

# Backyard Composting



**Relax.**

**Don't Worry.**

**Compost happens.**



**RRFB**  
NOVA SCOTIA



**RRFB Nova Scotia's Help Line:**

**1-877-313-RRFB (7732)**

**[reduceyourwaste.ca](http://reduceyourwaste.ca)**



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# What is composting?

Composting is simply allowing Nature to take its course by returning organic material to where it came from, the soil. Any material from a living source – plant or animal – is called “organic”.

For the purposes of backyard composting, however, we deal almost exclusively with plant material.



All plants, from carrots to oak trees, have their roots in the soil. This is true in more ways than one. In nature everything returns to its source, the soil, which in turn provides the nutrients that all growing things need to flourish. When we harvest our fruits and vegetables or rake up and remove leaves in autumn, we deplete the soil of these vital nutrients. For the soil to remain healthy and fertile, organic material must be returned to it.

By composting our organic materials, we make compost (also called humus). Compost is a dark, earthy substance, which looks, feels and smells like very rich soil. Like peat moss, compost is a valuable soil conditioner. Unlike peat moss, you can make compost at home, using material that you have handy - like fruit and vegetable peelings, coffee grounds, leaves, egg shells and serviettes. And it's free!

Composting takes very little effort, just a slight change in some of our daily habits. You don't have to work that hard at it because composting is a natural process, something that simply happens. It is not really something that we do. We simply create the opportunity for compost to make itself.

Let's explore the reasons why more and more people are composting and how you can join them by composting right in your own backyard.



## **What are the benefits of composting?**

*Composting has many benefits and we can reap them right at home!*

### **Making Your Garden Grow**

**Adding compost to your garden helps your flowers and vegetables in two major ways - by supplying needed nutrients and by conditioning the soil.**

Compost contains some important nutrients. It also contains substances that convert minerals into new forms that plants can readily absorb. Compost also helps make all types of nutrients more effective by binding them to the soil so that they do not “leach” out of the soil in the rainwater.

Conditioning the soil means improving its structure. Poor soil structure means poor plant growth. Compost improves all types of soil with its water-holding and “loosening” properties.

A well-conditioned soil is also much easier to work, saving your back and making gardening a much more pleasant experience. But your greatest pleasure will be seeing your flowers and vegetables grow up healthy and well nourished in their fertile, well-conditioned beds.

Don't have a garden?

Compost will make your grass healthier. Spread it on your lawn and watch it create the same wonderful benefits for you that it does for your gardening friends. You can also use it indoors on your potted plants. In every case, the addition of compost will nourish your plants and protect them from disease.

Don't have a lawn? Don't have any plants?

Give your compost to someone you know who has a garden. Your gift will be very well received, as every gardener knows the value of compost.

## **Waste Reduction**

**Did you know that as much as 30% of the waste produced in your home could be composted in your backyard?** By not putting this material at the curb, you can reduce the need for landfill disposal and cut down on garbage collection, decreasing your municipality's waste management costs.

## **Environmental Responsibility**

Using compost in your garden means that you will be able to rely much less on chemical fertilizers and pesticides. Some of these products have many points of environmental impact, from mining through chemical processing to their build-up in the natural environment. Their reduced use on lawns and in gardens is good news for our precious land and water resources.

### **COMPOST KEEPS SOILS MOIST**

**Compost is able to retain nine times its weight in water (900%). Compare this to 2% for sand and 20% for clay!**

# How do I start composting?

First of all, you must know the three essential rules of composting. These rules are strict and must never be broken. If you obey these rules you will ensure that you never have a problem with your compost heap.

The all-important, totally essential, never-to-be-forgotten three rules of composting are:

- 1. Relax**
- 2. Don't worry.**
- 3. Compost happens.**



*There you have it!* Compost simply happens; it's a natural process. No sense getting all excited and worrying about it. Don't time it and wonder why it isn't done yet. Never fret that you simply can't compost – or that you aren't doing it right.

**Just relax. Don't worry. Compost happens.**

*OK, now you know the rules, so let's do it!*

## **Step 1:**

Decide which (if any) compost container to use.

