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
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
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
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
Bins you can make yourself

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 Bin
Wire bins can also be made for composting.

Graphics courtesy of the Massachusetts Audubon Society, the Seattle Solid Waste Utility, and the Massachusetts Dept of Environmental Protection
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
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
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
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
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)
Composting is easy!

To make compost, just follow these simple steps:

1. **Add three parts "browns"...**

   Fall leaves, straw, salt marsh hay, shredded paper and cardboard (newspaper, paper towels, paper plates, paper bags), chipped brush, sawdust, pine needles (pine needles should not make up more than 10% of total material in pile).

   **...and one part "greens"**

   Grass clippings, weeds (not laden with seeds), vegetable and fruit wastes, seaweed, eggshells, coffee grounds and filters, tea bags, manure (horse, cow, rabbit, chicken, goat, gerbil, etc).

2. **Mix or layer materials.**

   After every 12" or so, add a few shovelfuls of rich soil or compost.

3. **Keep it damp and aerated.**

   Wait a few months, and voila...black gold!

---

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)
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
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)
• 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”
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
Is there an even easier way to harvest compost?

• Adding another bin or two makes harvesting compost easier.

• After filling your 1st bin for 6 months, start a 2nd bin – fill that one for the next 6 months.

• Your 1st bin will now have mature compost ready to harvest and use – you can start refilling it while your 2nd 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.
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.
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
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
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](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