Burning leaves and yard waste produces air pollution. Open burning is one of the causes of particle pollution or particle matter 2.5 (PM2.5) in the air we breathe. Gas-powered lawnmowers and garden equipment also pollute our air through emissions released into the atmosphere. They produce nitrogen oxides (NOx) emissions. These emissions combined with volatile organic compounds (VOCs) and the right atmospheric conditions (hot-dry days with no wind) produce ground level ozone. Ozone is a harmful gas that causes damage to our lungs, especially in children, the elderly, and people with respiratory illnesses.

The following are two easy things that you can do at home to help improve air quality:

1. Compost leaves and kitchen and yard waste to avoid open burning.
2. Establish gardens and planting beds to avoid mowing lawns.

**Composting at home**

If you have established gardens or plant beds, compost (gardeners’ “black gold”) is the solution for more beautiful and healthy plants and trees. Composting can result in 300 to 400 pounds of finished product each year that can be used as a fertilizer, soil amendment, or mulch. Composting is the natural “circle of life.” For example, when leaves fall from trees they are eaten by bacteria and earthworms converting the organic leafy material into humus, a nutrient-rich non-compacted soil that helps new plants get started. A compost needs brown (carbon) and green (nitrogen) ingredients with a ratio of about 30 (brown) to 1 (green). Browns include leaves, sawdust, straw, wood chips, paper. Greens include kitchen waste (no meat and grease), grass clippings, barn manure. Compost needs oxygen (turn the pile) and water for moisture. There are various types of containers for composting at home including plastic, wood, and metal. You can even make them at home with scrap materials such as wood and chicken wire! For more detailed information logon to Clemson Extension’s Home and Garden Information Center at http://hgic.clemson.edu/factsheets/hgic1600.htm

**Lasagna Gardening at home**

If you want to establish new gardens and plant beds on your lawn without digging or tilling, the Lasagna Gardening technique is the solution. Lasagna gardening is a “layering system for bountiful gardens” and it is a “no digging, no tilling, no weeding, no kidding!” technique that utilizes lots of organic materials. The steps to your lasagna garden are:

1. Put down a thick layer of wet newspapers or cardboard.
2. Alternate 4-6 inch layers of organic materials such as peat moss, manure, grass clippings, saw dust, wood ashes, kitchen scraps, etc. until it is 18-24 inches tall.
3. If you want to cook it, put black plastic bags on top for about six weeks to keep moist and trap sunlight for fast heating and cooking.
4. The lasagna garden will be ready for planting!

“A leaves are the backbone of a new lasagna garden, as well as the compost pile.” Composting at home for a lasagna garden saves you money because you don’t have to buy compost. You already have at home the compost materials needed such as grass clippings, leaves, twigs, vegetable and fruit peelings, egg shells, shredded paper, and coffee filters for FREE!