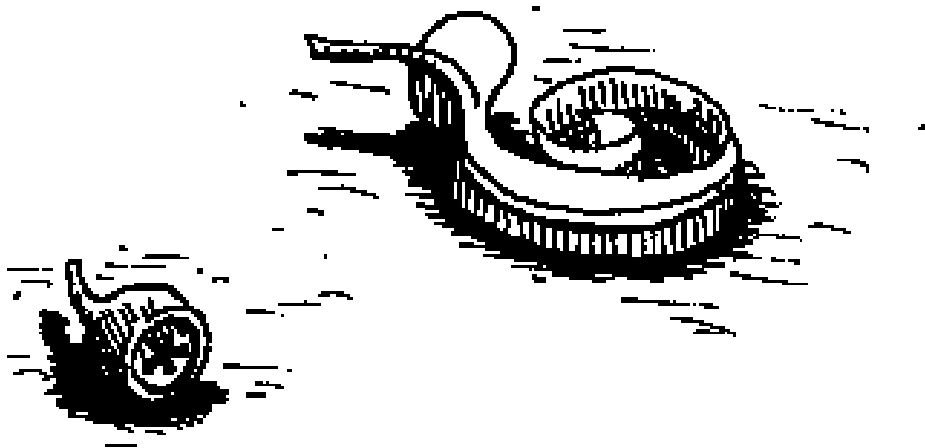


# All about composting

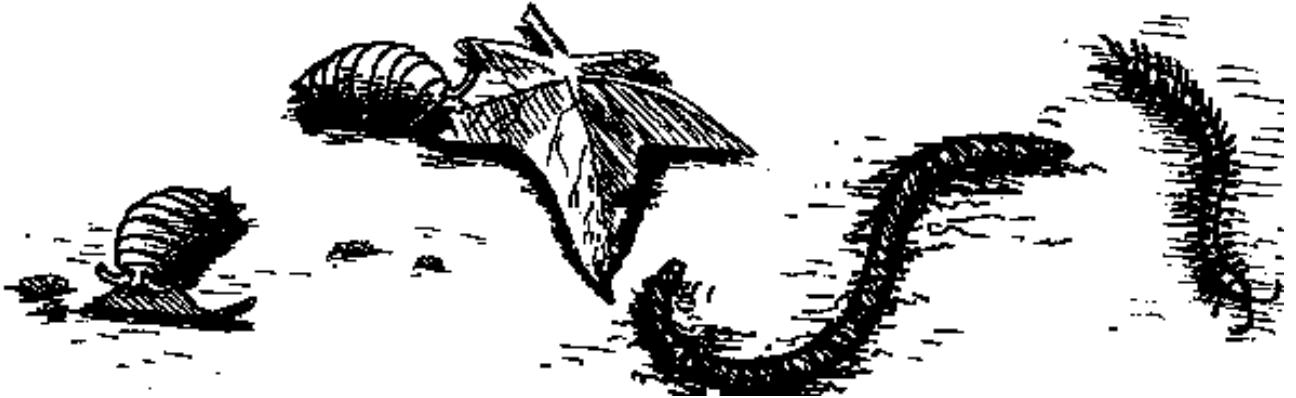
**By the end of this section  
you will know:**

- ✓ How composting reduces waste
- ✓ How to make your own compost heap
- ✓ What you can and can't compost
- ✓ How to fix composting problems
- ✓ How to use compost
- ✓ How to make your own worm farm
- ✓ How to make a no-dig garden



# What is composting?

COMPOSTING is nature's own recycling system. It breaks plant matter down into its original nutrient form and then returns that valuable nourishment to the soil.



By composting we give back some of the nutrients we have taken from our soil.

Putting home-grown compost onto gardens also greatly reduces our dependence on chemicals, such as artificial fertilisers and pesticides.

Everything you put into a compost heap is broken down by bacteria and other creatures such as worms and slaters. Air and water also play a crucial role in the life of a compost heap just as they are crucial to human life.

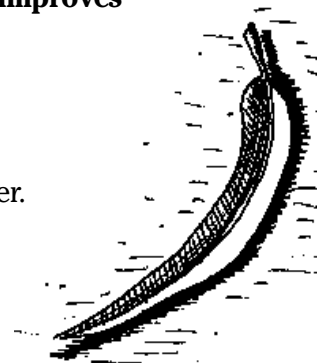
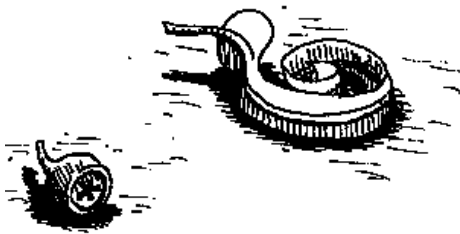
## Why compost?

The best way to reduce food + garden waste is to compost it.

On average, about half of our household rubbish is food scraps, garden waste and other organic matter that can be composted.

