



# **Composting**

*Let's talk about it...*



# Backyard Composting

## What and Why

- Composting is managing the natural recycling system of decomposition which converts organic material into humus
  - It benefits you, your town, and the environment
    - Reduces the garbage that is sent for disposal resulting in reduced disposal costs
    - Saves you and your town money in reduced soil purchases
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# Other benefits

- Produces valuable soil supplement by enriching the soil – it adds essential nutrients, improves soil structure, increases moisture and nutrient retention in the soil. Plants love compost!
  - It's one way you can help the environment while converting your organic waste into a resource – turning your spoils to soil
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# General info

- Enclosed compost piles are preferable to open piles
    - keeps out pests, holds heat and moisture in, and have a neat appearance
    - In urban areas, a rodent resistant bin must be used
      - (A secure cover and floor and openings no wider than one half inch)
    - Set up bin in a convenient, shady area with good drainage
    - A pile that is about 3' x 3' x 3' helps maintain heat generated by the composting organisms throughout the winter
      - Although a smaller pile may not retain heat, it will compost
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# Choose what works for you

- Purchase a compost bin or build one made of wood, wire, pallet, concrete blocks, or just use a garbage can with air holes drilled in and a lid
- One good opportunity - You can order a bin, upon availability, from the Town of Wellfleet at a reasonable price and it looks like this:



- An average household can compost at least 500 pounds of organic material each year in this bin
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# Bins you can make yourself

## Turning Bins



A series of three or more bins allows you to make compost in a short time by turning the materials on a regular schedule.



## Barrel Bin

These bins can easily be made from plastic garbage cans.

Wire bins can also be made for composting.

## Wire Bin





# Who does most of the work?

- **“Compost Critters”** – bacteria, molds, fungi, earthworms, and insects – do most of the work of composting
    - “Compost Critters” live in soil and decomposing organic matter
    - Introduce them to your pile by sprinkling a few shovelfuls of garden soil after every 12” of fresh material
    - If you don’t have garden soil, use decomposing leaves or partially finished compost instead
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# Food Web of the Compost Pile

