

WATER CONSERVATION IN YOUR ORGANIC VEGETABLE GARDEN

- **Increase the humus content in your soil** to retain moisture & allow the moisture to soak in.
- **Reduce evaporation:**
 - Mulch with 2 to 4 inches of organic materials.
 - Regular hoeing creates layer of soil mulch. .
 - 'Living Mulch': denser planting (possible in raised beds) so leaves touch at maturity.
- **Create deep root systems:**
 - Use healthy transplants (not too long in pot; no circling roots).
 - Double-dig beds; water reserve in subsoil.
 - Water less often for longer.
- **Don't waste water on the wrong crops:**
 - Grow crops at appropriate seasons.
 - Choose appropriate varieties.
 - Weed vigilantly.
- **Utilize the rain:**
 - Grow winter food crops.
 - Grow winter green manure.
 - Use rain to moisten compost piles.
- **Water efficiently:**
 - Computerized automatic irrigation.
 - Drip irrigation
 - Group plants of like water requirements together.
 - Do overhead watering in early morning.
 - Learn to judge your plants water needs: deep rooting vegetables need watering less often than shallow rooted ones.

Rooting Depths of Mature Vegetables		
Shallow 18-24"	Moderately deep 36-48"	Deep Over 48"
Cabbage family	Beets	Pumpkins
Celery	Beans: bush & pole	Tomatoes
Corn	Carrots	Watermelon
Garlic	Cucumbers	Winter squash
Onions	Eggplant	
Lettuce	Peas	
Potatoes	Peppers	
Radish	Summer squash	
spinach		

ORGANIC VEGETABLE GROWING RESOURCES (SILICON VALLEY)

Vegetable Growing / Gardening Advice

- Mastergardeners.org (then click on your county)
- Master Gardeners Hot line for Santa Clara county 408-282-3105 (9.30am-12.30pm)
- lpm.ucdavis.edu (for insects, diseases & pests)

Seeds

- Bountifulgardens.org
- Botanicalinterests.com
- Cooksgarden.com
- Johnnyseeds.com
- Seedsofchange.com
- Territorialseed.com
- Reneesgarden.com

Organic gardening supplies /soil amendments

- Commongroundinpaloalto.org
- Harmonyfarm.com
- Peacefulvalleyfarmssupply.com
- Lyngsogarden.com
- Wheelerfarms.net composted horse manure; delivery only. Minimum 3 yards.
- SMART station, 301 Carl Rd, Sunnyvale; composted green waste. Free to residents of Sunnyvale, Mountainview, Los Altos, & Palo Alto.

Composting resources (including bins)

- Reducewaste.org
- Rot line 408-918-4640

Soil Testing

- Soilandplantlaboratory.com
- Timberleafsoiltesting.com

Raised Bed structures

- Sunset.com (then type raised bed in the search); directions to build your own wood 8ft x 4ft.
- Gardeners.com
- Composters.com/raised-garden-beds.php
- Bluegrassgardenbeds.com

Books

How to Grow More Vegetables by John Jeavons
Sunset Western Garden Book
Rodale's Illustrated Encyclopedia of Organic Gardening.
Good Bug Bad Bug by Jessica Walliser

Resources

COMPOST DEMONSTRATION SITE

Stop by Emma Prusch Memorial Park at 647 South King Road, San Jose to see various compost bins and a worm compost bin. Open all daylight hours.

FREE WORKSHOPS

Sign up for our backyard composting workshops! Call the Rotline for a current schedule.

BOOKS

Backyard Composting, 1992. Harmonious Technologies, Harmonious Press, Ojai, CA, 96 pp.

Let it Rot!, 1975. Stu Campbell, Garden Way Publishing, Pownal, VT, 144 pp.

Rodale Book of Composting, 1992. G.Gershuny, Saint Martin's Press, New York, NY, 278 pp.

THE ROTLINE 408-918-4640

The Rotline answers compost questions.

ABOUT THE MASTER COMPOSTER PROGRAM

The Home Composting Education Program teaches a ten week training course in backyard composting to interested volunteers once a year. Training consists of approximately 50 hours of classroom and hands-on instruction. Volunteers agree to give back 50 hours of volunteer service in the form of composting workshops and other educational outreach. For more information contact:

County of Santa Clara
Home Composting Education Program
1553 Berger Drive, Building 1, San Jose, CA 95112
408-918-4640
compost@pln.sccgov.org



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Basic Composting

Turn your garbage into gold! It's smart – it's recycling.



Santa Clara County
Home Composting Education Program

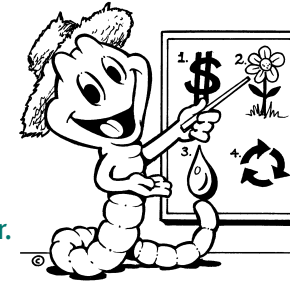
408-918-4640



Recycling & Waste Reduction Commission
of Santa Clara County

Why compost?

Composting is nature's way of recycling. It is a satisfying way to turn your fruit, vegetable and yard trimmings into a dark, crumbly, sweet-smelling soil conditioner.