**Compost returns nutrients to the soil and improves plant growth by:**

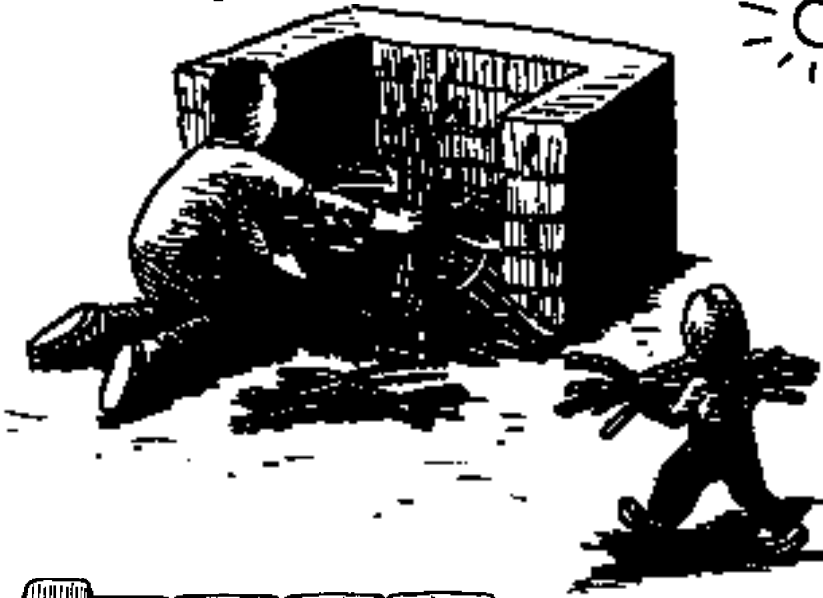
- Bringing life back to the soil.
- Helping to break up heavy clay soils.
- Improving the soil's capacity to hold water.
- Adding essential minerals to the soil.



# Compost cookery: A beginner's recipe for compost



**STEP 1:** Choose a well-drained, sunny position.



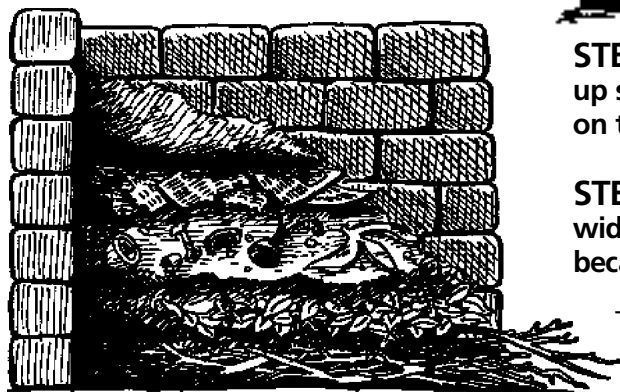
**STEP 2:** First put a layer of coarse material such as broken-up sticks, twigs, prunings, dry leaves and torn newspaper on the bottom of the heap.

**STEP 3:** This layer should be about the thickness of the width of one of your hands (8-12 cm). This step is important because it allows air to flow through the heap.

Then add a thin layer (1-2 cm) of rich soil or finished compost from a previous heap. Add enough water to make everything moist.

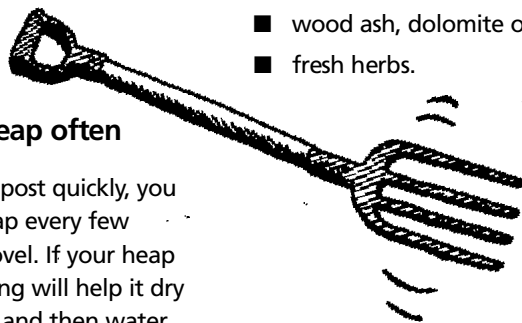
You are ready to start adding your food scraps to the heap. Each time you add kitchen scraps to the heap, also add a different thin layer (1-2 cm) of one or more of the following:

- grass clippings
- soil or compost from a previous heap
- coarse material, eg, tree prunings, sticks, twigs and leaves
- shredded newspaper
- wood ash, dolomite or lime
- fresh herbs.

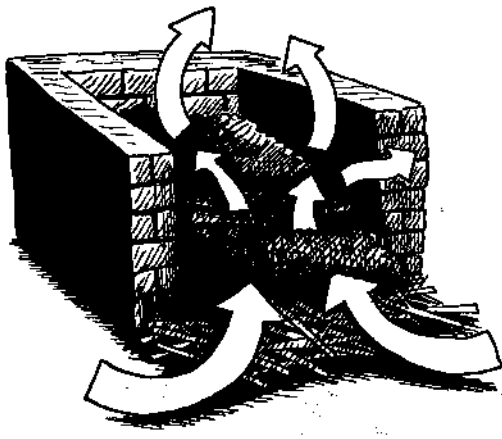


## **STEP 4:** Turn the heap often

To get good quality compost quickly, you need to turn the the heap every few weeks with a fork or shovel. If your heap is wet and smelly – turning will help it dry out. If it's too dry turn it and then water it.



When you have finished layering, cover the heap with hessian bags, underfelt or a layer of mulch.



# Good composting with ADAM

ADAM will help you remember the keys to making good compost.

*Your compost heap should let air in through the top, bottom and side if possible.*

- A Aliveness.** Compost is a living system.
- D Diversity.** Lots of different ingredients are the key to good composting.
- A Aeration.** For fast-working, sweet-smelling compost, it is essential to get air (oxygen) into the heap.
- M Moisture.** For the living compost heap to work well, it needs to be a little wet.



