Natural Mulches and Compost

A guide to improving water quality in Redford

Why be concerned?

Recycling yard waste is an economical way to improve lawn health, which can decrease the need for fertilizers and pesticides and help improve the quality of the Rouge River. Composts and mulches help improve soil structure, retain water, aerate soil, encourage root penetration, release nutrients, and suppress some root-borne diseases, so you will spend less time watering, weeding and fighting pests.

Fallen leaves carry 50-80 percent of the nutrients that a tree extracts from the soil and air. These nutrients, including carbon, potassium, phosphorus and other elements are essential for plant growth. The leaves are naturally broken down by earthworms and organisms and decomposed into humus. Humus is light and fluffy, improving the structure of sandy and clay soils.

Shredded leaves, grass clippings, and other shredded yard materials can be recycled as mulch. Mulching around flowers, vegetables, bushes and trees helps support healthy plant growth.

Why mulch?

- Reduce the need for watering and weeding
- Reduce soil compaction
- Stabilize soil temperature
- Hold moisture in the soil, while allowing rainfall to pass through
- Enrich your soil through the gradual decomposition of natural yard materials
- Increase yield and hasten maturity of plants such as tomatoes and peppers
- Keep soil warm during winter
- Help control insects and diseases

Mulch should be applied thick enough to inhibit weeds without depriving soil of water and oxygen.

A good mulch is readily available, inexpensive and easy to apply. A good mulch fits your needs, yard materials and landscape. Why not try different natural mulches to help reduce the yard waste sent to landfills?

Select the natural mulch that fits your landscape

Shredded leaves
Chop or shred leaves with a mower or shredder since whole leaves may mat and prevent water from reaching the soil. Leaves help cool soil during the summer and warm soil in the winter. Leaves raked into a shrub border will gradually break down and help nourish the soil.

Grass clippings
Spread dry clippings in a one-inch layer under bushes or around plants. Keep clippings away from young seedlings. Avoid clippings with a herbicide residue or clippings with weed seeds. In a vegetable garden, try laying grass clippings on top of wet newspaper to help resist weeds. Both the newspaper and the clippings will eventually decompose and help build the soil.

Pine needles
Use pine needles around acid-loving plants such as rhododendrons and azaleas. Pine needles help form the same rich mat of humus that nourishes trees in the forest.

Compost
Compost can be placed around plants as mulch, especially to hold moisture and enrich soil. Apply in 1-3 inch layers.

Hay or straw
Hay and straw are useful mulches in the vegetable garden, provided that rodents are not a problem. Since hay contains many seeds, straw is often preferred.

Shredded bark or wood chips
Spread in a thick layer around shrubs and trees to be effective as a weed control. Shredded cypress or pine bark, nugget pine bark, or wood chips are useful options.

Healthy garden tip

Diversify the type of mulch used in various sections of your garden. Different mulches encourage different types of microorganisms and contribute different nutrients. Diverse mulches, like diverse plantings, help build natural resistance to pests and disease.

Sources and Funding
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Benefits of compost

Compost is an excellent soil conditioner. When mixed with sandy soil, compost helps to retain and hold water. When mixed with clay soils, compost loosens soil particles and improves drainage.

Compost is known as gardener's gold because it improves soil structure, retains water, encourages root growth, aerates soil, releases nutrients slowly, supports beneficial microorganisms and earthworms, and suppresses some soil-borne diseases.

Composting materials

To avoid nuisances and odors, select the materials for your compost pile with care. Check with Redford Township's Department of Public Works for specific home composting regulations.

Yes
Grass clippings
Leaves (shredded, if possible)
Spent flowers and garden clippings
Young weeds (without seeds)
Hedge trimmings
Fruit and vegetable peelings
Lettuce leaves
Coffee grounds, filters, and tea bags
Fertilizer
Soil or compost

No
Dairy products
Oils and fats
Meat, fish, bones
Pet manure; Cat litter
Cooked food
Diseased plants
Black walnut leaves
Bread
Weeds with seeds
Invasive weeds

For an ideal composting mix, combine shredded leaves (50% of total volume), green grass clippings, (25% of total volume) and soil or compost (25% of total volume). Start with available yard clippings and add other materials, as needed, to balance the pile.

The "green" materials have a high nitrogen content which typically causes the pile to heat up and decompose more quickly. To avoid odors, make sure that green materials are mixed thoroughly with brown materials and soil.

Building the compost pile

To build the pile, follow these steps:
1. Start with a layer of organic materials such as shredded leaves, grass, or other garden debris.
2. Water the layer until it is as moist as a wrung-out sponge.
3. Add 2"-3" of soil or compost to provide microorganisms.
4. If possible, mix all materials together as you build the pile.
5. Continue adding organic materials, soil, and water until the bin is filled. Add grass clippings in small amounts and mix in thoroughly.
6. Water each layer and check moisture periodically.

Build the pile to a size of 3 feet x 3 feet x 3 feet or slightly larger, or fill the compost bin.

Turning the pile

Turning and mixing the compost pile with a pitchfork or compost turner adds oxygen and accelerates the rate of decomposition. The pile may be turned once a week, once a month, several times a year, or not at all. If the pile is turned over and mixed from time-to-time and kept moist, finished compost is usually available in six to nine months. Don't worry about the temperature of the pile. Either hot or cold composting yields beneficial compost.

Using compost

In the garden
Spread a 1"-3" layer and sprinkle any time.

For container gardening
Do not exceed 1/3 of the total amount of soil.

As a top dressing on the lawn
Sprinkle any time.

As a mulch around trees and shrubs
Spread a 2-4 inch layer and do not add to planting hole.

Getting Help

Charter Township of Redford Dept. of Public Works 313.387.2690