

Composting Basics

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Potter County Master Gardeners

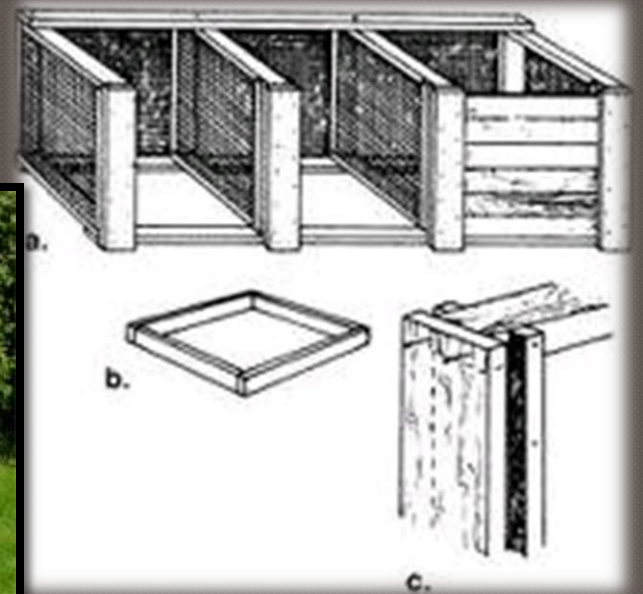


General Compost Information

If a compost pile is properly made and maintained, an excellent composted material could be ready for use in 90 to 120 days.

In our climate moisture is the key -
- covering the pile helps immensely.

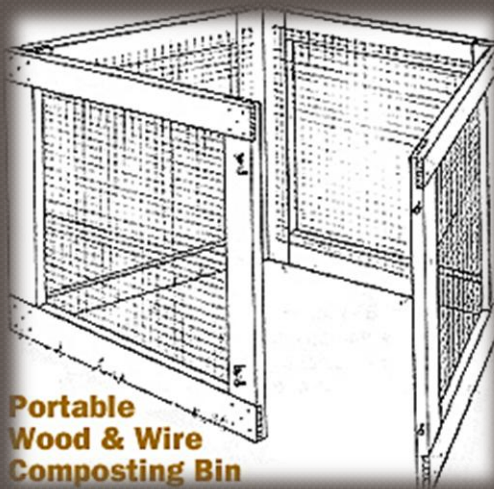
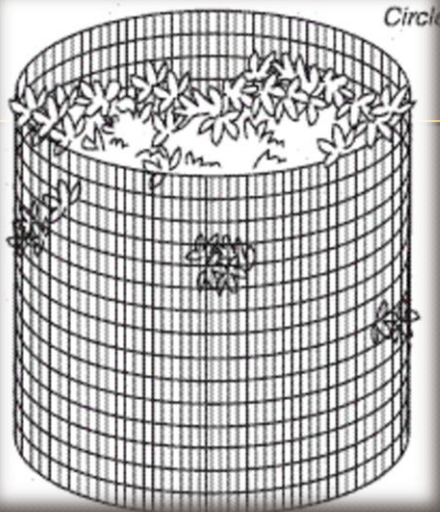
Hand made or commercial –
compost containers
come in all sizes and
types



- It is absolutely essential that the compost pile be well ventilated so that there is sufficient air flow of gases between the atmosphere and the interior of the compost pile. And that there is adequate moisture.