## Aliveness

A compost heap needs living organisms to break down the waste and release the minerals and nutrients to make rich soil-like compost.

Each living organism in the compost has a different but important role to play in creating the right conditions for good compost.

Some of these living organisms, such as bacteria, are too small for you to see. But they are still very important.



## Diversity

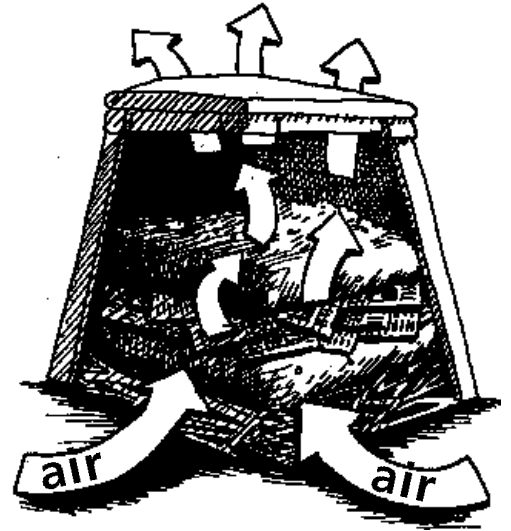
A compost heap needs different ingredients, just as you need different types of food to keep you healthy. Layering different ingredients makes sure that the compost you get from your heap has all the right minerals and nutrients.

## Aeration

A compost heap needs air or it will start to smell. Remember, more air means less smell!

Turning your compost heap lets in more air. But don't turn more than once a week as you will let too much air in the heap and it will get too cool. Compost heaps need to be hot to make the ingredients break down faster.

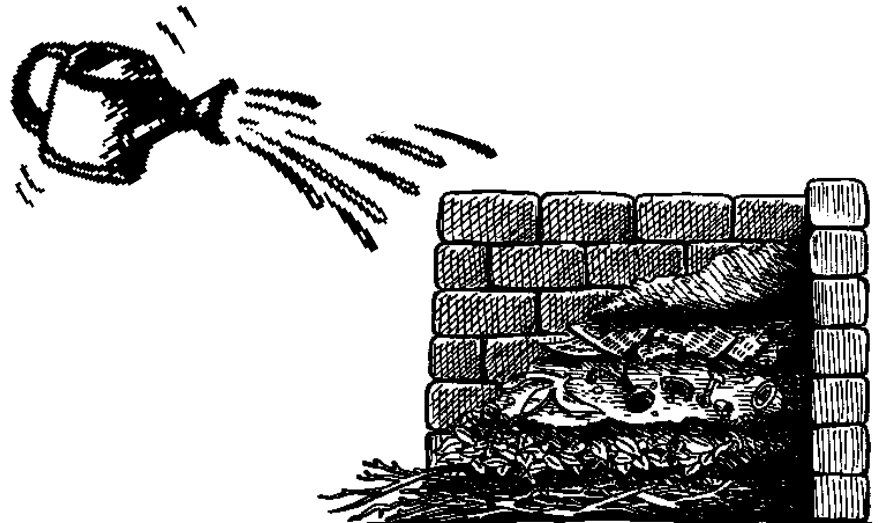
Remember, you also want to let some air into the top of the heap, so don't cover it with plastic sheets, use hessian.



## Moisture

All plants and animals need water and air to live and so does your compost heap.

As a guide, compost should be about as wet as a lightly wrung-out sponge. It should be moist but not dripping with water.



**Too wet.** If the heap is too wet it should be turned. If it's very wet, pull the heap apart and remake it with some extra tree prunings, twigs, sticks and leaves.

**Too dry.** If the heap is too dry, try watering it from above with a trickling hose.

Always water any dead leaves, sawdust, hay, straw, and weeds before you put anything else on top of them.

