

Get Your Veggies Growing

Preparing your soil and yourself

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Backyard Harvest

Motivations

- Food miles
- Job scarcity
- Centralized food production and distribution
- Lack of food quality
- Transform the fear

Personal benefits of edible gardening

- Learn responsibility
- Encourages creativity and analytic thought
- Teaches patience
- Experience nurturing feelings
- Non-threatening
- Reduces stress and tension
- Exercise—from gentle to gym membership replacement
- Caring for plants inspires hope

Personal benefits of edible gardening

- The freshest food
- Decrease negative environmental effects
- Knowledge about food and what goes into it
 - For those seeking increased health benefits
 - From a social justice standpoint
- Increased food security
- Connectedness to seasons, non-human world
- “Biophilia”: zoologist Edward Wilson
 - "The connection that human beings subconsciously seek and need with the rest of life."
- Social relationships
 - Eating—we all do it

Choosing a site

- South or southeast facing is best
- North facing garden not an option
- Watch the site in different seasons
- Keep away from large trees
- Good air circulation prevents disease
- Too much wind dehydrates

Choosing a site

- Addressing the country/city fallacy
- Avoid exposure to pressure treated, railroad tie areas exposed to old paint
- Avoid old driveway areas
- Research site history
- Get your soil tested
- Consider building a raised bed
- Wash your vegetables and hands

Soil Testing

Two Main types

- Nutrient tests
- Contaminants test
 - Heavy metals
 - Polyaromatic Hydrocarbons
 - VOCs

When reading test results

Bear these assumptions in mind:

- Designed to protect 100% of pop.
- Most environmentally sensitive
- Food not properly washed
- Hands not washed
- 100% of your diet from this soil
 - For 50-60 years
- 100% of contaminant taken up into plant
 - Range is one third to one ten-thousandth

The environmental risk
guidelines are created so that if
100% of these factors are true,
you would still be safe

What to do with the sod?

- How much time do you have?
- Mulch over top—lasagna gardening
 - Not suitable for small seeded plants or dense plantings
- Turn sod in
- Remove sod and compost

Feeding the soil

- Conventional agriculture
 - Soil as plant-holding medium
- Healthy soil produces healthy plants

Soil is a living community

- Minerals
- Worms, insects, bacteria, fungi, slugs, snails, nematodes
- humus

Compost – Life from death

- Humus—the “finished” product of composting
- Improves both sand and clay
- Increases soil’s moisture retention
 - 100 lbs. Humus holds 195 lbs. water

Soil Structure

- Dig in and look at your soil
- Aggregate/crumb formation in soil
 - Imagine a good soil as a bed of marbles
 - Imagine a poor soil as fine marble dust
- Living fungi, microorganisms and earthworms all help soil to crumb
- Compounds found in decayed organic matter increase the stickiness of the crumb (humic acids)
- Surface crusting

Aeration & Drainage

- Reduces erosion through increased drainage ability
- Increases air levels in soil
 - Many soil processes rely on oxidation
 - Life in the soil—soil organisms and growth of beneficial fungi
- Increased mass of aggregate—less resistant to wind erosion

A continuous process

- But, crumbs broken down by bacteria
 - So, feed the soil every one-two years with compost!
- How much?
 - 200 – 300 pounds/ 100 sq ft in first year
 - Thereafter—half of that amount
 - Too much of a good thing--carrots

