

## BACKYARD COMPOSTING

### **Commonly Asked Question & Answers**

#### ***Where is the best place to put a composter ?***

Pick a sheltered spot, protected from the wind. As much sun as possible will help the compost pile retain as much heat as possible. Avoid trees and shrubs that may push their roots inside the compost pile... and remember to consider both convenience and appearance in selecting a location.

#### ***What shouldn't go into a backyard composter ?***

Never include synthetic materials such as plastics. Coloured newspapers or magazines should also be avoided. Plant material recently sprayed with a herbicide, fungicide or insecticide should not be added to the composter. Animal and poultry bones, fats, meats, dairy products and other waste carcass parts should not be used as they decompose slowly and attract insect pests.

#### ***Is it necessary to prepare composting materials ?***

Chopping, grinding, pulverizing and shredding helps to increase the surface area for the microorganisms to work on. However, a successful composting process is not entirely based on the size of materials. The compostibles should be no more than 5 cm long.

Accumulating compost materials in a container such as an old milk carton or a bag prior to delivery to the compost container is beneficial. This preparation step enables bacteria and fungi to start breaking down the material and adds additional micro-organisms to the compost pile. Peat or sawdust can be used to cover the material to control odours should they persist.

#### ***Should I wear gloves to handle compost ?***

If you haven't composted pet manures, which contain bacteria harmful to humans, there is no need to wear gloves. Finished compost can be handled just as you would garden soil.

#### ***What if the compost pile has an odour?***

An earthy smell is normal and non-offensive but a well built, well maintained system should not produce unpleasant odours. Covering the compost with a layer of dirt will help minimize any odours.

If the compost smells like ammonia it has too much nitrogen. If this happens add something with a high carbon content such as sawdust, shredded newsprint or leaves. If the compost has a rotten egg smell then it is likely too little air. Aerating the pile by turning it will allow additional oxygen to reach the bacteria.

#### ***Can I compost in the winter ?***

Some bacteria will continue to operate albeit at a slower rate in -20 °C weather especially if the composter is protected from the elements. The compost pile will freeze solid in constant -40 °C weather. Compostable materials can be continued to be added to the composter as long as wet and dry material are both included. Materials should be covered with peat or dirt as they are added.

#### ***Can I add ashes to the compost pile ?***

Ashes from untreated wood and paper used in wood stoves can be added in small quantities. Ashes from treated wood, plywood, glossy paper or barbecues should not be added because of the potential of heavy metal contamination.

### ***Should I add activators to the compost pile ?***

Activators help to heat the compost pile. Temperatures in the range of 49-71 °C are optimum for bacteria growth. If your compost temperature has not risen especially in the spring and summer months then the use of an activator should be considered.

Activators may be organic or inorganic in nature. Organic activators are high in nitrogen and include fresh grass clippings, vegetable waste, green vegetation, coffee grounds, hair and feathers. Inorganic activators are available from garden supply manufacturers and used according to the manufacturer's recommendations. Both types of activators will increase bacteria growth in the compost.

### ***When is compost "finished" and safe to use?***

When an active compost pile fails to heat up once more, and very little of the original material can be recognized, the compost is ready to use. The compost will be a rich brown colour, slightly moist and smell something like the humus of a forest floor.

### **Carbon (C):(N) Nitrogen ratio**

Carbon(C) and nitrogen(N) are both necessary for the growth and maintenance of microorganisms. Microorganisms involved in the composting process require a ratio of 25-30 parts carbon to one part nitrogen for best performance. That ratio enables them to have enough energy to produce the necessary high temperatures for rapid decomposition.

Since few feedstocks have the ideal C:N ratio of 25-30:1 they must be mixed. High C:N ratios may be lowered by adding grass clippings or manures. Low C:N ratios may be raised by adding paper, dry leaves or wood refuse. Consult Appendix 1 in The Northern Home Composting Handbook for the C:N ratios of some common feedstocks.

Proportions can be calculated in the following manner;

#### **SAMPLE I**

vegetable wastes	15:1	3 containers vegetable wastes	$x 15:1 = 45:3$
fruit residue	35:1	1 container fruit residue	$x 35:1 = 35:1$
newsprint	400:1	$\frac{1}{4}$ container newsprint	$x 400:1 = \frac{100:1}{4}$
			180:4 $\frac{1}{4}$

Divide the added values by the number of containers used.  $180 \div 4.25 = 42:1$   
C:N ratio is 42:1

#### **SAMPLE II**

coffee grounds	30:1	$\frac{1}{2}$ container coffee grounds	$x 30:1 = 15:\frac{1}{2}$
vegetable wastes	15:1	1 container vegetable wastes	$x 15:1 = 15:1$
dried leaves	60:1	$\frac{1}{2}$ container dried leaves	$x 60:1 = \frac{30:1}{2}$
			60:2

Divide the added values by the number of containers used.  $60 \div 2 = 30:1$   
C:N ratio is 30:1

#### **Bibliography**

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