# What to compost?

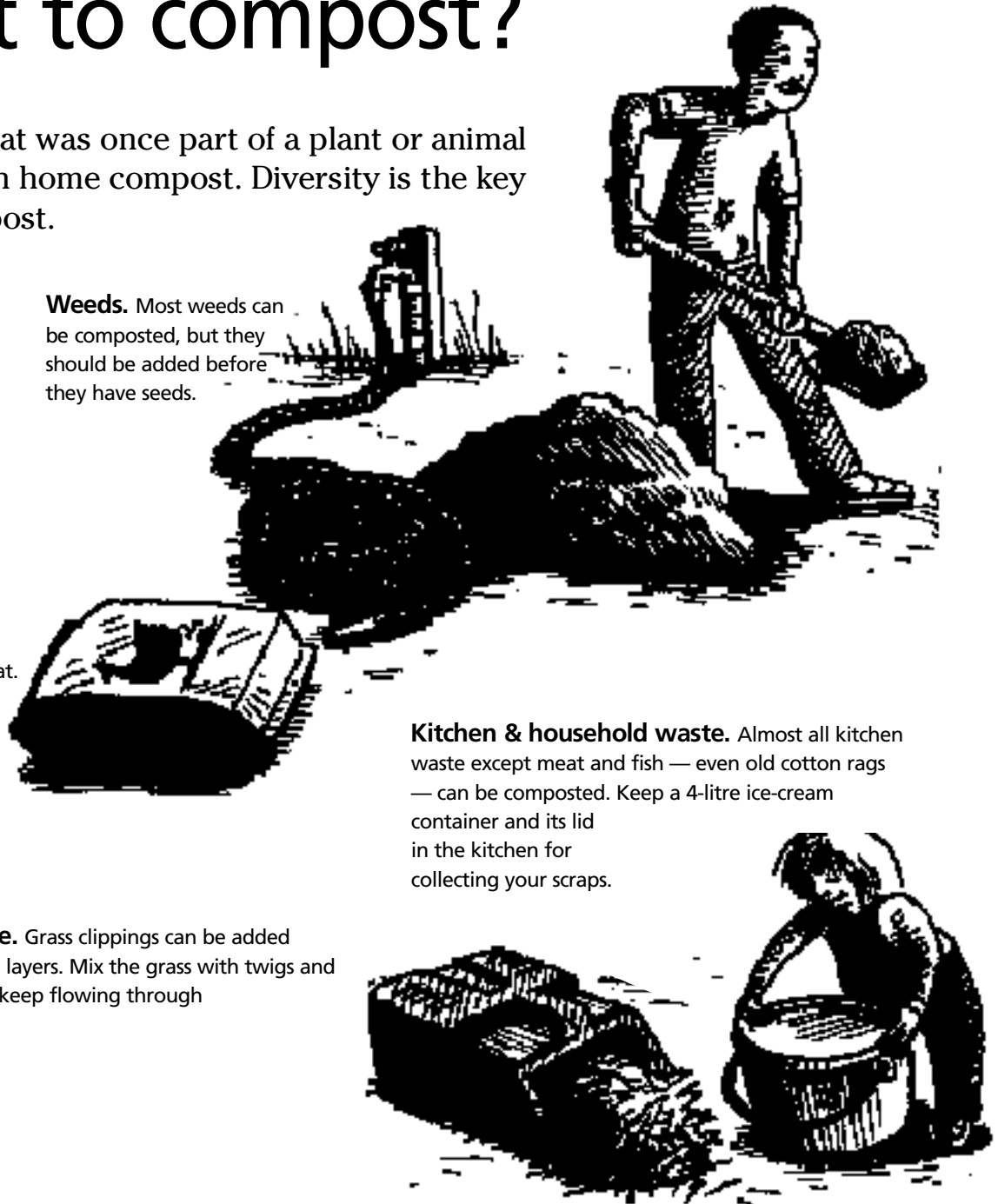
ANYTHING that was once part of a plant or animal can be used in home compost. Diversity is the key to great compost.

**Weeds.** Most weeds can be composted, but they should be added before they have seeds.

**Manures.** Small amounts of poultry or pigeon manure are great. Cow, sheep and goat manure aren't quite as good.

**Kitchen & household waste.** Almost all kitchen waste except meat and fish — even old cotton rags — can be composted. Keep a 4-litre ice-cream container and its lid in the kitchen for collecting your scraps.

**Garden waste.** Grass clippings can be added regularly in thin layers. Mix the grass with twigs and leaves to let air keep flowing through the heap.



