GREEN materials**, which provide nitrogen, consist of moist organic matter such as green grass clippings, discarded kitchen scraps, and weeds (without seeds). Actually, any mixture of green and brown materials – Plus water and occasional turning for oxygen – can create compost, but after working with the materials available to you, you will likely come up with a mixture that works well for you.

### ■ Location

Begin by finding a good spot for your composter. This area should be in a spot in which you will plant later, since some of the nutrients from the compost will drain into the soil below. Sun or shade exposure is not critical, although a pile heats up and dries out much faster in a sunny location, and therefore, will need to have moisture added more frequently.

### ■ Ingredients

Place a layer of GREEN materials along the bottom of the composter for a depth of about 6" deep. Your composter came with a bag of mulch for use as a starter kit. Place a layer of mulch and other BROWN materials to a depth of about 2- inches. Continue to layer these materials until the composter is almost filled, or until your materials are used up, finishing up with brown materials. Remember, the smaller in size the material, the quicker the decomposition, so consider crushing larger pieces. As you have available materials, throw them into the pile so that you're continually adding materials to your composter.