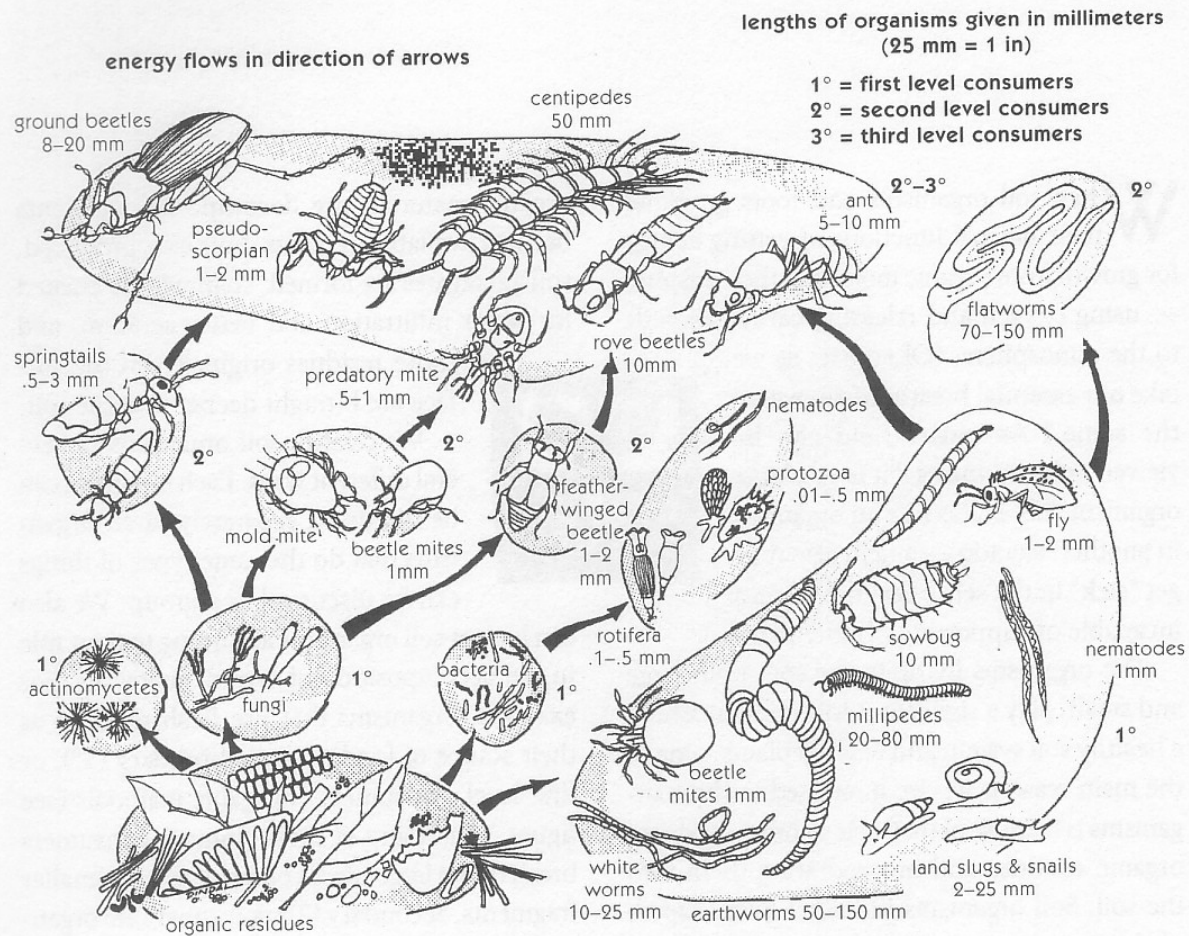


Figure 3.1 Soil organisms and their role in decomposing residues. Modified from D.L.Dindal, 1978.



# Compost Critters

They need what we need...

- Food, Air, and Water
    - Food for compost critters:
      - Our organic “waste” materials – leaves, grass clippings, fruit and vegetable scraps, etc
      - “Browns” = woody materials such as leaves, straw & paper products (high carbon)
      - “Greens” = moist materials such as grass, fruit & vegetables (high nitrogen)
      - Try for a “recipe” of 3 parts “Browns” to 1 part “Greens” to prevent odors
      - A pile of “Browns” only is fine; a pile of “Greens” only gets stinky
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# also...

## – Air

- Compost “critters” need oxygen (like we do)
  - Lack of oxygen slows down the composting process and causes odor
  - Turn, fluff or stir the pile occasionally
  - An alternative to turning – build air passages into the pile with coarse materials (like straw, woodchips, stalks) or a perforated pipe
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# and...