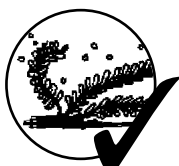
## OTHER useful ingredients



hair



coffee grounds and tea leaves



seaweed



cut flowers and herbs



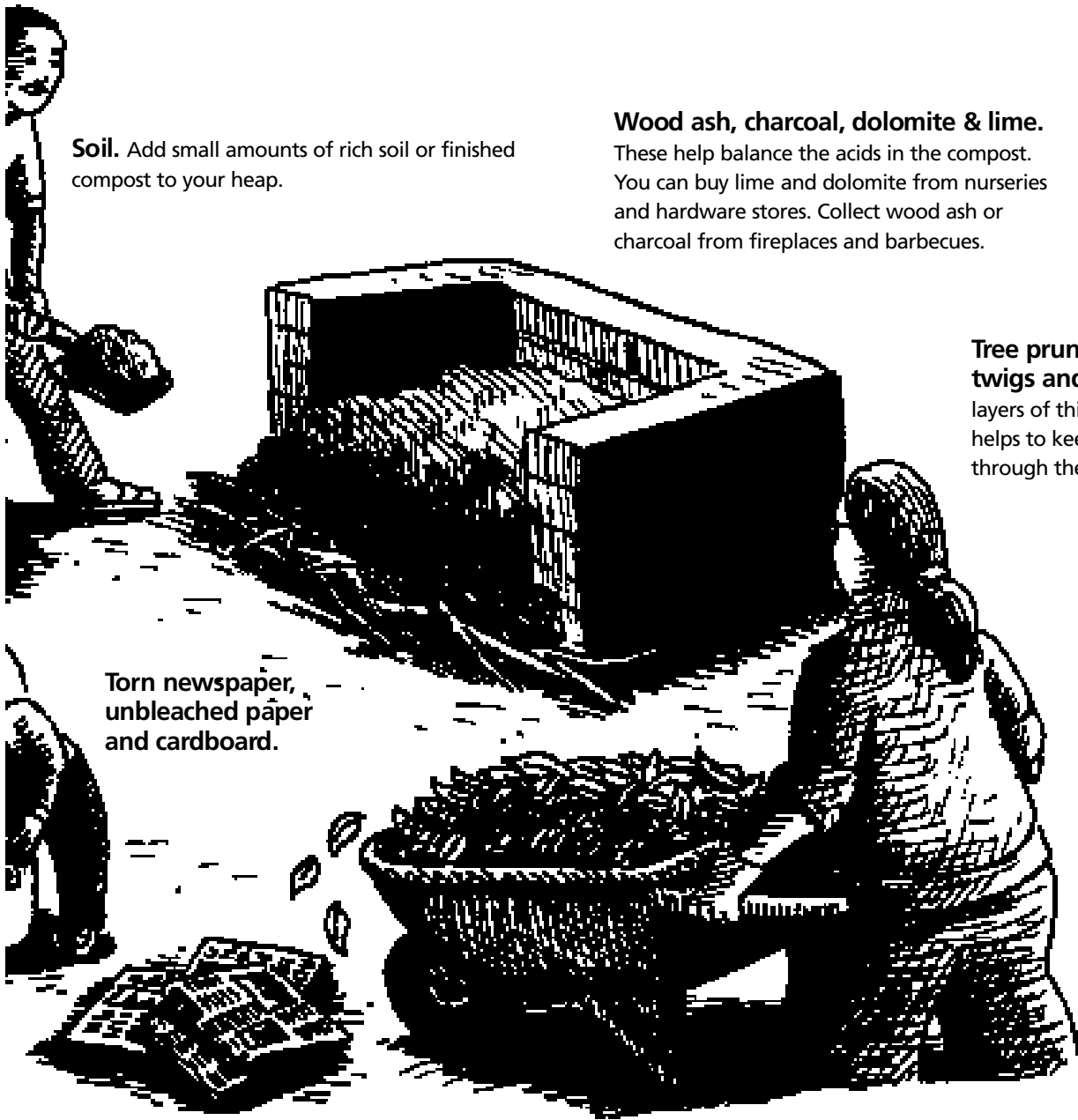
old potting mix



vacuum cleaner dust



torn up pizza boxes



**Soil.** Add small amounts of rich soil or finished compost to your heap.

**Wood ash, charcoal, dolomite & lime.**

These help balance the acids in the compost. You can buy lime and dolomite from nurseries and hardware stores. Collect wood ash or charcoal from fireplaces and barbecues.

**Tree prunings, sticks, twigs and leaves.** Include layers of this coarse stuff as it helps to keep air flowing through the heap.

**Torn newspaper, unbleached paper and cardboard.**

**DO NOT compost these!**



**Dog, cat or human faeces (manure)**  
They can cause disease.



**Meat and fish scraps** should not be composted.



**Only small amounts of dairy products and fats** should be composted (added to the centre of the heap so they break down and do not attract flies, rats or mice).