Nutrient release

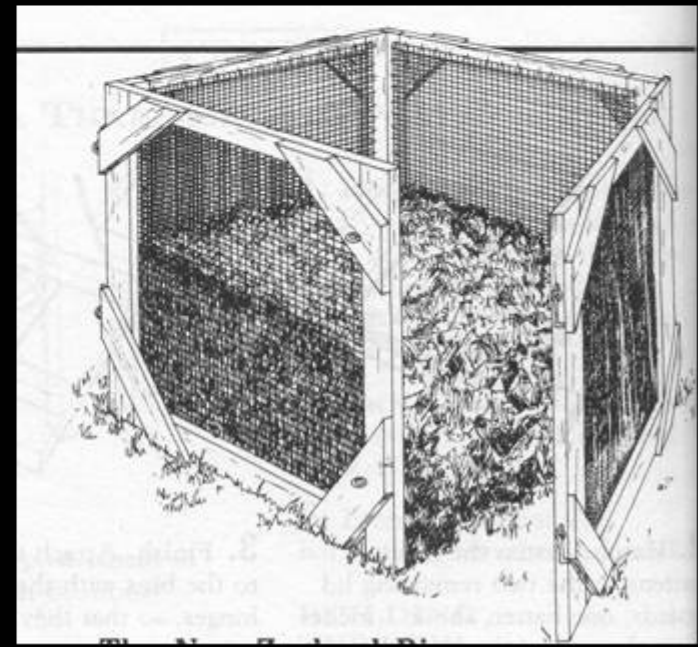
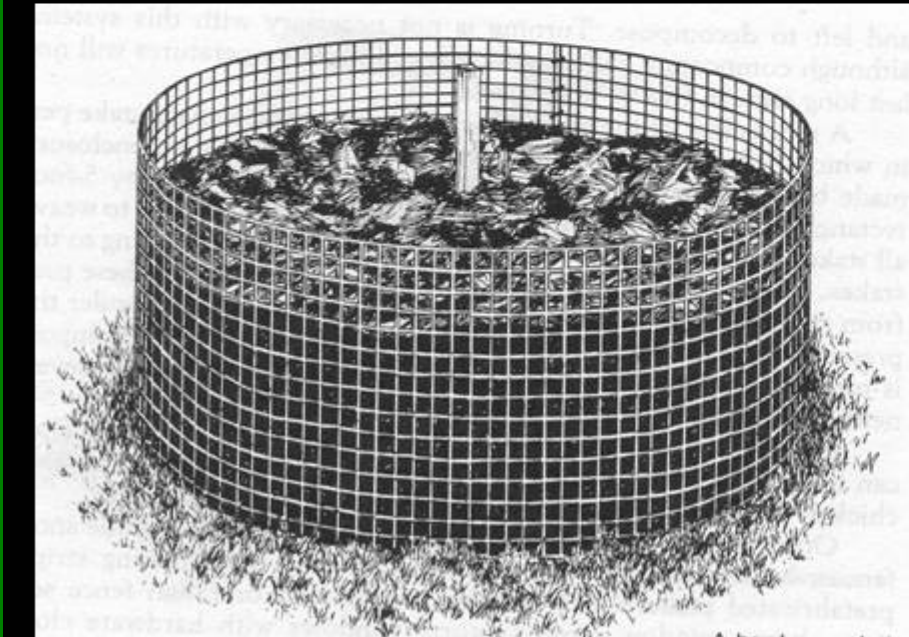
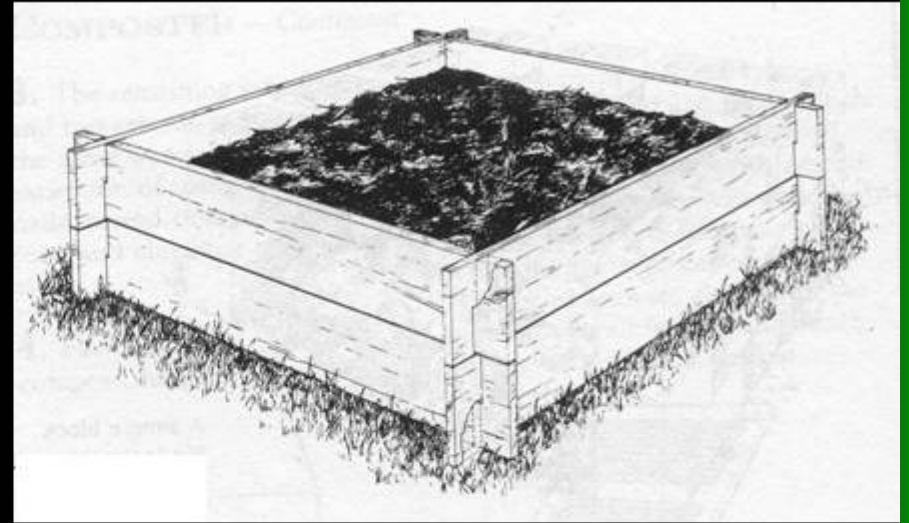
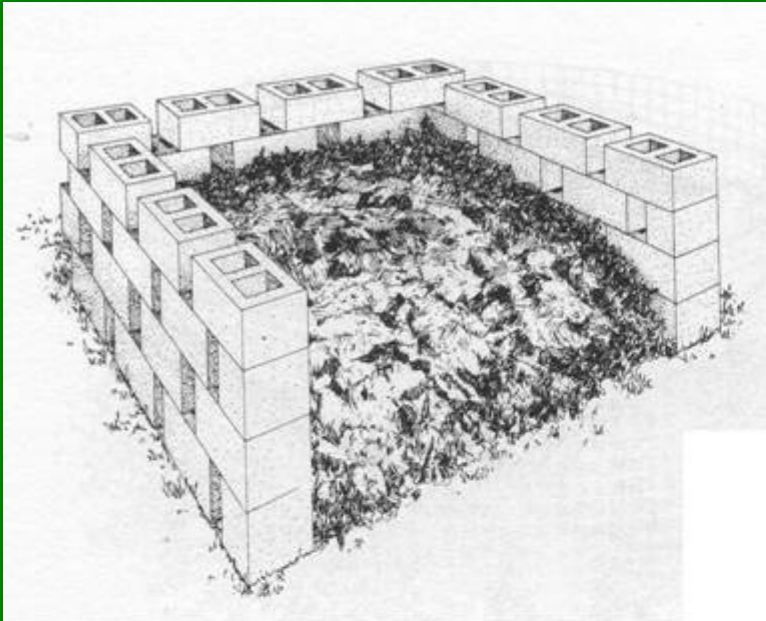
- Holds nutrients in the soil—not leached
- Compost releases nutrients slowly
- Faster when warmer—when plants need more
- Plants in poor soils
 - Fast growth with rain
 - Suffer in drought