COMPOSTING:

- ~ **Saves you money** by lowering garbage bills and replacing store-bought soil conditioners.
- ~ **Helps garden and house plants** by improving the fertility and health of your soil.
- ~ **Saves water** by helping the soil hold moisture and reducing water runoff.
- ~ **Benefits the environment** by recycling valuable organic resources and extending the life of our landfills.

The 4 "R's" of the yard:

REDUCE the amount of yard trimmings you make by planting slow-growing, drought-tolerant plants.

REUSE yard trimmings by grasscycling (mowing more often, and leaving the clippings on the lawn) and by mulching fallen leaves and chipped prunings (spread them 6" deep on paths and around trees and shrubs).

RECYCLE remaining yard trimmings by composting. This brochure shows you how.

RESTORE the environment with thriving gardens. It all starts at home!

Compost works for you

Not only does composting help the environment, but it can help your garden, yard, and house plants too! When compost looks like soil and smells sweet and earthy, it is ready to use. Here are some of the most common ways to use compost:

IN THE GARDEN

Before planting, mix a 4" to 8" layer of compost into newly reclaimed or poor soils. Mix a 1/2" to 3" layer of compost into annual garden beds at least once a year. Compost will add nutrients and beneficial microbes, hold water, and improve plant growth.



AROUND THE YARD

Spread a 1" to 6" layer of coarse compost on soil as a mulch, or spread a 1/2" layer of sifted, weed-seed-free compost on turfgrass as a top-dressing. These can be done any time of year to improve soil fertility and reduce watering needs.

ON HOUSE PLANTS

Sprinkle a thin layer of compost over house plant soil to provide nutrients. You can also make a great potting soil by mixing one part compost with two parts sand and/or soil.

DON'T HAVE A GARDEN?

You can still make compost and use it on a house plant, give it to a friend, sprinkle it around a street tree, or use it in a community garden.



Choose a System

SYSTEMS FOR FOOD & YARD TRIMMINGS

Rodent-resistant bins

- ~ For fruit, vegetable & yard trimmings (using “mixed” compost recipe)
- ~ For yard trimmings alone (using “no-fuss” recipe)
- ~ Bins require sides, lid, & no holes bigger than 1/4"



Open piles & simple bins

- ~ For yard trimmings ONLY
- ~ Requires “active” composting (chopping & weekly turning to keep animals out)
- ~ Usually inexpensive or free



SYSTEMS FOR JUST FOOD TRIMMINGS

For more information, see the Worm Composting & Other Methods brochure.

Worm bins

- ~ Most fun! Takes some time & effort
- ~ For indoors or outdoors
- ~ Produces excellent fertilizer



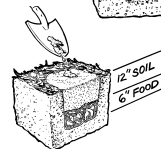
Closed-Air Systems

- ~ Low maintenance
- ~ Prone to odor & insect problems



Underground Composting

- ~ Requires digging a hole each time you add new materials
- ~ No harvesting necessary



Remember... Whenever you compost fruit & vegetable trimmings, use a container with sides, lid, and no holes bigger than 1/4", or bury food scraps at least one foot under the soil surface.

Follow the Basics

Thanks to friendly bugs and worms, composting is as easy as “1-2-3”—no matter which recipe you use!

- 1 CHOP** materials if you want them to break down more quickly.
- 2 MIX** “browns” (dry, woody materials) with “greens” (moist, green materials).
- 3 MAINTAIN** air & water balance by keeping compost as moist as a wrung-out sponge.

Browns, greens, air & water are the “big four” that will keep every compost pile happy.

DO COMPOST

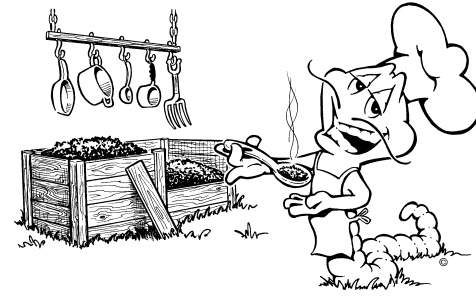
- Most sawdusts
- Chopped, woody prunings
- Pine needles
- Fallen leaves
- Tea bags
- Citrus rinds
- Coffee grounds & filters
- Lawn clippings & young weeds
- Fruit & vegetable trimmings
- Herbivore manures



DON'T COMPOST

- Meat, bones, or fish
- Dairy products or grease
- Grains, beans or breads
- Dog, cat or bird feces
- Sawdust from plywood/treated wood
- Diseased plants (in cold piles)
- Fruit & vegetable trimmings (in open piles/simple bins)

Hot compost happens when you follow the basic “1-2-3” carefully, and the pile is about a cubic yard (3'x3'x3'). Heat can accelerate composting and kill weed seeds and plant diseases, *but is not necessary*. Cold, slow piles are just as good. If your pile is large enough, moist, and well chopped, but not heating up, you can turn it and mix in some greens like grass clippings or an organic nitrogen fertilizer. For faster hot composting and better weed-seed kill, turn or mix your hot pile about once a week.



