Nurture Nature Center, located in Easton, Pennsylvania, created an Urban Garden in a small parking area using recycled and found materials to demonstrate low-cost growing techniques for small urban areas (walls, balconies, small paved spaces). This fact sheet is part of a series that features information about demonstrations in the garden that are easy to replicate and implement in a variety of urban spaces.

Composting - Residential Scale

Description:
Compost happens. You can make layers of brown leaves and green materials (such as garden trimmings, grass clippings, and coffee grounds) and turn your pile regularly, or you can just make a big pile and let it sit. The result will be the same. The difference is, a managed pile will break down into rich compost, an essential ingredient to garden success, more quickly. Not only does compost improve the structure of garden soil, it introduces organisms that assist in breaking down organic materials and aerating the soil. Some of the organisms found in compost also protect plants from diseases. In addition, composting at home ensures that less garbage is placed into the local landfill. According to the EPA, yard trimmings and food waste account for about 28 percent of municipal solid waste, that is, trash that is dumped into landfills.

Step-by-Step Composting:
To create a managed compost pile or bin, select a dry, shady location, and begin by laying down a layer of twigs or straw. This layer should be a few inches high to ensure proper drainage and aeration. Then begin alternating between layers of dry and moist materials. Dry materials can include shredded newspaper, small twigs, and leaves. Examples of moist materials are vegetable and fruit scraps, tea bags, and coffee grounds. Lastly, add manure or another nitrogen source (such as grass clippings) to speed up the process, and regularly water the pile. To keep it moist and increase the temperature of the pile, you can cover it with a tarp. Or you can let the rain keep the pile moist, but be aware that too much water can be counterproductive.

Every few weeks turn the pile to aerate it. Mix in any new vegetative trimmings or kitchen scraps, or use them to start a second pile. Your compost will be ready to use once all of the materials have broken down and the color is a rich brown. Add it to the garden for a natural, slow-release nutrient source.

Tips:
- Construct a bin using chicken wire, pallets, or scrap wood. The size should be between 3’ x 3’ x 3’ and 5’ x 5’ x 5’.
- Do not add dairy products, oils or fats, meat scraps, or chemically treated plants.
- Do not add weeds that have gone to seed. Most home compost piles do not reach 140°F, the temperature at which weed seeds are killed.

For more information related to Nurture Nature Center’s Urban Garden Project, see http://nurturenaturecenter.org/garden/

Resources:
http://www2.epa.gov/recycle/composting-home
http://www.epa.gov/epawaste/nonhaz/municipal/
http://cwmi.css.cornell.edu/compostbrochure.pdf