

# Traditional Composting



**Protecting your Compost**

Using a compost bin with a lid will protect your compost from rain and pests. Use a sturdy, waterproof material for the bin to ensure that it lasts a long time. This is most suitable for small amounts of compost, and can be used at home or in small gardens.

Scan the QR code for a composting demonstration on our NParksSG YouTube Channel or visit [go.gov.sg/compostingdemo](http://go.gov.sg/compostingdemo)



## Why Compost?

Compost is a valuable organic soil additive that can improve clayey soil. Organic matter in compost helps to make the soil softer, improves drainage, and introduces nutrients and beneficial microbes. Compost can also be used as a mulch to help retain water in the soil and keep it cool in hot weather. Making your own compost can save you money and also reduce the amount of waste sent to the landfill.

## About Community in Bloom

Community in Bloom (CIB) is a programme that was launched by the National Parks Board (NParks) in 2005. It aims to nurture a gardening culture among Singaporeans by encouraging and facilitating community gardening efforts. It is also an opportunity to build community bonds and strengthen social resilience in our City in Nature.



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For more information, visit our website at [www.nparks.gov.sg/cib](http://www.nparks.gov.sg/cib) or email us at [CommunityInBloom@nparks.gov.sg](mailto:CommunityInBloom@nparks.gov.sg)

For more information on plants in Singapore, visit NParks Flora & Fauna Web at [www.nparks.gov.sg/florafauanaweb](http://www.nparks.gov.sg/florafauanaweb)

For more gardening resources and tips, visit [go.gov.sg/gardening-resources](http://go.gov.sg/gardening-resources)

To learn more about our City in Nature, scan the QR code or visit [www.nparks.gov.sg/about-us/city-in-nature](http://www.nparks.gov.sg/about-us/city-in-nature)



## Useful tips for aerobic composting:

- Place the container in a well-ventilated area
  - Ensure that the composting bin has ventilation holes
  - Check your compost regularly
  - It is important to make sure that all materials in your compost are disease and weed free for safe use around the garden
  - The ideal ratio of carbon to nitrogen for aerobic composting is 2 to 3 parts carbon for each part nitrogen by weight\*
  - \*If the carbon to nitrogen ratio is too low, there may be an unpleasant odour due to the ammonia gas released during the composting process, which results from having too much nitrogen.
- Aerobic composting, also known as traditional composting, requires oxygen for the decomposition process. This prevents the compost from smelling rancid.

Composting is a process in which organic material is broken down by bacteria and other microorganisms via decomposition. The resulting material is called compost, which can be used for gardening. There are many ways to do composting and this brochure features information on traditional composting.

Compost is a valuable soil additive for any garden, big or small. Mixing compost into your soil can improve drainage, increase organic matter and help your plants grow better.

We hope that this brochure will encourage you to start composting on your own or in your community garden.



# What is Traditional Composting?



Immature compost with large chunks of intact organic matter

Mature compost with a soft and crumbly texture

Compost is traditionally made by mixing organic garden and kitchen waste materials in a bin or a pile and regularly introducing oxygen. The microorganisms then break down these materials into compost. The whole process is called aerobic decomposition, and when done correctly, should not result in any unpleasant smells. Traditional composting can be done in plastic bins, wire mesh cages, upcycled plastic containers and other waterproof containers with some form of drainage. The compost should have a waterproof cover in the form of a plastic lid or tarp to protect it from the rain. Mature compost can be used to improve soil for gardening as an organic soil additive.

# What can I compost?

Compostable materials are sorted into 'browns' and 'greens'. 'Brown' materials supply carbon as an energy source for the microorganisms in the compost pile, while 'green' materials provide the nitrogen needed for the microorganisms to grow and function. Cutting compostable materials into small pieces will speed up the decomposition process. Managing what goes into your compost is key in controlling unpleasant odours and pests. Here are some common materials you can add to your compost:

## Browns



- Woody plant parts
- Dry leaves
- Cardboard egg trays
- Sawdust

## Greens



- Leafy vegetable scraps
- Fruit peels
- Fresh grass clippings
- Fresh leaves
- Coffee grounds
- Tea leaves

## Not suitable for composting



- Meat and dairy
- Starchy foodsuff (e.g. bread, rice)
- Raw animal products
- Raw animal manure
- Weeds with seeds
- Charcoal ashes
- Diseased plant parts

# Steps to starting and maintaining a compost bin

## 1 Setting up your compost bin

- Put the compost bin in a shady area, away from direct sunlight.
- Fill one-third of the container with garden soil or bought compost (and/or wood shavings and sawdust)
- Fill the remaining space in the bin with alternating layers of 'greens' and 'browns'; by weight, there should be 2 to 3 parts of 'browns' for every 1 part of 'greens'
- Add tap water until moist but not dripping wet
- Mix the contents thoroughly, cover the bin and leave it alone for one week

## 2 Maintaining your compost bin

- Once every week, use a garden fork or shovel to turn the mixture for air circulation
- Ensure that the mixture is not too wet or dry – add more 'browns' if too wet, and more water if too dry
- The mixture should always be kept moist but not dripping wet
- Instead of throwing away your garden or kitchen waste, you can use it as 'greens' in your compost. Add a comparable amount of 'browns' to maintain the 2-to-3:1 ratio
- Mix each time new material is added

## 3 Composting and preparing for use

- Depending on the organic materials added and size of the container, most materials should break down into mature compost in 3 to 6 months
- Due to the continuous addition of new material to the compost, there will always be some material that is not completely broken down
- Sieve out the mature compost for use in the garden
- Mature compost should be dark brown or black with a soft, crumbly texture and an earthy smell
- Any remaining uncomposted material can be returned to the compost bin



Sample recipe for setting up a traditional compost bin