

Backyard Composting Made Easy

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- **4 Components To Make Compost**
- **Containers**
- **Tools & Things**
- **Bin Distribution Program**

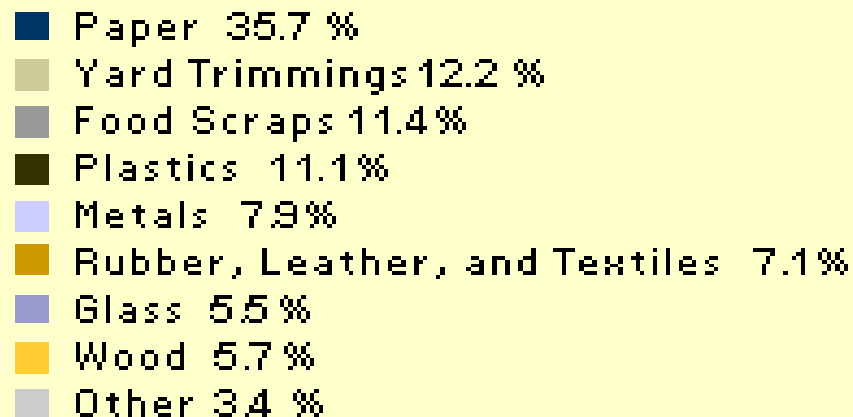




Backyard Composting Made Easy

Why Compost ?

**2001 Total Waste Generation—
229 Million Tons
(before recycling)**





Backyard Composting Made Easy

4 Things That Make Compost Happen

Brown (carbon)	Water (H₂O)
Green (nitrogen)	Air (oxygen)

Backyard Composting Made Easy



Carbon/Nitrogen Ratio

~

C/N Ratio



Backyard Composting Made Easy Brown or Carbon

- **Brown and woody material**
 - **Leaves**
 - **Straw**
 - **Saw dust**
 - **Wood chips**
 - **Paper products**
 - **Hand towels**
 - **Napkins**
 - **Paper plates**
 - **Paper mache egg cartons**
- **1/3 – 1/2 of pile to be brown (carbon)**



Backyard Composting Made Easy Green or Nitrogen

■ Green or Nitrogen

- **Food Scraps**
 - No meat, fat or bones
- **Fruit peelings & pulp**
- **Coffee ground and filter**
- **Tea bags**
- **Grass clippings**
- **Weeds**
- **Manure (no dog or cat)**

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Backyard Composting

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C/N Ratio

Ideal 30:1 for fast hot composting (temperatures up to 140 F)
50:1 for slower, low temperature composting

■ Brown (Carbon)

Leaves	60:1
Straw	90:1
Sawdust	500:1
Wood chips/ twigs	700:1

■ Green (Nitrogen)

Food Scraps	15:1
Grass Clippings	17:1
Fruit Waste	40:1
Weeds	20:1
Chicken Manure	7:1



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Easy method to calculate C:N ratio.

- **2 parts green, 1 part brown.**
 - You can get a c/n ratio of 30:1 – 50:1 by adding two parts green material to one part brown to your pile.

Example:	food scraps	15:1.
	Grass clippings	17:1.
	Leaves	60:1.

$$15 + 17 + 60 = 92 \text{ divide by } 3 = 31.$$

Or.

31:1 C:N ratio.



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Moisture

~ 60 % ~

Damp - feel like a wrung out sponge.

Squeeze a handful

- ~ Should stay together**
- ~ If water drips out – too wet !**
- ~ If crumbles – too dry !**



Backyard Composting Made Easy

Air / oxygen - turn or aerate

- ~ Speeds up the composting process**
- ~ Re-heats pile to keep it in aerobic state**
- ~ Creates pathways for air & moisture to circulate**
- ~ Eliminates odors**
- ~ Takes care of most composting problems**

Turn every 7 –10 days – the more you turn the faster you get finished compost



Backyard Composting Made Easy

**Hot fast – batch compost pile.
Compost in 1-3 months.**

Create a recipe that works for you !

