COMPOSTING GUIDE

Compost improves soil texture and structure, helps soil retain nutrients, moisture and air for the support of healthy crops. The composting process involves four main components: organic matter, moisture, oxygen, and bacteria. We employ the Hot/Fast composting method in which decomposition is completed in about 3-4 weeks

RAW MATERIAL → **FINISHED COMPOST**

Bin System Set Up:

System has no more than 12 towers in process ~ 4-5 segments tall.
Stack segments together with the feet pointing up.
Reserve first three towers for RAW MATERIAL, and last two for FINISHED COMPOST.

Instructions:

Flip material from left to right (RAW MATERIAL to FINISHED COMPOST).
Towers in same Phase with similar dates can be consolidated into one tower. Add water if material is dry.
Update sign with date upon task completion.

Note:

Tasks should be carried out by Compost Team members only.

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Phase 1: Mesophilic Bacteria Proliferation

Initial decomposition is carried out by mesophilic microorganisms, which rapidly break down the soluble, readily degradable compounds. The heat they produce causes the compost temperature to rapidly rise. As the temperature rises above about 113°F the mesophilic microorganisms are replaced by others that are thermophilic, or heat-loving.

THIS COMPOST TOWER WAS **FILLED** ON:

Date: _____

Instructions:
COMPOST CREW ONLY: Mix brown and green materials – no weeds, vines or food. Add water if material is dry. Write date material was added on this sheet. **Do not add new material to this bin**, even if a bin is half full. 3 days after fill date, using a pitch fork or shovel, move contents to a Phase 2 bin, to the right

Phase 2: Thermophilic Heating Period

During the thermophilic phase, high temperatures accelerate the breakdown of proteins, fats, and complex carbohydrates like cellulose and hemicellulose, the major structural molecules in plants. As the supply of these high-energy compounds becomes exhausted, the compost temperature gradually decreases, and mesophilic microorganisms once again take over for the final phase of "curing" or maturation of the remaining organic matter.

THIS COMPOST TOWER WAS **FLIPPED** ON:

Date: _____

Instructions:
Add material from a single bin or consolidate multiple Phase 1 bins into a single Phase 2 bin. Add water if material is dry. Write date content was added on this sheet. After 3-5 days, use a shovel or pitchfork to move contents to a Phase 3 bin to cool and cure.

Phase 3: Cooling and Curing

The final cooling and curing phase is predominantly a fungal driven process. The fungi serve to degrade the more resilient forms of carbon (hemicellulose, cellulose and lignin), but the rate of decomposition has slowed.

THIS COMPOST TOWER WAS **FLIPPED** ON:

Date: _____

Instructions:

To cool off compost, use a shovel to move material to Phase 4 bin after 3 to 5 days. Write date content was added on this sheet. Do not add water. Compost will be ready for sifting when the raw materials are no longer recognizable and the pile no longer generates a significant amount of heat.

Phase 4: Sifting

Sifting helps filter the compost, removing large or unwanted objects such as rocks, plastics and debris like broken glass. The process improves the texture of the compost loosening it to allow for better water and air penetration. It can also remove old weed rhizomes – root systems that could grow new colonies of weeds.

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COMPOST IS CURING

READY TO SIFT

Instructions:
Sift compost using the provided wire mesh sifting screen, then add to a Phase 5 bin. Remove large sticks and add them back to chipper pile. Discard rocks into the garbage can or collect for use around the garden.

Phase 5: Complete

Plants require fertile soil for productive growth and disease resistance. Well-prepared soil is the foundation of your entire garden, adding compost will greatly improve your soil quality. Healthy soil literally has a life of its own with microorganism activity that break down organic matter to release essential nutrients that plants need. A little, goes a long way!

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SIFTED COMPOST

READY TO USE

Instructions:
About one month before planting, apply 1-2 inches of the finished compost and work it in gently to the top layer of your soil. Compost can also be used in the garden as a top dressing or mulch during summer. **Take only as much as you need, for gardeners use only.**