# **CREATIVE COMPOSTING** for the home and community gardener



The benefits of making compost

Composting turns our kitchen and garden wastes into plant food:

- almost 50 per cent of waste produced in the home can be composted — composting is a do-it-yourself approach to reducing our waste
- making compost avoids the need to buy fertiliser — it saves us money and turns waste into food.

You can make compost in commercially-available plastic compost bins, in large bays or heaps.

Community gardeners need large bays to produce enough compost for the garden.

# The many uses of compost

Compost can:

- increase the availability of the nutrients our plants need to grow strong and healthy — compost is a fertiliser
- retain moisture and add organic matter to light, sandy soils
- increase drainage in heavy, clay soils
- increase aeration in compacted soils
- reduce the extent of temperature extremes in soil, keeping soils cooler in summer and warmer in winter
- help form aggregrates in poorly structured soils.

# How to use compost

- use compost to make potting mix instead of buying a commercial product; try one third sifted compost, one third coarse sand for drainage and one third coconut fibre for water retention
- make a seed raising mix; try 50 per cent sifted compost for water retention and 50 per cent coarse sand for drainage in places of hot summers
- use compost as a mulch in your container gardens and around vegetables and fruit trees
  - keep it clear of the stems and tree trunks to avoid collar rot.

Compost is ready to use when it has broken down to a fine, crumbly texture, when it is black in colour and has an earthy smell.

# Using compost to make productive food gardens...



A gardener adds waste materials to make compost in a commercially-available plastic compost bin

Adding food scraps from a local green grocer to a community garden compost bin.

# Composting with ADAM...

The acronym **ADAM** provides an easy way to remember how to make compost. It reminds us what types of materials to use.

- A Aliveness anything that is or has been alive is suitable for making compost; people new to composting might avoid meat waste as it can attract vermin, such as rats, if not composted correctly
- D Diversity a mix of materials ensures that the

correct ratio of carbon (brown) to nitrogen (green) materials is included; nitrogen is a plant nutrient

- **A** Aeration air is necessary for the decomposer organisms to break down the organic materials
- M Moisture necessary to decomposer activity, a moisture level of less than 40 per cent slows activity while more than 60 per cent reduces the availability of air and produces a smelly compost. Keep the compost moist but not saturated.

# Making compost...

#### **1. COLLECT MATERIALS**

Gather enough carbon and nitrogen materials to fill a volume of approximately one cubic metre (one metre square by one metre high).

Nitrogen-rich materials: fresh (green) grass clippings; shrub prunings; food scraps including tea and coffee grounds; manures; seaweed.

Carbon-rich materials: dried grass; leaf litter; straw; hay; shredded newspaper, office paper, pizza boxes, cardboard egg cartons.

#### 2. SELECT A PLACE TO MAKE THE COMPOST

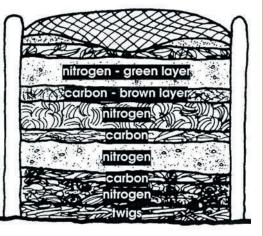
Choose a well-drained and sunny position.

#### 3. ADD THE MATERIALS

It is best to make the compost on soil. If you make it on paving, place a layer of small twigs at the bottom of the compost heap for drainage. Add a layer of nitrogen (green) material about ten centimetres thick, then a layer of carbon material (brown) to the same thickness, then another of nitrogen material and another of carbon on top of it. Continue alternating the layers until the bin or compost bay is filled. Water as you add the layers. Put the lid on a compost bin or cover the bay or heap with a porous covering such as hessian bags. This reduces water loss and allows rain to trickle into the heap to maintain moisture.

#### 4. FOR A FAST COMPOST, TURN WEEKLY

For a fast compost (how fast depends on material type and size, temperature and rainfall) weekly turning can produce compost in eight to ten weeks. An unturned, slow compost will take longer to break down. To make a slow compost, add material as it becomes available; layer food scraps (nitrogen material) then cover with carbon material.



### Test moisture content...

**The squeeze test** — wearing a gardening glove, take a handful of compost and squeeze. A few drops or water should trickle between your fingers — this is the right amount.

If no water trickles out: the compost is too dry — add water.

If more than a trickle: compost is too wet - turn to aerate and leave uncovered until water content declines.

# Problems...

- foul smell: too wet, not enough aeration add dry carbon materials such as leaf litter and turn; cover when raining
- slow decomposition: insufficient nitrogen material; add fresh lawn clippings, kitchen scraps, animal manure, blood and bone fertiliser; could also be insufficient air ---- turn the heap
- ants: check moisture; add water if needed; cover food scraps with grass or newspaper; turn the compost
- flies: may be anaerobic (decomposing without air) - turn; add dry carbon or course materials; cover heap with hessian or similar material
- maggots: remove meat from compost; cover maggots with lime; add soil to top of compost and turn heap next dav
- mice/rats: the compost heap is a warm, cosy place to raise young rodents — turn regularly; reduce the amount of bread and meat; always cover food scraps with grass or newspaper.

## Stay well, stay healthy...

Compost contains living organisms that, on rare occasions, may cause illness. Precautions include:

- moistening compost to avoid micro-organisms becoming airborne when working on compost
- wearing gloves to protect broken skin
- washing hands after handling compost
- wearing a dusk mask if you suffer from asthma or respiratory disorders
- if you handle animal manure, consider vaccination against tetanus
- protect yourself from sunburn with suncream and hat
- drink plenty of water while gardening.

#### REFERENCES

- Handreck K, 1993, Gardening Down-Under; CSIRO, Australia
- Rutherford, Peter W. & Lamonda, Mary Lou, 1996; The Australian Compost and Worm Book, Apollo Books, Mosman, NSW Australia
- Simons, Margaret, 2004; Resurrection in a Bucket; Allen & Unwin, Crows Nest, NSW, Australia.



#### **PRODUCED BY...**

#### TERRACIRCLE www.terracircle.org.au

TerraCircle is an international development consultancy working in the South West Pacific and in Australia in: food security, livelihood development, training in small scale sustainable agriculture, community health, project management.

#### **Australian Citv** Farms & Community **Gardens Network**

#### AUSTRALIAN CITY FARMS & COMMUNITY GARDENS NETWORK (ACF&CGN) ww.communitygarden.org.au

Text and photo by Russ Grayson and Fiona Campbell. Design and layout: Fiona Campbell



Creative Commons licence. www.creativecommons.org

Educational and advocacy organisations and sustainability educators are permitted to reproduce and distribute this brochure for non-profit purposes providing content is not changed and TerraCircle and the ACFCGN are credited as the source. Any reuse must be under this same Creative Commons licence and must carry this notice. Please inform us if you reuse the brochure: info@pacific-edge.info