## – Water

- Keep the compost material damp (like a wrung out sponge) If it's dripping wet, decomposition will stop and it can become smelly
  - If the leaves in your pile rustle when stirred, they're too dry
  - Replace moisture as needed with rain, snow or the hose – remove the cover when it rains or snows, or drill holes in a solid cover
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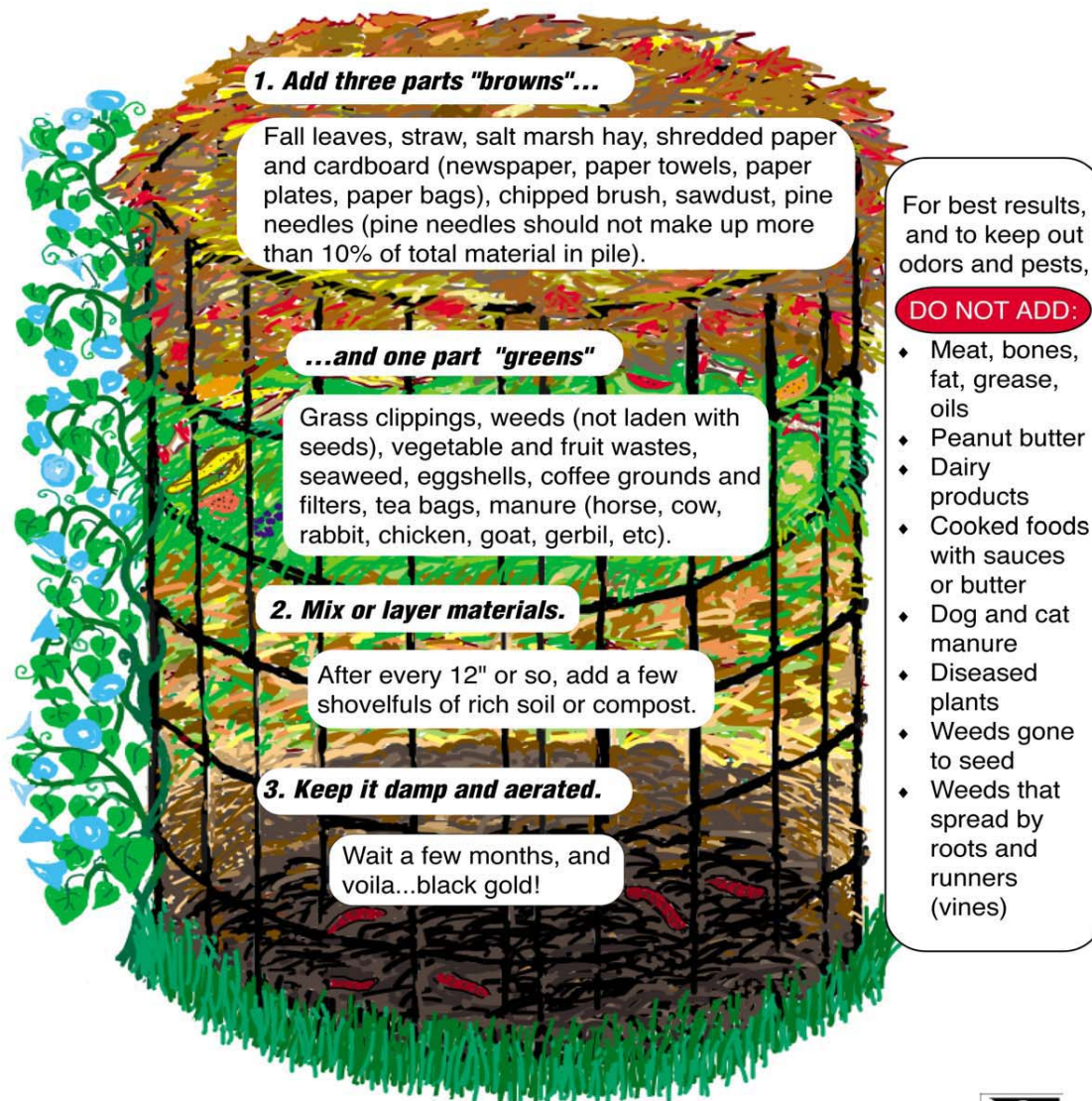
# What not to add...

- For best results and to keep out odors and pests do not add:
    - Meat, bones, fat, grease, oils
    - Peanut butter
    - Dairy products
    - Cooked foods with sauces or butter
    - Dog and cat manure
    - Diseased plants
    - Weeds gone to seed
    - Weeds that spread by roots and runners (vines)
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# Composting is easy!

