A NATURAL PART OF YOUR GARDEN

The parallel that exists between composting and wildlife gardening make it a natural addition to any nature lover's garden. Both processes encourage nature and its creatures to enter an artificially-created environment. Hopefully, the organisms find conditions suitable and stay to colonize. In fact, maintaining healthy insect and microorganism populations is the key to composting. There is something magical about compost. In goes the waste — trimmings, scraps, cores, dregs, mouldy bits and pieces — and out comes a valuable resource with a natural soil conditioner and fertilizer that is rich, earthy, and sweet smelling.

Because one can never have too much compost, we are focussing here on how to compost actively and efficiently. The outdoor container model, despite being one of the most common, continues to challenge many would-be compost-makers, however determined they are. May the following information guide you to success with your composter.

WHY COMPOST?

Whether gardener, wildlife enthusiast or concerned citizen, it makes practical sense to compost. Compost is humus, the earthy end-product of the decomposition of organic matter. Home composting emulates this process, which occurs at a slower pace in nature. It acts as a soil conditioner that aerates your soil and improves moisture retention. Any type of soil benefits, regardless of clay or sand content. Compost is an organic fertilizer that is easy and safe to apply. Over-application of man-made fertilizers can produce environments which become "toxic" to plant growth. That won't happen with compost!

HOW DOES IT WORK?

To work with your composter and not against it, it is vital to understand a few basics about the process. Large chewing insects begin breaking down the organic material. The smaller chewing insects handle finer matter while the microorganisms (bacteria and fungus) complete the process of creating humus. Working together, these organisms are what drive composting. Like all living creatures, they require food, air, water and warmth to survive.

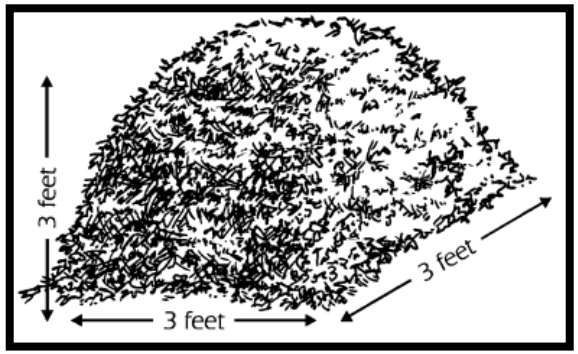
Their food is a mixture of "brown" matter (high in carbon) and "green" matter (high in nitrogen). Each type of organic material has its own carbon-nitrogen ratio. Green material (like waste produce, fresh plant and grass clippings, green weeds) is generally available year-round. Brown matter (like dry grass and fall leaves) is abundant in the fall, but can be made more accessible during the summer months by storing it in piles. In a pinch, shredded newspaper can be used.

For efficient decomposition, the carbon-nitrogen ratio of the material in your composter should be between 25 and 30 to 1. This means you need a lot more “brown” material to offset the richness of the “green”. This guide emphasizes the need for regular additions of high-carbon material throughout the composting process to maintain as high a carbon-nitrogen ratio as possible.

HOW DO I COMPOST?

A sunny location is best but shade will work, though at a slower rate. Use a large enough container, minimum 3 feet by 3 feet by 3 feet (27 cubic feet or about 1 cubic metre). Contact with the soil surface is crucial so that organisms have access to their food.

Add no more than a 3-inch layer of any particular material at any one time. Build with alternating layers of "green" and "brown" matter. Use sufficient material to maintain organism populations and levels of heat and moisture. Ensure that the pile remains moist, but not wet. Keep the pile aerated (e.g., turn with a fork once a week). Adding a few cupfuls of composted manure will speed up the process. Don't let the pile dry out!



WHAT TO ADD

Green

- Soft plant material from your garden including weeds (NOT Dog-strangling Vine!)
- Waste food scraps of plant origin
- Egg shells, tea bags, coffee grounds, bread
- Dryer lint, hair clippings, feathers
- Fresh grass clippings, green leaves
- Wood ash

Brown

- Newsprint (shred)
- Cotton or wool scraps
- Cereal boxes (shred)
- Dried leaves, grass clippings
- Kleenex

WHAT NOT TO ADD

- Meat, fish or milk products unless you want to attract "problem" wildlife
- Diseased plant material or plants that have gone to seed
- Pet litter or excrement
- Pesticides on grass or plants
- Biodegradable plastic

COMPOSTER TYPES

There are many instructions online for building you own bin, or you can buy moulded plastic bins.