Compost—How to Make it

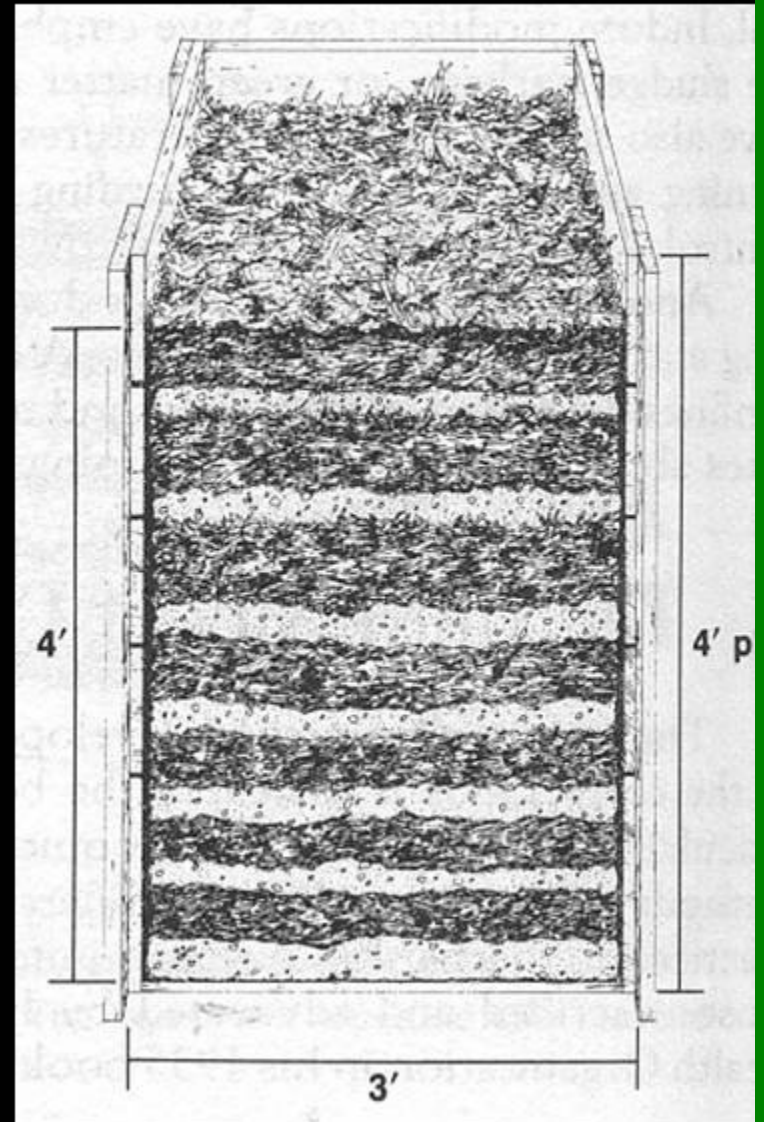
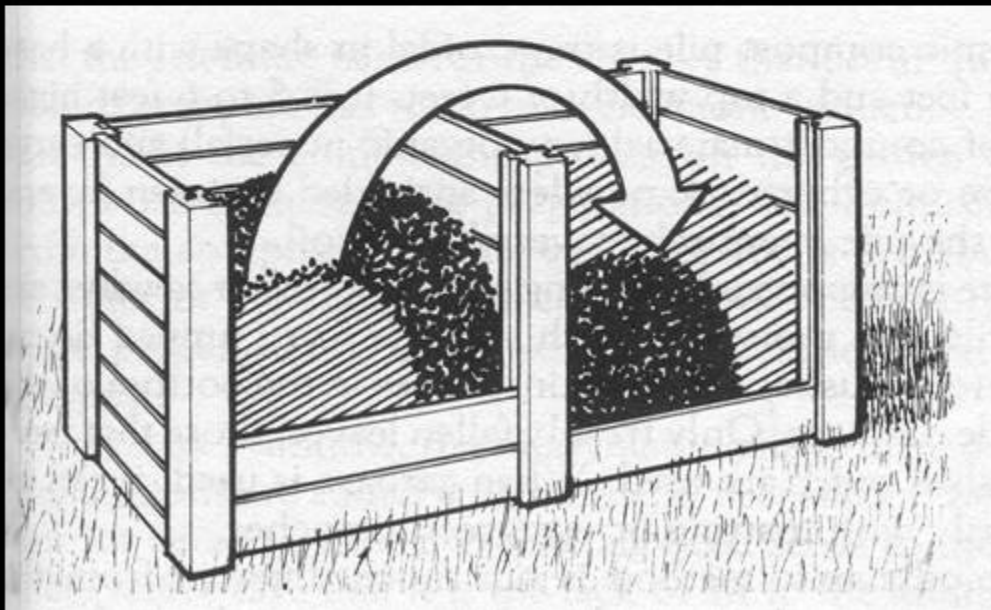
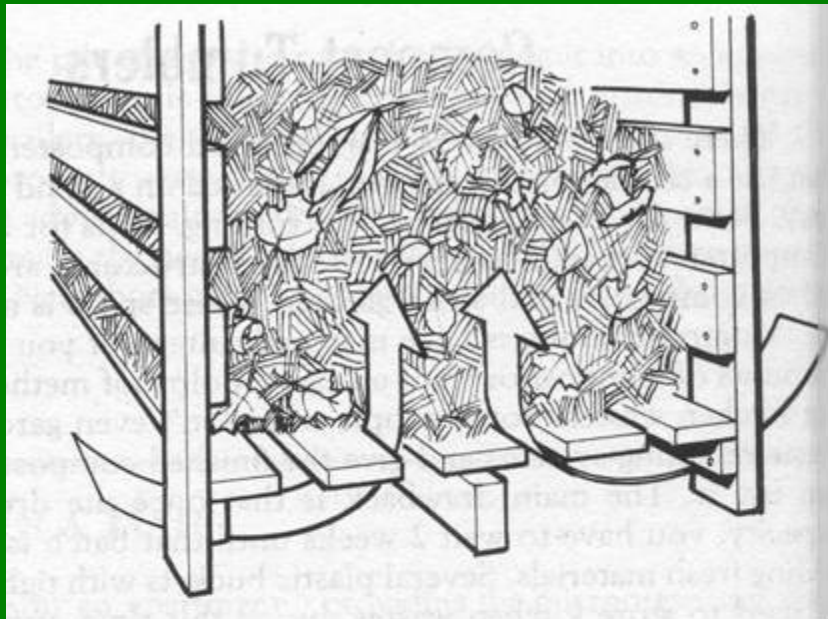
- Aerobic vs. anaerobic
- Heat—thermophilic pile
 - To turn or not to turn
- C-N ratio
- C is for Carbon -- Browns
- N is for Nitrogen – Greens