Recipes FOR RODENT-RESISTANT BINS

“No-fuss” Compost:

For yard trimmings ONLY. Requires a rodent-resistant bin to prevent animal nesting.

Ingredients:

Yard trimmings only (browns & greens), water as needed.

Directions:

Feed chopped or unchopped yard trimmings into bin as you generate them. Maintain compost by keeping it as moist as a wrung-out sponge. Harvest rich, brown, finished compost from the bottom and center of the pile after 12 to 18 months.

“Mixed” Compost:

For fruit, vegetable & yard trimmings together. This recipe requires a rodent-resistant bin and active maintenance to prevent animal nesting and feeding.

Ingredients:

Fruit, vegetable & yard trimmings (browns & greens), water as needed.

Directions:

Feed yard trimmings to your pile as you generate them by chopping them first into pieces 6" or smaller. Food scraps need to be buried and mixed into the center of the pile. Never dump and run! Be sure to mix in enough browns to balance your greens. Feed as often as you like. Maintain compost by turning or mixing it about once a week. Keep it moist as a wrung-out sponge. Harvest rich, brown, finished compost by sifting out coarse, unfinished materials after 3 to 8 months.

A RECIPE FOR OPEN PILES

“Active” compost:

For yard trimmings ONLY. In open piles & simple bins, active maintenance prevents animal nesting.

Ingredients:

Yard trimmings only (browns & greens), water as needed.

Directions:

Feed yard trimmings to your compost by chopping them into pieces 6" or smaller, then mixing them into the pile. Feed as often as you like. Be sure to balance browns with greens. Maintain pile by turning or mixing it about once a week. Keep it as moist as a wrung-out sponge. Covering it with a plastic tarp will help keep it moist. Harvest rich, brown, finished compost by sifting out coarse, unfinished materials after 3 to 8 months.

TROUBLESHOOTING

Symptoms	Problems	Solutions
Pile not composting	Too dry	Add water until slightly damp & turn (mix)
	Too much brown matter	Add fresh green matter or organic nitrogen fertilizer & turn
Pile smells rotten/attracts flies	Too wet/too many food scraps or lawn clippings	Turn & add browns (dry, woody materials) or dry soil
	Food scraps exposed	Bury & mix food scraps into pile
	Non-compostables	Remove meat, dairy, grease, etc. & turn
Rodents in pile	Foodscraps in open bin/holes larger than 1/4 in./non-compostables	Use traps or baits, rodent-proof bin, remove meat, grease, etc. & turn

Cool Season Vegetable Planting Guidelines for Santa Clara County

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Arugula	Seeds in pots												
	Transplanting												
	Direct seeding												
Beets	Seeds in pots												
	Transplanting												
	Direct seeding												
Broccoli	Seeds in pots												
	Transplanting												
Brussels sprouts	Seeds in pots												
	Transplanting												
Carrots	Direct seeding												
Cauliflower	Seeds in pots												
	Transplanting												
Chard	Seeds in pots												
	Transplanting												
	Direct seeding												
Fava beans	Direct seeding												
Garlic	Direct planting												
Greens (Mustard, Asian)	Seeds in pots												
	Transplanting												
	Direct seeding												
Lettuce	Seeds in pots												
	Transplanting												
	Direct seeding												
Onions	Seeds in pots												
	Transplanting												
Peas	Seeds in pots												
	Transplanting												
	Direct seeding												
Potatoes	Direct planting												
Radishes	Direct seeding												
Spinach	Seeds in pots												
	Transplanting												
	Direct seeding												

Key

Should be fine



Might work



Based on UCCE Master Gardener research

1/2009 - KMS

UCCE Master Gardener Program of Santa Clara County
 1553 Berger Drive, Building 1, San Jose, CA 95112
 Hotline: 408-282-3105 Website: www.mastergardeners.org

Warm Season Vegetable Planting Guidelines for Santa Clara County

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Arugula	Seeds in pots												
	Transplanting												
	Direct seeding												
Basil	Seeds in pots												
	Transplanting												
Beans	Seeds in pots												
	Transplanting												
	Direct seeding												
Beets	Seeds in pots												
	Transplanting												
	Direct seeding												
Corn	Direct seeding												
Chard	Seeds in pots												
	Transplanting												
	Direct seeding												
Cucumber	Seeds in pots												
	Transplanting												
	Direct seeding												
Eggplant	Seeds in pots												
	Transplanting												
Lettuce	Seeds in pots												
	Transplanting												
	Direct seeding												
Melons	Seeds in pots												
	Transplanting												
	Direct seeding												
Peppers	Seeds in pots												
	Transplanting												
Squash, summer	Seeds in pots												
	Transplanting												
	Direct seeding												
Squash, winter	Seeds in pots												
	Transplanting												
	Direct seeding												
Tomatoes	Seeds in pots												
	Transplanting												

Key

Should be fine



Might work



Based on UCCE Master Gardener research