- Closed container with lid and air holes
- Open wood frame or stacked brick structure
- Mesh framework, most suitable for full season composting (e.g., fall leaves, sod)
- Rotating container, into which garden soil must be introduced
- In-ground pit, with cover which can include meat scraps
- Worm composter (indoor, year-round)

WHEN IS COMPOST READY?

If you have been adding smaller or shredded items to your compost, flipping weekly and watering as needed, your compost will be ready when it resembles rich, dark soil. Some people like to have two piles on the go so one can be actively added to while the second decomposes all material fully. The compost will smell faintly sweet and be very loose and workable in your hands.

TROUBLESHOOTING COMPOST

Is your compost smelly? You might be adding too much "green" material, too much water and/or not flipping your pile sufficiently. Compost never feels wet – it feels damp or moist. If it is very rainy for extended periods of time, cover your compost with a loose tarp, secured with heavy objects.

Are materials not breaking down even after weeks? You may not have enough "green", pieces may be too large and thus require more time to break down, or your bacterial colony may still be growing. Try adding a shovel of regular garden soil to introduce more colonisers!

Are you being troubled by raccoons despite best intentions? At FWG, we sometimes have birds or squirrels' nest in the piles, but the lack of household food means no raccoons. Make sure you are only throwing out easily-compostable material, and chop scraps like melon peels up into smaller bits. You can cover the top of your pile with shredded newspaper as a deterrent to flies. You may need to create a wire enclosure with a top from chicken wire or wire fencing if all else fails.

REFERENCES

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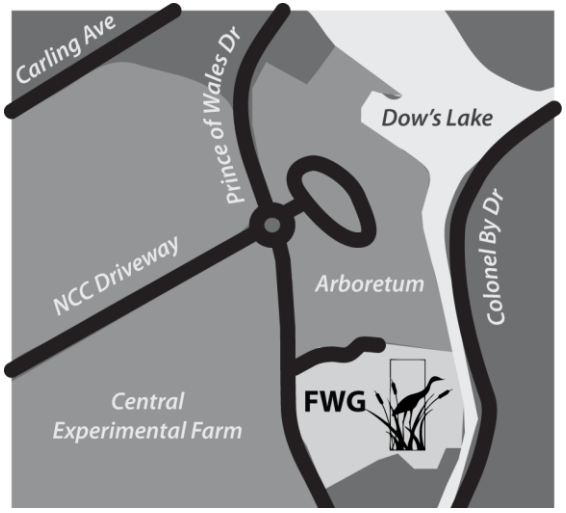
GARDENING FOR WILDLIFE

Loss of natural space is a major factor in the decline of many plant and animal species. The Fletcher Wildlife Garden was established in 1990 to encourage the creation or restoration of wildlife-friendly gardens and plantings in urban and rural areas. The Garden includes a variety of habitats: two woodlots, an open field, an amphibian pond, a ravine, and a butterfly meadow that is also a Monarch butterfly waystation. Our Backyard Garden demonstrates local plants suitable for various growing conditions. Our website and publications explain how you can use local plants to attract and support local birds, butterflies, pollinators, and other creatures; how to deal with invasive plants; and where to find other helpful information.

The Fletcher Wildlife Garden is a project of the Ottawa Field-Naturalists' Club, which has an agreement with Agriculture and Agri-Food Canada for the use of the land. We also liaise with the Friends of the Central Experimental Farm.



45° 23' 12" N 75° 42' 15" W

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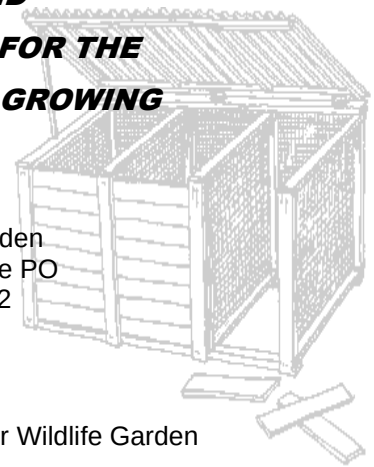
Fletcher Wildlife Garden

HOW TO

BACKYARD COMPOSTING

CREATE YOUR OWN SOIL FERTILIZER AND CONDITIONER FOR THE BEST GARDEN GROWING POSSIBLE!



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