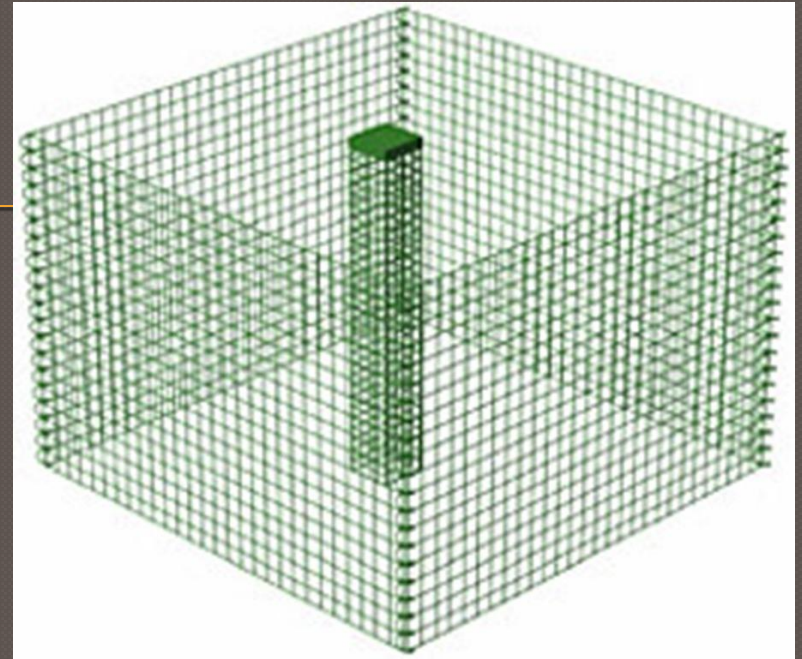


Some compost bins are easy to make.



**Portable
Wood & Wire
Composting Bin**













How do you know if the pile is
being kept moist enough?

It should feel like a squeezed out
sponge. Too much water
smothers the micro organisms
and there is
odor.





One way to turn compost is with a compost turning probe.

This probe is a tool about the size of a walking cane. It has two wings that fold into a streamlined point when pushed into the pile, but spread open when pulled up. On the up stroke, the pile is torn open, and some of the bottom is brought toward the top.

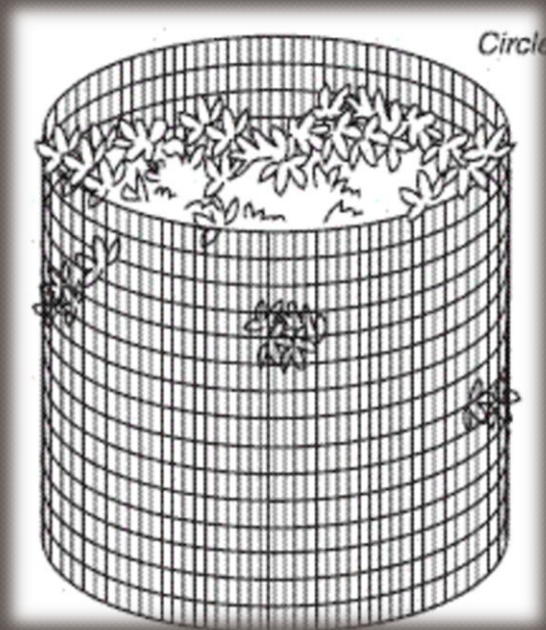
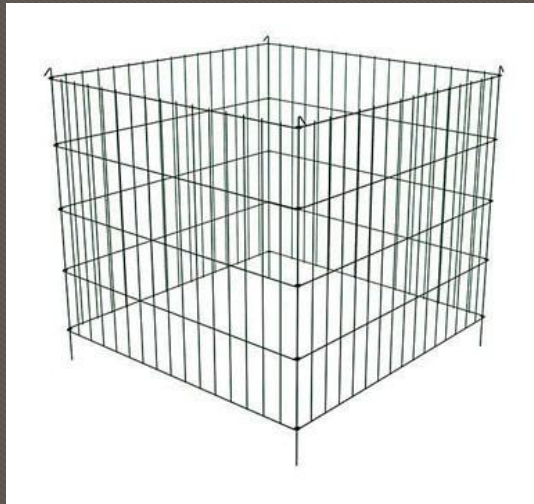
This doesn't require a lot of muscle.

Other method of turning:

The old
fashioned
method



Another easy way to turn a wire enclosed compost pile is to unpin the wire cage and take the wire from around the pile. Pin it back together, now empty. Replace the compost in the repositioned frame.



