Composting. Can you dig it?

Composting is like cooking…

There is a basic recipe and many variations. Use roughly **half brown and half green** materials when building your pile.

- **Browns** (carbon) are leaves, small twigs, shredded cardboard, dried grass, weed free hay.
- **Greens** (nitrogen) are grass clippings, vegetable and fruit leftovers, green leaves and fresh vegetable garden clippings. Layer your pile every time and add oxygen by turning your pile. You can stockpile your greens and browns to the side of your pile separately and add them as needed.

A Community of Compost Critters

Your compost pile is home to many critters from microscopic bacteria to earthworms. These are nature's recyclers and belong in the compost pile. In fact, most of the work is done by fungus and bacteria. It is this initial biological activity of the microbes that causes the temperature to rise.

As the pile cools other organisms, i.e., fungi and actinomycetes (that cobwebby growth) show up.

As the cooling continues, invertebrates i.e., spiders, centipedes, millipedes and earthworms will appear. When you see these critters, it's a sign that the temperature has lowered. Sowbugs and pillbugs come in to get the leftovers that were not decomposed by others

Troubleshooting your compost pile

symptom	problem	solution
Bad odor	Too much moisture.	Turn pile. Do not water as often and turn the pile to dry out the material. Add leaves or other carbon-rich material.
	Too much nitrogen-rich material in the pile.	Add leaves or other carbon-rich materials.
Pile does not heat up.	Not enough water.	Add water.
	Pile too small.	Gather more material and build the pile at least 3′ x 3′ x 3′.
	Not enough nitrogen-rich materials in the pile.	Mix in fresh nitrogen-rich materials, such as grass or fruit and vegetable trimmings.
	Particle size too large.	Chop or grind material to reduce the particle size.
Attracts flies, rodents, or other pests	Protein-rich, fatty, or sugary foods are present in the pile.	Be sure to leave meat, bones, oily foods, and dairy products out of the compost pile.
	Food is exposed.	Bury the fruit and vegetable trimmings at least 6-12 inches deep.

Basic Strategies for Composting

Fast

Composting requires a proper balance of carbon (brown) to nitrogen (green) materials.

This method produces compost in as little as four weeks, though usually longer. The heat may also kill weed seeds, insect eggs and pathogens.

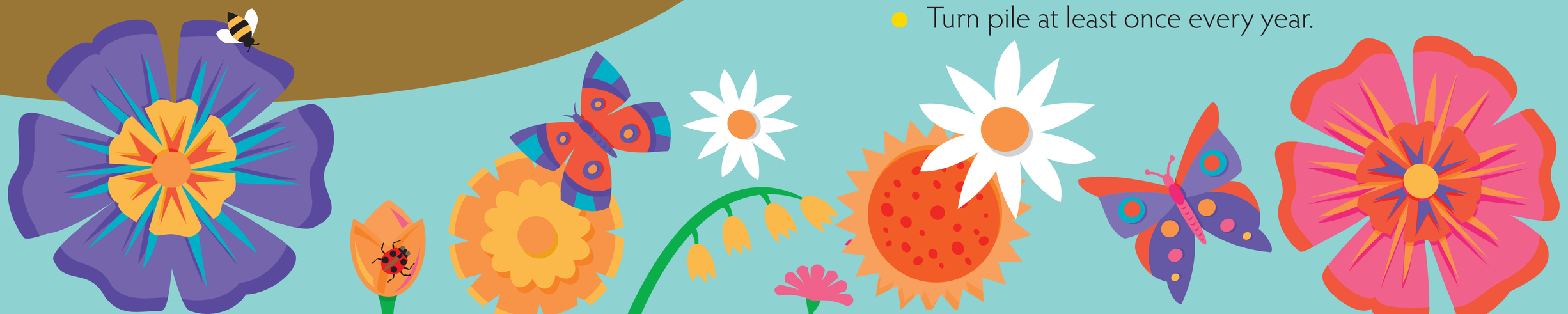
- High temperatures of up to 160 °F are generated by thermophilic, (heat loving) aerobic bacteria that work without creating offensive odors.
- Materials are processed into small pieces, usually by a chipper/shredder unit, and turned frequently—every week or more. This will make the pile hotter and "cook" faster.

Slow

Composting is essentially the same as "fast" composting but generally requires less time and attention to the pile and the combination of materials used.

This method diverts organic material from the landfill with an added benefit of having a rich amendment for your garden soil.

- Materials are simply layered (browns and greens) as they are generated.
- Materials decompose more slowly due to mesophyllic (medium temperature) aerobic bacteria, taking six months to a year before compost is ready for harvesting.
- Turn pile at least once every year.



Worm Composting or Vermicomposting

- **Worms can be raised to convert organic waste into worm castings** (i.e. worm manure), which is a nutrient-rich, biologically beneficial soil amendment.
- **The best composting worms are known as "red wigglers"** and can be purchased at local garden stores or bait shops. They thrive in dark, moist, environments between 55 and 77°F. Bins should be kept out of direct sunlight and sheltered from heavy winter rains.
- **Worms will eat organic materials** including paper, fruit, vegetables, grains, coffee grounds and ground up garden wastes. Worms don't have teeth, so it's important that what you feed them is chopped up into tiny pieces.
- **Avoid oils, dairy products, meats and breads,** as these things cause odors and can attract unwanted pests.
- **Castings can be harvested in about a month.** The remaining liquid, or "worm juice", often referred to by gardeners as "black gold," is a strong fertilizer that should be diluted 10 parts water to 1 part worm juice prior to use. The liquid can be used to water your garden, indoor or outdoor plants, flowers, shrubs or trees.

Water Conservation

Ventura's water sources are 100% local - Ventura River, Lake Casitas and groundwater wells. Water conservation is everyone's responsibility, and ensures a clean and reliable water supply for future generations.

Here are some tips for conserving water in your garden:

- **Check your meter and look at your water bills;** both can alert you to possible leaks.
- **Water wisely.** Watering before 8 am and after 4 pm reduces the chance of evaporation and wind interference.
- **Select Water Wise Plants** and divide your landscape into Hydro-zones (according to climate and water needs)
- **Check your sprinklers for leaks, misdirected heads, clogs** and other issues, which can waste water. Consider a "Smart Irrigation Controller" that adjusts watering cycles automatically based on the weather.
- **Mulch bare ground.** Mulch saves water, reduces weeds and pests, and helps create healthier, happier plants. The City provides free mulch to residents on a self-serve basis as available at the Cornucopia Gardens.