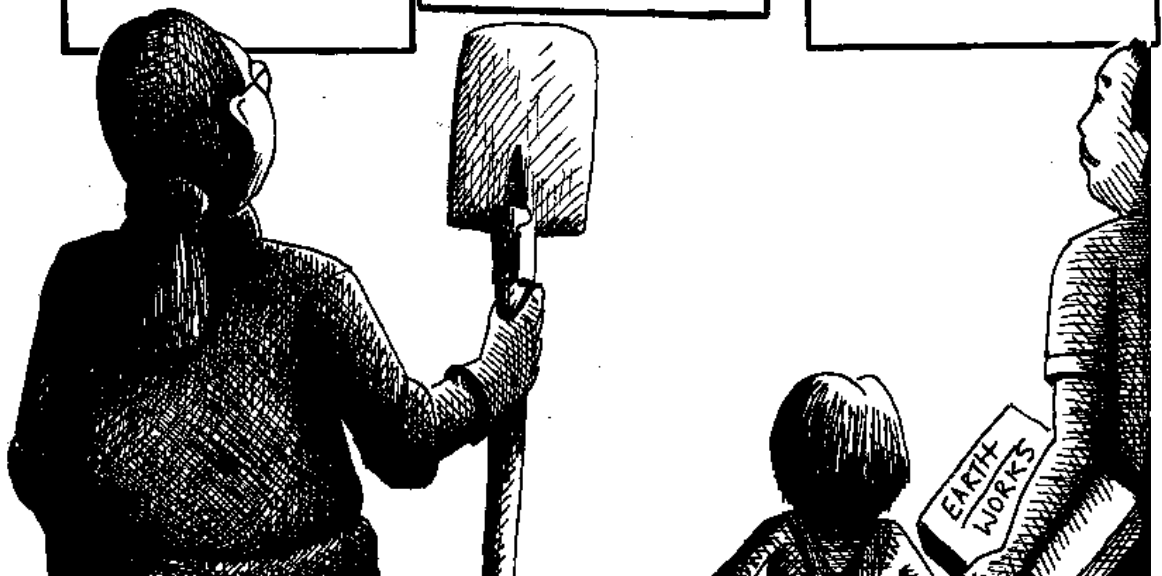
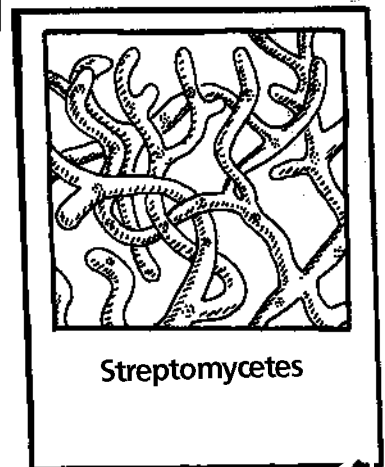
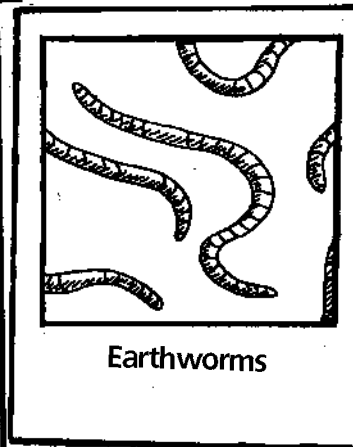
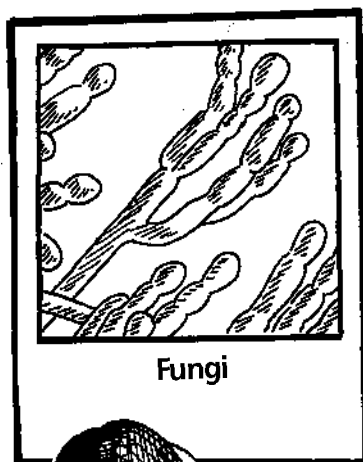
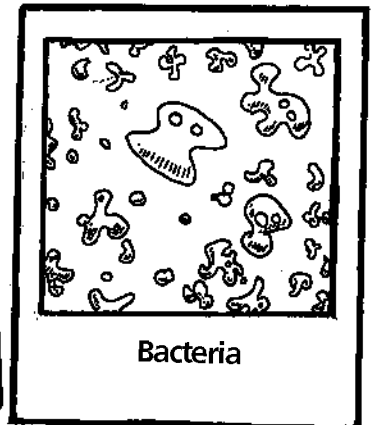
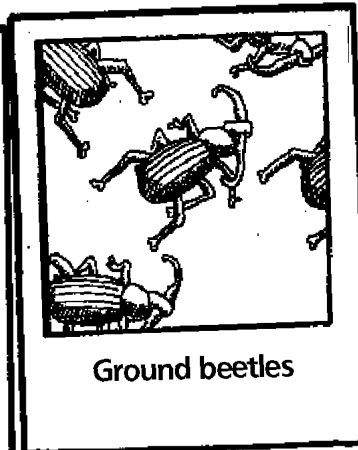
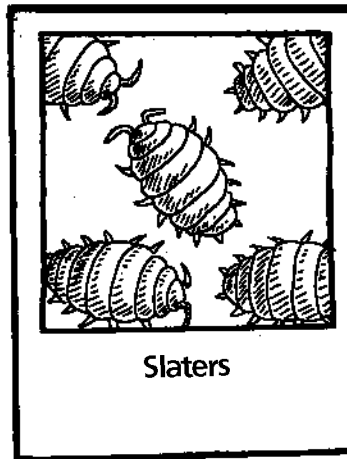


**Chemicals.** Most household and garden chemicals will kill or slow down the living organisms in the compost and soil.

# Compost creatures

COMPOST is a living system. There are millions upon millions of tiny animals that live, feed and breed in your compost. They all help break down your food and garden wastes and turn them into rich soil or fertiliser.

*Some compost creatures are:*



# Composting systems

THERE ARE many different types of compost systems. You can buy ready-made systems such as compost bins, or you can make your own. Choose a compost system that suits your budget and lifestyle.

## Make your own compost system



### Covered heaps on the ground

This is one of the easiest ways to make compost. It costs nothing and you can start now.

Cover the heap with hessian bags, garden mulch or newspapers.



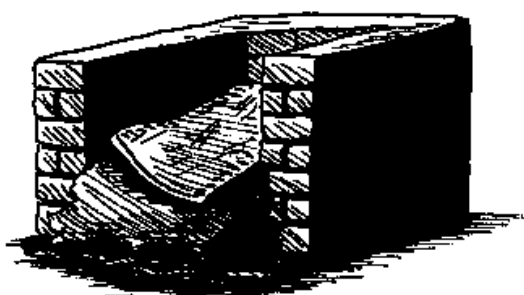
*Temporary holding bay*

### Holding bays and multi-bay units

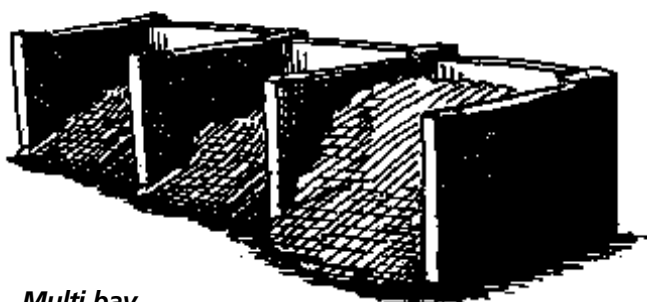
Holding bays are simple containers used to store yard and garden waste like grass clippings, leaves and prunings until these materials break down.