There are a few ways you can go. One is not to have a container at all. Many people compost in a heap in a corner of their yard. Because composting is a natural process there is no need for any kind of a structure, although many people do use plastic containers or wooden bins.

A compost container provides two major benefits. First, it will contain your materials so lightweight materials do not blow away. Secondly, containers hide your compost pile from your neighbour. This will be important if your neighbour does not yet understand the benefits of composting.

Compost containers also help to retain moisture in the pile, keep it from getting too wet in rainstorms, and minimize odours that may occur. But you aren't going to have any odours anyway, because you are going to compost correctly!

### **If you decide to get a container, here is a checklist of what to look for in buying a backyard composter:**

- Is it large enough to handle all of your yard and kitchen wastes?
- Does it have adequate ventilation?
- Is it easy to put together and can it be easily removed?
- Does it offer easy access to the material, so that it can be turned without any difficulty?
- Is the design complimentary to your yard?



## Step 2:

### Decide where to compost.

The backyard is usually a good place. Try to find a spot on bare ground that gets a fair amount of shade, so your pile is not dried out by the sun in the hot months of summer. A tree can provide some shelter from heavy rainstorms.

Put your composter (or compost pile) far enough away from your back door so that it is not a nuisance, but close enough so that it is not a long trek, particularly in the winter.

If you're not sure, just find a spot that seems handy, maybe near your garden where you will use the material.



## Build Your Own Compost Bin!

Visit [reduceyourwaste.ca](http://reduceyourwaste.ca)  
to download our backyard  
composter building plans.

## Step 3:

### Build the pile.

You will need some materials to start your compost pile. Both Greens (wet and soft) and Browns (dry and woody) will be part of the mix.

### Greens are things like:

- kitchen waste, such as fruit and vegetable peelings, bread, pasta, coffee grounds and filters, etc. (things don't have to be green to be called a Green!)
- weeds, grass clippings, etc.

### Browns are things like:

- leaves, straw, hay, and woody material
- ash
- paper (including egg cartons, toilet paper rolls and cereal boxes)

**What's In  
& What's out?**  
See the back page  
of this booklet for an  
easy-to-use list.

Greens provide nitrogen, while Browns provide carbon. For composting to work properly, you must have both carbon and nitrogen in reasonable quantities, so you must mix some Greens and Browns together.

Begin with a layer of Browns – a base of leaves and woody material will help air circulate in your pile – and then add a layer of Greens. Finish by covering with a layer of Browns. As you add to your pile, continue alternating layers of Greens and Browns, always finishing with a layer of Browns on top.



Don't worry if you don't have many materials at the beginning. Although a compost pile needs a certain amount of bulk to get working, you will soon be adding lots more material to your pile.

Congratulations, you now have a working compost pile!

**Relax. Don't worry. Compost happens.**

### ***Step 4:***

Keep adding material.

Now that you are an avid composter, you will be collecting those kitchen scraps and adding them to your compost pile. It's so easy to do!

You don't want to leave kitchen scraps (Greens) on the top of your compost pile. It is best to keep these materials buried inside the compost heap where they will break down quicker. That is why you finished with Browns when you built your pile. Just remember that each time you add some grass clippings and/or kitchen scraps, cover them with a layer of Browns. The easiest way to do this is to keep a bag of leaves or shredded paper near your composter and then throw in a few handfuls each time to cover your Greens.

### **What is Vermicomposting?**

Vermicomposting is composting with worms. Certain types of worms (the most common is the 'red wiggler') love to eat organic wastes. If you give them an opportunity, they will consume all your leftover vegetable and fruit scraps, turning them into nutrient-rich material called castings.

Vermicomposting is usually done indoors, using specially designed plastic containers with lids and drainage holes.

This type of composting is particularly good for schools, people in apartments or other situations where outdoor space is limited or non-existent. For more information, call RRFB Nova Scotia at 1-877-313-RRFB (7732) or visit [reduceyourwaste.ca](http://reduceyourwaste.ca).