To make compost, just follow these simple steps:





# Getting Started

- Set up bin in a convenient, level area with good drainage
    - in sun or shade
  - If you bin comes with instructions, follow them for best results
  - Simplest method:
    - Fill bin three quarters full with damp leaves and bury food scraps under the leaves for the next 6 months
    - Make sure leaves are damp when added or they will not break down. It's tough to dampen the lower layers of leaves in a dry pile. *(Tip! Collect leaves for composting after it rains)*
    - Sprinkle garden soil or compost (finished or partially finished) after every 12" of fresh material
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# More Tips for Success

- If composting vegetable scraps, bury them in the center of the pile
  - If composting grass clippings, stir them into the leaves
    - If you don't have leaves, substitute pine needles, hay/straw, ripped up newspaper, paper towels, sawdust or any other "Browns"
  - Turn or stir pile when burying food scraps – once a month, once a season, or once a year (frequent turning speeds the process - but is not required)
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# and...

- A full bin holds the most heat – fill it up in the fall and try to keep it full during cold weather
  - Keep a few bags of leaves on hand to add throughout the year as needed
  - If you don't have leaves, a bale of old hay or straw near the bin makes a convenient source of "Browns"
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# When is compost ready, and how do I get it out?

- Compost should be ready to use in 6 months to a year
    - – it will look like dark, crumbly, brown soil
  - Finished compost will be at the bottom of the pile
  - Small amounts can be harvested out the little door of the Earth Machine (if that's the bin you use)
  - For large amounts, lift the bin up off the pile, push aside top layer of material, remove the finished compost underneath
  - Refill bin, starting with the unfinished compost you removed from the top layer
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## Is there an even easier way to harvest compost?

- Adding another bin or two makes harvesting compost easier
  - After filling your 1<sup>st</sup> bin for 6 months, start a 2<sup>nd</sup> bin – fill that one for the next 6 months
  - Your 1<sup>st</sup> bin will now have mature compost ready to harvest and use – you can start refilling it while your 2<sup>nd</sup> bin “cooks”
  - Continue to alternate bins, adding new material to the “fresh” bin while letting the other “mature”
  - This system works well with whatever style of compost bin you use
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# **How do I use my “Black Gold”?**

- Compost is excellent for reseeding lawn and can be spread ¼ inch deep over entire lawn to rejuvenate the turf
  - Spread compost on bare patches in lawn before reseeding – seeds will germinate faster and establish quickly
  - Make organic potting soil – mix equal parts compost, sand, and loam. You may screen it to remove large particles – these can go back in the compost pile
  - Compost can be added directly to houseplants as need to top off and rejuvenate potting soil
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# **No yard to put a bin?**

- If you have no yard for a compost bin, try indoor composting with red wiggler worms helping out
- Make a worm bin!
- But that's a story for another day.

If you really want to make a worm bin, see MassDEP's vermicomposting handout or check online.

<http://www.mass.gov/dep/recycle/reduce/vermi.htm>

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# What's the easiest way to get rid of grass clippings?

- Leave them on the lawn where they help fertilize the grass and improve the turf
  - Easier than collecting and composting them
  - *Much* easier than bagging them and taking them to the Town's compost area
  - Best of all, it's *best for the lawn!*
- Turf experts nationwide agree – clippings do not produce thatch
  - They are 80% water and decompose quickly
- Give it a try –you'll never bag clippings again!

For more information:

<http://www.mass.gov/dep/recycle/reduce/dtg.htm>

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# Now you know...

- Compost happens! An easy, cost-effective and environmentally sound thing to do
  - Stop by Wellfleet Town Hall for a MassDEP Home Composting brochure that includes all this information and more or visit <http://www.mass.gov/dep/recycle/reduce/composti.htm>
  - Don't forget the Town of Wellfleet Transfer Station and Recycling Center (TS/RC) accepts yard waste for composting
    - Grass and leaves, Christmas trees, branches that are 6' long x 2" in diameter **maximum**
      - No vines, tree stumps or large timbers, please
- For more info on what is accepted at the TS/RC visit the Town's Recycling program at [www.wellfleetma.org](http://www.wellfleetma.org) and click on the Recycling tab
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