Choose the type of holding bay that best suits you.

- **Temporary holding bays.** These are made from light materials so that they can be taken apart and moved around the garden. They can be made from chicken wire, old wooden pallets, or wire framed with wood.
- **Permanent holding bays.** These can be made with Besser blocks or by mortaring bricks or rocks together.
- **Multi-bays.** It's best to have at least two bays: one for fresh waste, the other for storing maturing compost until it's ready to use. Three-bin bays are even more efficient because you are turning the compost frequently. The compost is shovelled from the first bay into the second bay after two weeks, then a few weeks later from the second bay into the third bay. The compost is ready to be used when it is turned out of the third bin.



*Permanent holding bay*



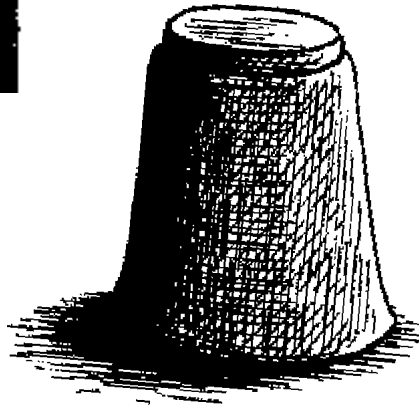
*Multi bay*



## Burying waste

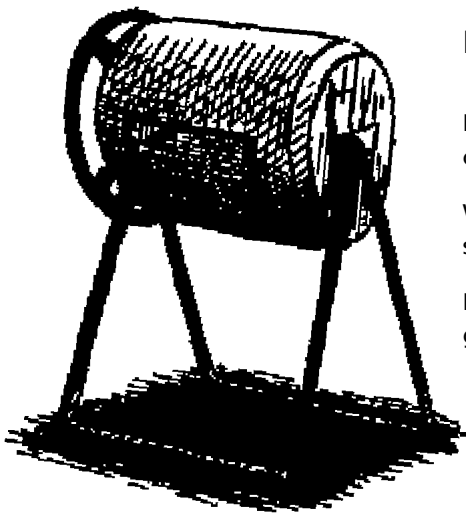
Food waste can be composted by burying it in the soil. Just dig a hole, throw some chopped food wastes into it and then cover with at least 20 cm of soil.

This is a slow process but it's very simple.



## Bins you can buy

There are many types and sizes of bins for sale from most local councils, large stores, hardware shops, garden centres and nurseries.



## Barrels and tumblers

Barrel composters use a tumbling action to aerate the compost — just like a clothes dryer. Compost is made in batches.

Waste is stored until there is enough to fill the barrel. If the barrel is turned every second day, the compost can be ready to use in 2-3 weeks.

Barrels and tumblers are very useful to start composting large amounts of leaves, grass and weeds. Later these can be added to a regular compost heap.

# Some common questions



**Q** How long will it be until my compost is ready to use?

Let your compost settle for the first two weeks. After this, turn your compost heap weekly and it will take 8-10 weeks to produce good compost.

If you don't turn your compost heap regularly, then it will take longer to produce good compost.



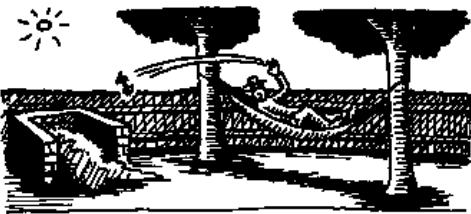
**Q** What do I do if I have no worms in my heap, but lots of ants?

Add lime to the heap and turn it. If your heap seems to be drying out, water it.



**Q** My compost seems very wet. How wet should it be?

The compost should be as wet as a damp sponge. It needs to be moist, but not dripping wet.



**Q** My composting method is to throw everything on the heap and then ignore it. Is this OK?

Yes, it's called cold composting and it's a slow way to compost. Watch that the compost doesn't become smelly because of lack of air. It may need to be turned now and then.



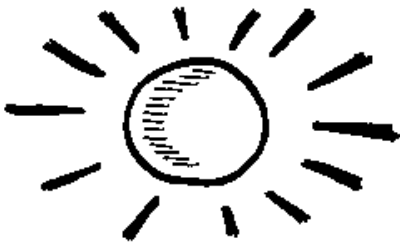
**Q** Can bones and meat scraps be composted?

No, it is best not to compost bones and meat because they can attract flies, rats and mice.

**Q** My neighbour complains about my heap but it doesn't even smell. What should I do?

Set a good example by keeping your compost system neat and smell free. Explain the benefits of composting to your neighbour and offer her or him some compost for the garden.





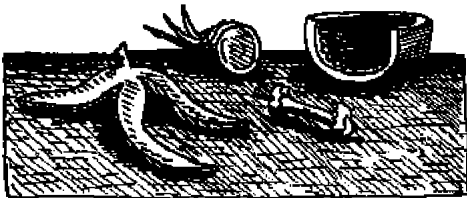
**Q Should my compost be in the sun or in the shade?**

The heat of the sun will speed the process, but remember it will also dry it out – so keep it moist. If sunny space is limited in your garden, find the next warmest position.