Some people think the finished product of their composting should be crumbly like old leaf mold. However, for gardening purposes, it is not necessary to allow the material to completely decompose since final decay can take place in the soil.

When compost is added yearly, the soil will become fluffy, easy to work, fertile and will hold soil moisture better.



- Although creepy-crawly, insects work to decompose the plant matter. Some, such as pill bugs, earth worms and ants, will be in the compost pile. Encourage them. They do work for you.
- Making compost is as much an art as it is a science.



The best way to learn to make good compost is by doing it and not giving up.

TRASH OR TREASURE?

Is plant debris valuable?
It can be!



Exactly What Makes Compost:

Correct carbon to nitrogen blend:
25-30 parts carbon (brown)
1 part nitrogen (green)

Ideally you would mix the parts of dry brown ingredients (or equivalent) and moist green ingredients as you create the compost pile. Maintaining this exactly is not necessary. Estimating will work.

Fast Track – 14 day Compost:

- If there is one secret to making fast compost, it is finely shredding the carbon rich ingredients (fallen leaves, hay, straw, paper and cardboard).
- Shredding increases the surface area that the compost microbes have to work on and provides a more even distribution of air and moisture among the materials.
- The type of chipper or shredder used is not important, provided it can handle the materials.
- Rotary lawn mowers can also be used for shredding leaves by running the mower back and forth over a pile a few times.

- Nitrogen rich green materials such as manure, vegetable wastes and green plant prunings can also be shredded. Soft succulent materials do not need to be shredded because they break down very quickly in the compost pile.
- If you don't have a chipper or shredder you can chop your materials into $\frac{1}{2}$ " to $1\frac{1}{2}$ " pieces with pruning shears. The results will be worthwhile.

Some Nitrogen Ingredients:

Green yard waste	10-25:1
Kitchen vegetable trimmings	10-50:1
Blood meal	3:1
Grass trimmings (thin layers!)	10-25:1
Old plants	20-30:1
Hay	10-25:1
Coffee Grounds	300:1
Weeds (no seeds)	20:1
Bone meal	6:1
Stock manure (cow, goat, horse)	20-60:1

**Ratios
N to C**



Some Carbon Ingredients:

Dead leaves 30-80:1

Straw 150:1

Coffee grounds (incl. filter) 20:1

Tea bags 10-20:1

Shredded paper (no colors) 150:1

Wood chips – Bark 100-300:1

Sawdust (sparingly) 100-600:1

Newspaper (Shredded/torn) 150-200:1

Cardboard 600:1

Toilet paper, paper towels 100-300:1



Ratios
C to N

Anything Else:



A shovel full of dried, crumbled manure
Microbial jumpstart-

Has very high nitrogen content

Well rotten manure 500-600:1 N/C

Dirt can be added (thin layers work best)-
adds micro-organisms that boost the
composting process

A cup or two of dried molasses (for microbes)



Commercial compost starters are costly and not necessary if you mix ingredients well.

Unwise Ingredients:

- No dog, cat or human poop (pathogens)
- No meat or meat products (draw in critters)
- No dairy (more critters and possible odor)
- No fat (kills the good microbes)
- No pickled vegetables/vinegar (also kills microbes)

Suggestions:

- ◉ Create a compost pile at least 3'x3'
- ◉ Mix all ingredients as you put them in the pile or stir as you go.
- ◉ Dampen as you go – after every mixing of materials.
- ◉ Keep watch – 120-130 degrees that lasts will create compost. 160 degrees is a hot, fast compost pile.
- ◉ Covering the pile helps hold moisture.

Small Scale - Anyone Can-do-it Composting:

For gardeners in the city or with limited space, composting may not be possible on a large scale.

Try pre-composting with small quantities of grass clippings and/or leaves.

