

## **Island Grown Initiative Workshop Backyard Composting**

Compost happens! When you walk in the woods you are stepping on layers of rich, dark decaying leaves, pine needles, twigs, and bark while millions of tiny creatures such as springtails, millipedes, sow bugs, worms, and mites are chewing, shredding, grinding and digesting the fallen debris. These organisms excrete organic matter which becomes food for microorganisms such as bacteria, fungi, and other decomposers.

You can duplicate this composting process in your backyard by providing the decomposers with plenty of carbon and nitrogen (from organic materials), water, and air. There are many sources of carbon and nitrogen available in your own yard. (See the chart below.) Dry leaves and most other carbon sources can be stored until materials high in nitrogen are available. Nitrogen is plentiful during summer months in the form of grass clippings, weeds, and spent plants. Nitrogen sources do not store easily. Layer compost materials 3:1 browns : greens.

### **Compost Inputs**

#### **Carbon Sources (Browns)**

Leaves, straw, hay, sawdust, wood chips, shrub trimmings, shredded paper, cardboard, paper bags (uncoated), wood ash (no charcoal), dryer lint, pine needles, brown twigs, peat moss and peat pots

#### **Nitrogen Sources (Greens)**

Raw fruit & vegetable scraps, peels, weeds, grass clippings, fresh hay, composted manure and shavings: cow, horse, poultry, sheep, rabbit; seaweed, coffee / tea grounds, green leaves, perennial and annual cutbacks, eggshells, green twigs

**Materials to avoid in your compost pile:** Bones, Cat and dog manure, Cleaning solvents, Cheese, Cooking oil, Dairy products, lard, mayonnaise, meat products, milk, peanut butter, petroleum products, plastic, salad dressing, sour cream, synthetic fabrics

### **Troubleshooting**

Compost pile is not heating up: add greens (nitrogen); make bigger

Smells bad: add browns (carbon) and turn

Ants: too dry – turn and water

## Sheet Mulching

The following is an excerpt from *Perennial Vegetables* by Eric Toensmeier

**Sheet mulching** combines soil improvement, weed composting, and mulching to increase planting areas. This technique, also known as lasagna gardening, can improve soil health in two to three years.

### Sheet Mulching Steps

1. Mow or cut grass, weeds, or other plants to the ground.
2. Plant any shrubs or trees that will require a large planting hole (including woody plants, perennials, and large transplants).
3. Water the whole area thoroughly to help the decomposition process get going.
4. Add green compost materials (N) - fresh manure or hay, green leaves - and spread them in layers on the ground over brown leaves (C).
5. Place a porous breathable weed barrier like cardboard, newspaper (10 sheets thick) on the ground to define the new gardening area and to smother weeds. Overlap weed barrier materials to prevent weeds from poking through. Over time the cardboard will decompose, and the weeds will supply nitrogen to soil organisms and turn into compost.
6. Next, add a thick layer (4-6") of good organic compost, or build a layered compost pile of carbon (brown) and nitrogen (green) on top of the cardboard. This will enrich your new garden bed.
7. Add layer of mulch – composted wood chips or hay - on top of the compost to keep new weeds from getting established.