**Q How will I know when to turn the heap?**

Turning every 7-14 days will speed up the process. If you're not in a hurry, once a month will probably do.



**Q Can fruit waste be composted? How?**

Yes, all fruit can be composted. But with oranges, lemons, mandarins and grapefruit, it is best to chop the rinds finely so they decay easily. Then add a little wood ash, charcoal, dolomite or lime to reduce their acidity.



**Q What if there are worms in my compost?**

That's great. Worms help to breakdown the waste and let air through the compost heap.

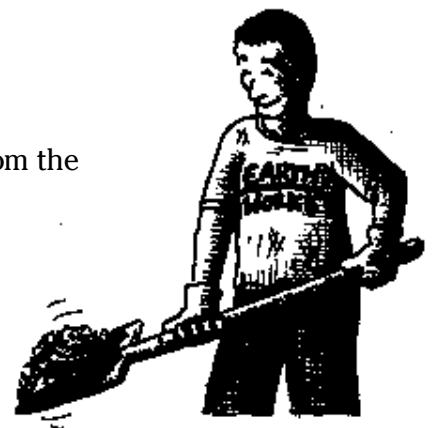


**Q How do you know when the compost is ready to use?**

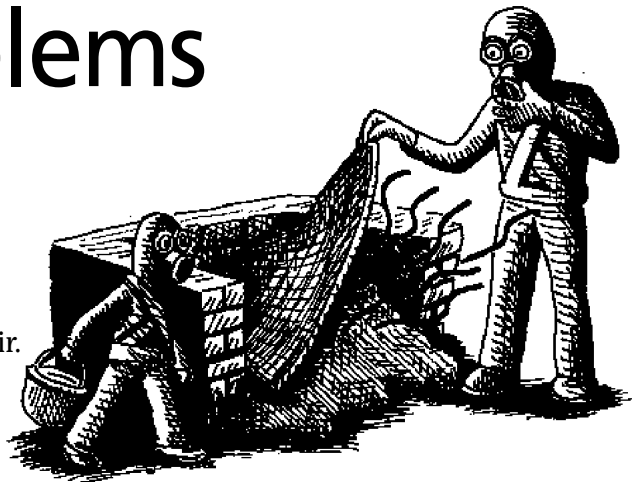
When it has become dark, loose and crumbly, smells like fresh earth and you can't see any lumps of food or other waste.

**Q How do I get my compost out when ready?**

Dig out the finished compost from the bottom of the heap.



# How to fix some common composting problems



## My compost is smelly

Your compost will smell if it gets too wet or not enough air.

It may also get smelly if you put in too much food waste and not enough dry ingredients.

### Fix it by:

- Forking in dry leaves, garden mulch or soil.
- Adding two or three handfuls of garden lime, dolomite or woodfire ash.
- Turning the compost to get more air in.
- Mixing food or grass clippings with sawdust or shredded newspaper before adding to the heap.

## My heap has some unwelcome visitors

Ants, cockroaches, mice or rats can make your compost their home.

### Fix it by:

- Covering food with a layer of newspaper, mulch or soil.
- Adding lime and turning the heap will discourage ants and cockroaches.
- Shovelling the heap to one side, then placing fine wire mesh under the compost bin or heap will keep out mice and rats.
- Don't put dairy products, meat bones and seafood into the compost.

## Now my compost heap has flies

Don't worry if you have a few compost flies. However, if your heap becomes smelly it may have too many flies.

### Fix it by:

- Following the steps above for smelly compost.





**I think I'm going to decay before my compost does.  
How can I speed it up?**

If your composting system can't keep up with demand there are ways to make great compost quicker. A slow composting system can mean that the compost is not hot enough, or there may not be enough air or water.

**Fix it by:**

- Adding manure or finished compost.
- Turning the heap and adding water.
- Covering the compost with insulating material like newspapers or mulch in winter if it gets too cold.
- Adding a compost activator. You can buy this from a nursery or hardware store.

# How to use your compost

**Compost can be used as a starting mix** for vegetable and flower seeds. Mix one-third sand with two-thirds compost. The seedling mix should have a fine texture.

## **The best time to dig compost into a garden bed**

is when you are preparing it for planting seeds or seedlings.

## **A thin layer of compost can be spread on your lawn**

once or twice a year to encourage healthy growth.



**If you want to use compost in a potting mix**, or as a seedling mix, it is best to use a coarse screen or sieve to separate out the larger particles. You can make one out of chicken wire.

**For indoor plants**, you may want to mix sand with the compost. This will help to drain the compost mix. Potted plants grow well with compost in the mix.

**Finished compost** can be used as a mulch to fertilise plants. To mulch with compost, add 5-7 cm of compost to the soil around the drip line (the circle made by rain falling off the outermost branches) of plants.

**Compost can be used as a bedding material for a worm farm** (see page 35).

**Compost can also be used as the base of a no-dig garden** (see page 38).

Joel 99