Gary's Pre-Composting Success

Pre composting Conclusions (so far):

Started both 100% fresh cut grass clippings and a 50-50 mix of mowed oak leaves and fresh clippings in separate tight sealing trash cans. One black rubber; one bright metal; both in all day sun.

Black rubber produces noticeably more heat. But use what you have. 100% grass needs very little water and then only 3-4 days after going in the can, can go into compost bin in 8-12 days.

It will be digested to a point that would have taken at least twice as long if it had gone straight to compost bin.

50-50 grass clippings and mowed oak
leaves requires a few tries to get correct
amount of water onto this mix.

Water it lightly when it goes into can. Extra
water making it to the bottom is OK and is
a weaker colored compost tea than the tea
that leaks out of my compost bin.

This mix takes twice as long to come out of can.

This mix then competes well with clippings in the compost bin.

Expect to have completed compost twice as fast with either material.

Expect this mix to provide a better compost than the clippings alone.

It does not have the tendency to clump
together when added to compost bin as do
the clippings alone.

Pre composting is well worth the additional
effort.

FOR THE ADVENTUROUS

GARDENER

TRY
VERMICULTURE

Vermiculture: Worms

VERMICULTURE

- ◉ Who
- ◉ What
- ◉ When
- ◉ Where
- ◉ Why



VERMICULTURE: WHO

Although not new, vermiculture is gaining popularity.

Inexpensive
Effective

Takes little space
Is fun

Virtually odor free pets
Yields “black gold”



VERMICULTURE: WHAT



Vermiculture is growing red wiggler worms (which multiply quickly) by feeding them table scraps, shredded computer paper, newspaper and more.

They love banana peels and coffee grounds with filters.

VERMICULTURE: WHEN

Raising and feeding red worms can be done anytime of year. They are easy to keep happy.

Give them food, bedding warmth or shade and they flourish.



VERMICULTURE: WHERE

Growing red wigglers is simply a matter of their comfort and happiness.

Feed them regularly – but not too much and don't let their abode get too wet.

Keep them warm in winter and cool in summer – kitchen, garage, patio...

VERMICULTURE: WHY

Red wigglers are not expensive to buy or keep and they are very interesting.

They eat your garbage: less trash odors!



Do it because it is natural, fun and you get fabulous compost for houseplants or garden.

Now Flourishing!!

- ◉ 2000 Red Wigglers
- ◉ A beautiful commercial “condo”
- ◉ A moist, inviting bedding material
- ◉ Worms will eat my garbage!
- ◉ SUCCESS!

New Home:

The new RW Condo:

In the kitchen
Odorless
Easy to tend



Feeding Time:

Worms will consume almost any fresh veggie/fruit clippings, peelings, coffee grounds but dislike eggshells (sharp) and do not eat greasy foods, meat, bones of vinegary things.



Ahh! Home Sweet Home

RWs took to
their new
condo quickly
and settled in.



After 1 Month:

Happy as clams!



After 6 months:



If you are still not
sure.....

Here is a nearly
instant - fast track
composting method.

EASIEST EVER COMPOSTING

Imagine, instant composting...
or nearly so!

1. Collect your daily vegetable scraps



2. Combine batches with water in a blender
3. Blend well to form a pourable liquid



4. The resulting blended mix is great for “cold” composting.

5. Simply pour into a trench in the garden and cover with soil. In just a few days it is doing work in the soil.



Also called Guerrilla Composting!!!”

Or simply chop/tear/cut into small pieces and fill a trench.

Then cover...

In nearly no time
you have enriched
the soil.



NOW ASK YOURSELF:
IS THERE *ANY REASON*

WHY YOU SHOULDN'T
COMPOST?

Even a small amount will add
tremendously to your garden soil's
health

One last parting shot!

CONSIDER

AQUA

COMPOSTING

Home Scale Aquacomposting:

Empty your fresh water fish tank water into the garden or mix with water to spread the “benefits”. Fish waste is full of plant nutrients.



Janean Thompson

Master Gardener – Potter County

