



As responsible gardeners, we look for ways to put those three magic words – reduce, reuse, and recycle - to good use. Look at that item, whether it is a pruner you would like to purchase or a weed just pulled from the planting bed, and think about how you may be able to use those materials. Can it be completely or partially recycled? Home composting is a rewarding way to recycle product refuse and extend some of the benefits of those materials. Yard waste – weeds, plant debris under six inches in diameter, spent flowers, dropped fruit – uncooked food scraps that do not contain any fats, dairy or other additives (check with your community for any regulations on this one), and other decomposable materials like newsprint and corrugated cardboard can easily be kept out of the community waste stream and provide a lovely addition to our gardens. Composting is not a difficult process and can be done with a basic understanding of the principles and components.

Let's start with what compost is. Compost is the finished product of a decomposition process that utilizes micro-organisms in conjunction with oxygen, moisture, and organic materials to create a luscious product (also called humus) that makes a fantastic addition to your planting beds. Finished compost has a lovely earthy smell, good texture, and a nice rich color. Available micronutrients will vary according to input materials, but pH on finished compost is generally around a neutral 6.0.

There are two main types of composting. Cold composting consists of allowing input materials to do all of the work with minimal intervention from humans. This process requires two things - space to pile or bury materials for one to two years and the knowledge of acceptable input materials. The space used can be as big or small as desired – do keep in mind that if a compost pile is less than 4 x 4 x 4 feet, expect it to freeze over winter, slowing the process somewhat. This does not pose any problems for the compost, but does lengthen the time necessary to get to a finished state. Hot composting is a more labor intensive method but the results are fast. Generally, intensive hot composting can be completed within 6 – 8 weeks, but does require frequent turning to incorporate more oxygen into the process, and additional materials as needed. Hot composting can be done with a commercially purchased container or a home constructed bin. If constructing a bin sounds a bit intriguing, there are free plans available from some municipalities, government offices, and natural resource departments for hot composting bins that are relatively simple to make. Often the materials needed for construction - cement blocks, snow fencing, wire mesh, or pallets - are those that can be found at local lumber yards, home stores, or even in your garage.

Once you have decided which method best fits your input time available and what type of structure you prefer – a proper location is very important. While it may be visually ideal to put a compost area into the furthest corner of the

lot – does your water hose reach that far? And does the area have cover from direct sunlight and intense winds? Adequate moisture is important to the success of compost - the materials throughout the pile should always feel like a freshly wrung out, damp sponge. A compost area in direct sun or with intense wind will dry out very quickly. And an area far away from a water source will mean higher labor inputs – water has to get there somehow. Do you want to carry the water when it is necessary to moisten the compost? Be sure to talk with your neighbors before placing a compost area within their view and do check with local and county ordinances to make sure that you are in compliance with any regulations regarding location of home composting areas.

All organic materials have carbon and nitrogen components and for compost, an ideal ratio of carbon to nitrogen is 30:1. Inputs needed to achieve this ratio will vary according to availability of materials from your yard, home or other external source. Some of the commonly available materials such as leaves, have a C/N ratio of 40 – 80:1, depending on the species. Manure (not from dogs or cats) ranges from 5 to 50:1, depending on the animal. Grass clippings run between 15 and 20:1 depending on freshness. Newsprint has a wide variation in C:N ratio - anywhere from 400 to 850:1. It is important to be aware of the C:N ratios of materials you plan on using to be sure that the compost has adequate amounts of both to work properly. Detailed lists can be found in printed materials at libraries, online at many composting sites or often at natural resource areas. A bit of caution should be practiced when considering what materials to use for composting. The manure from dogs, cats, and meat eating birds are not appropriate for composting as their feces may harbor diseases that can infect humans. Any food products containing fats, dairy, nuts, oils, meat, or bones are not appropriate for home composting. In fact, they are illegal to use for home composting in some municipalities as they will attract meat eating nuisance rodents and animals. When the appropriate materials are used, residual or unpleasant compost area smells and uninvited guests are quite minimal.

If the composting area does develop an unpleasant smell, more than likely oxygen and perhaps some bulk may need to be added. Mix the pile, adding some coarser chopped materials to increase air space. If only the center of the compost area is warm and the smell is good, you may need to increase the overall size, keeping similar proportions of materials used. If the compost seems to have everything working but only so-so – you may have to learn some patience or change over to a more interactive technique of composting. A bit of perseverance throughout the initial stages is the key to getting the composting process to work for you. It's kind of like cooking – ingredients and preparation technique make the difference between success and failure. And the result of this recipe is another garden product to play with – how fun is that?