Compost Ingredients

Do s	Don'ts
Raw vegetable & fruit scraps	Meat or bones
Grass clippings	Cheese, Dairy
Wood ash	Oil
Weeds (no seeds)	Cooked vegetables
leaves	Cooked grains
Hair, fingernails	Twigs & woodchips
Eggshells, nutshells	Hay
straw	sawdust



Roadie Press, 1992.



Press, 1992.

Worm Composting— Vermicomposting

- Red Worms a.k.a. Red Wrigglers
 - Need high levels of organic matter to ingest
 - Not suited for garden soils like earthworms
 - Will not survive well in hot compost piles
 - Well suited to indoor worm-compost bins

Vermicomposting

- Bins and worms are commercially available
- Plastic container
 - Holes in bottom, tray to catch liquid, tight lid
 - Bedding—mixture of wetted peat moss, loam and compost
 - Worms
 - Cover material—burlap, cheesecloth layers or wetted newspaper
 - Cover food waste with cover material—start slow
 - Start a new box within a few months

Container Gardening

- Best if south or southeast facing
- Flower pots, pails, flats, wooden boxes, plastic bags
- Size of container
- Water frequently
- Make sure water can drain out of bottom

Size of container

- Large or deep containers—tomatoes, eggplant, beans, squash, zucchini, cucumber, root vegetables
- Small containers—herbs, greens, miniature peppers

Mulches

- Saves on weeding
- Preserves soil moisture
- Adds to organic matter
- Straw, leaves, pulled weeds, black plastic
 - Applied after plants achieve sufficient height
 - Can attract snails and slugs in wet year

Community Gardens

- More than 10 in Hamilton
- Range in price
- Great way to meet other gardeners
- Learning and social events
- Beautify your neighbourhood
- Check out Hamilton Community Garden Network's directory

Gratitude

- Dundas In Transition
- My teachers
- Volunteers

- Share what you know,
Share what you grow

- Take it slow
- Enjoy yourself

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