## **Step 5:**

### Maintain your pile.

You will want to ensure that your compost pile is healthy and active. It can be quite exciting to watch these “wastes” turn into wonderful resource right in front of your eyes.

To make sure your compost pile is working efficiently, it must be damp and well aerated.

### **Water:**

Your pile should be damp, about as wet as a wrung-out sponge. If it is too dry, simply add some water to it. If it is too wet, adding Browns will solve the problem (Browns will soak up the excess liquids). Or, if you have a top on your composter, leave it off for a while in sunny weather to let some of the liquid evaporate.

### **Air:**

To add air to your pile, turn the material with a shovel or pitchfork. By simply mixing the material up in this manner, you will add air to the pile.

Wondering why it is so important to keep your pile damp and aerated? It's because the micro-organisms, insects and earthworms that do all of the work of turning your “wastes” into such a valuable resource need the moisture and air to stay alive and do their work.

To sum it up, your job is to add the material, turn (mix up) the pile every two to three weeks, and keep your pile damp.





## Mastering the process

Here are a few handy hints that will make composting even easier and produce your compost faster.

### Collect your kitchen scraps in a container.

By re-using an empty ice cream or large margarine container, you can have a handy counter-top or under-the-sink organics storage system. When you are cutting vegetables, just put the scraps into the container, put the lid on it and save. At the end of the day, take the material out and toss it into your composter (remembering to cover with some leaves or other Browns).

Rinse the container under the tap and it is ready for the next day.

You can also collect plate scrapings, leftovers, eggshells, tea bags, coffee grounds, etc. Remember, however, not to put meat, dairy, or oily materials in your container. These substances take too long to break down and can attract animals to your compost pile.

### Break down twigs and larger pieces

Twigs can take a long time to break down. If you break them into smaller pieces before adding them to the pile, you will allow them to compost much quicker. Chopping up large Greens (e.g., broccoli stems, watermelon rinds, etc.) also speeds up the process.



## Keep a pile of leaves separate and handy

Dry leaves provide a good source of Browns. You can add some as cover each time you add some kitchen scraps or after turning the pile. Leaves can be added to absorb excess moisture if your pile gets too wet. Store your leaves in a bag beside your compost bin.

## Two bins are better than one

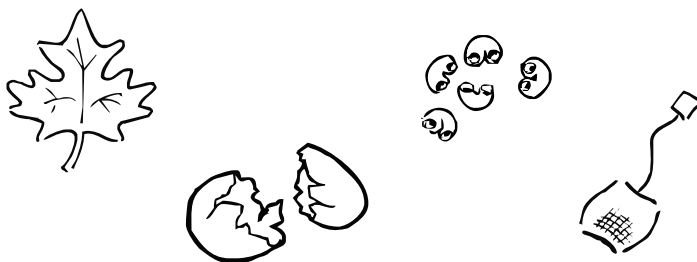
Consider getting a second compost bin. You can then have one for fresh material and another to allow your compost to age before putting it in your garden.

## Watch Out! You Might Get Hooked!

Many avid gardeners, who have discovered the tremendous benefits of composting, work with a three-bin system.

The first bin is for fresh material, the second for material that is still actively composting, and the third is for aging their compost. Often these gardeners seek compostable materials from neighbours or local stores or farms.

Watch out, or you too may become addicted to turning waste into **“black gold”**.





## ***You asked...***

### **My municipality collects organics at the curb and composts them at a central facility. Why should I bother to compost in my backyard?**

Curbside programs are a cost-effective way to reduce waste while producing a high-quality compost for commercial distribution. This is good news! But it does not mean you shouldn't compost in your backyard. On the contrary - when you compost at home you:

- 1** get free compost that is invaluable to your garden
- 2** save the municipality money (they don't need to collect as much material), and
- 3** help the environment (you save the energy and pollution involved in transporting the materials to the composting facility).

And remember, if your municipality collects organics at the curb you can still compost lots of materials in your backyard while putting your meat, dairy, fat and grease, non-recyclable paper products, and excess yard waste out for pick-up (contact your municipality if you are not sure about this list). In fact, backyard composting and curbside collection of organics go hand-in-hand.