What materials are available ?

*** Remembering you need 2 – browns, 1 green.**

Start with a layer of course materials (stalks, twigs, straw).

Then alternate layers of brown & green materials, adding a shovel full of soil and moistening every other layer.

Repeat this layering and moistening until bin is full.



Backyard Composting Made Easy

Hot fast – batch compost pile.

Compost in 1-3 months.

Monitor the temperature of the pile.

Within 24 hours, pile should be 120 –130 F.

After 3 days at 130 F, turn pile – the core of pile is finished

Add moisture and/or some nitrogen (food scraps or grass clippings). Again the pile should heat back. After 3-4 days, turn pile. Repeat process for 3 – 4 weeks.

*** Check temperature by thermometer or place your hand in the middle of pile.**



Backyard Composting

Made Easy

Slow or Cold Composting
Slow results (3-8 months)

Most Common

Pros

- ~ **Easy, little effort**
- ~ **No stockpiling**
- ~ **Immediate kitchen scrap disposal**
- ~ **Quick disposal of yard debris and grass**
- ~ **Great for homes that generate little waste**

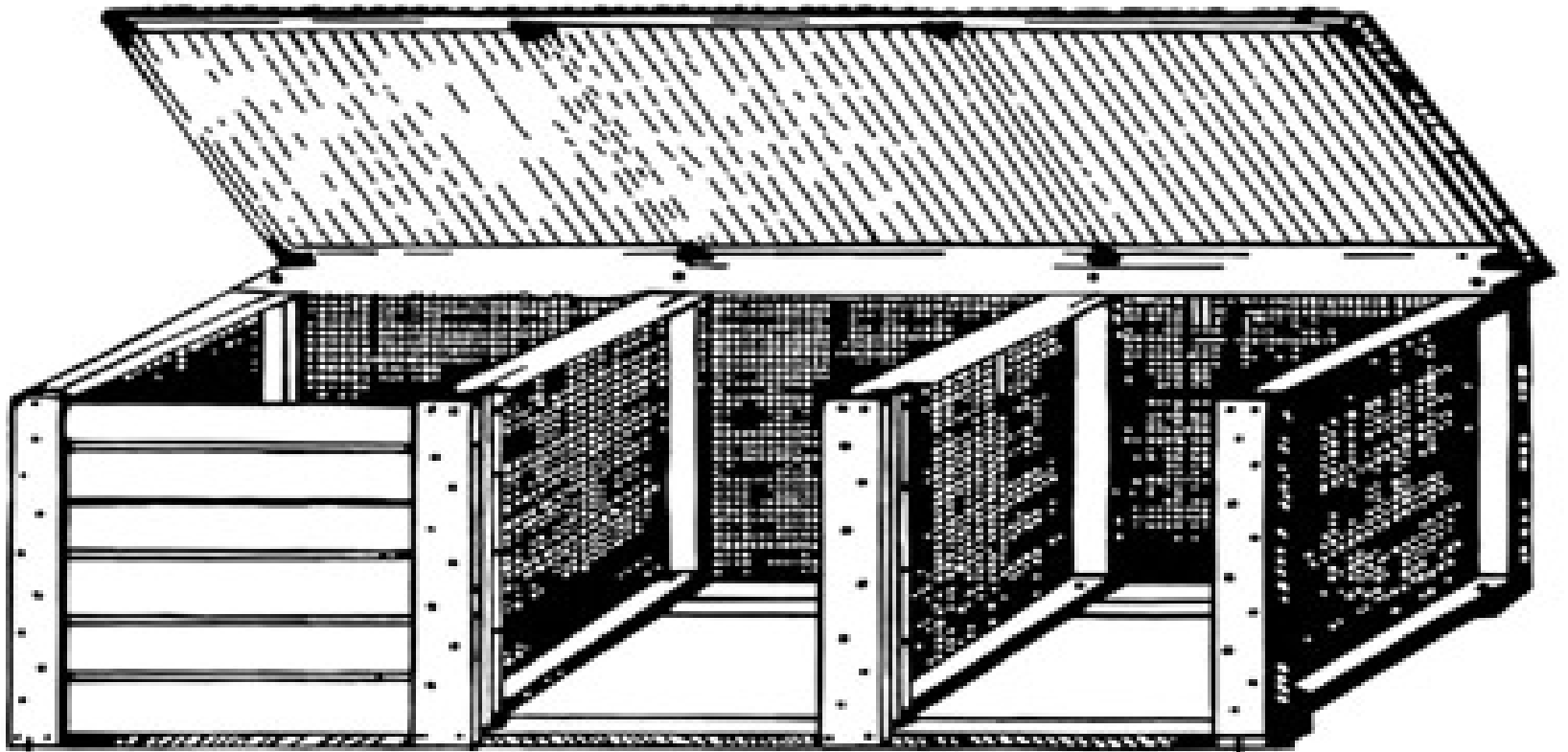
Cons

- ~ **Decomposes slowly**
- ~ **Can cause odors**