**You can cut your solid waste by up to 75% by recycling and composting.**

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

Yes you can! Although your compost heap may look as frozen as everything else in the winter, it will usually be working in the middle, although at a much slower rate than in the summer. Keep adding material to your pile throughout the winter... even if it freezes, it will start composting again in the spring.

## **How long does it take to make compost?**

Compost can be produced in as little as 3 months or it can take as long as 2 years. It depends on how you maintain your heap. If you use roughly equal amounts of Greens and Browns, keep the pile moist, and turn or mix the materials regularly, you can get compost in a few months. A less active maintenance program will result in the same product, but after a longer period of time.

## **What should I do if my composter smells bad?**

There are two possible reasons why you are experiencing this problem. First, you may have too many Greens and not enough Browns. If you haven't added Browns in a while, put some in. If you don't have any dry leaves handy, shred some newspaper and mix it in. Second (and more likely), your pile may be lacking oxygen. To fix this problem, simply turn the material over with a shovel or pitchfork. The odour will be gone in a day or two.

## **What is happening in that pile?**

The kitchen scraps and yard waste in your compost contain nitrogen and carbon. There are a number of different microorganisms, worms and beneficial insects that live on a diet of nitrogen and carbon-rich materials. The microorganisms will generate a lot of heat as they do their work – a compost pile regularly heats up to 50 to 65 degrees Celsius after new material is put into it. During the process, the materials you put in are broken down into compost, or humus.



## **Will I get animals in my compost?**

Not if you put the correct materials in your pile. No meat, bones, dairy products (including cheese), fatty materials, or oils should be put into your compost pile. These materials break down very slowly and will attract animals. And all kitchen waste should be covered by Browns (such as dry leaves) so that birds are not attracted. Animals are a rare occurrence in a properly managed compost pile.

## **What is a backyard food digester and how is it different from a composter?**

The composting process described in this booklet needs air in order to work. For this reason, it is called an “aerobic” process. Composting can also take place without air – this is called an “anaerobic” process -- but the end result is somewhat different. Digesters are backyard composters that use this anaerobic process. They do not allow any air circulation and they do not take much leaf and yard waste. They will take all of your kitchen scraps, however, including leftover meat and meat trimmings. Because they do not use oxygen, turning is not required. This makes them even more low-maintenance than aerobic composters. On the other hand, they produce very little compost.

## **Can I compost ashes?**

Maybe. It depends on where the ashes came from. Untreated wood or paper ashes are OK. They won't help your composting but they won't hurt it, either. Ashes from barbecues, plywood, treated wood, or glossy paper can contain toxic materials that you don't want in your compost.



# Acknowledgements

RRFB Nova Scotia would like to thank Annapolis County for allowing their original booklet on Backyard Composting to be adapted for use across Nova Scotia.

RRFB Nova Scotia was established in 1996 as a not-for-profit organization to administer certain components of the province's solid waste-resource management strategy. One of the company's primary mandates is to promote education and awareness of waste diversion programs.



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**[www.rrfb.com](http://www.rrfb.com)**



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# Backyard Composting

## What's In

### From the House:

- Fruit and vegetable scraps
- Baked goods, including bread
- Rice and other grains
- Pasta
- Paper towels/serviettes
- Tea leaves/bags
- Coffee grounds and filters
- Egg shells
- Shredded paper (newspaper, cereal boxes, paper packaging, etc.)

### From the Yard:

- Leaves
- Grass clippings
- Weeds
- Twigs (break into smaller pieces)
- Plants, plant trimmings (non-diseased)

## What's Out

### From the House:

- All meat, including chicken
- Fish and shellfish
- Bones
- Fat, grease, oils
- All dairy products, including cheese

### From the Yard:

- Weeds that have gone to seed
- Diseased plants
- Large branches, roots, etc.
- Dog and cat waste
- Plants previously sprayed with non-degradable pesticides

Please cut along dashed line for a convenient reminder for your fridge.