- ~ **Does not heat up**
- ~ **Can attract pests**
- ~ **Does not kill weed seed**
- ~ **Compost may be less nutrient-rich**



Backyard Compost Bins

3 Bin System





Backyard Compost Bins

Earth Machine



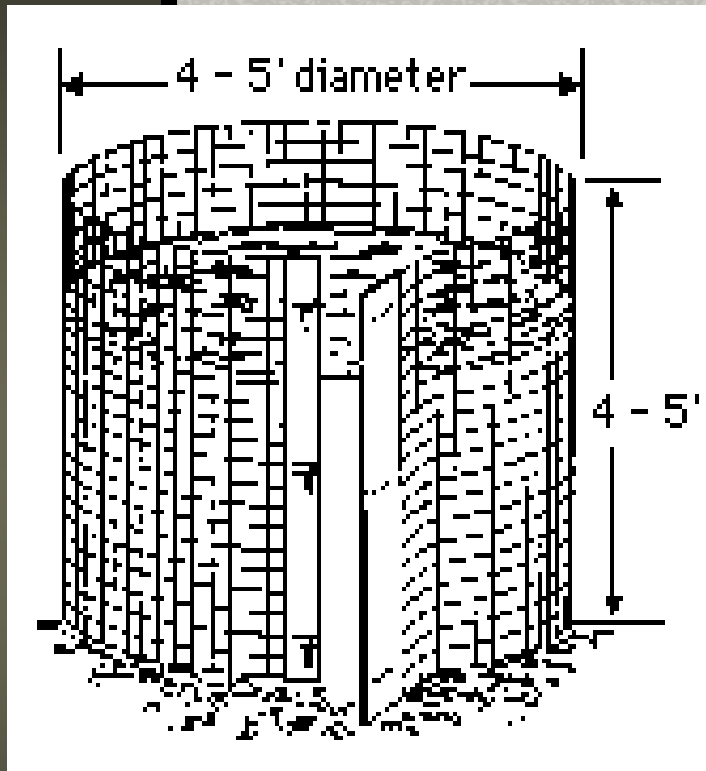


Backyard Compost Bins **Garden Gourmet**



Backyard Compost Bins

Simple Bins





Backyard Compost Bins

Tumbler





Backyard Compost Bins

BioStack



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Accessories

- ~ Pitchfork
- ~ Kitchen food collector
- ~ Thermometer
- ~ Aerator (Wingdigger)





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Trouble shooting

Backyard Composting

Made Easy



Other Options

- ~ Sheet Composting**
- ~ Trench**
- ~ Grass-cycling**



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Vermicomposting



Backyard Composting Made Easy

Compost Educational Resources

How to compost.org – Educational Resources

http://www.howtocompost.org/cat_education.asp

Cornell Composting in schools - Quiz

<http://compost.css.cornell.edu/quiz1.html>

NC DENR, Division of Pollution Prevention & Environmental Assistance

<http://www.p2pays.org/compost/>

(This web site will link to most major compost sites)