The Browns & Greens of the 3:1 Composting Ratio

Possible Browns (Carbon)

Thin-layer brown materials such as:

- dry, yellow or brown leaves, brown grass
- dead, woody stalks or plants
- non-glossy paper mail, untreated wood chips/sawdust, small diameter tree limbs cut to fit, phone books, shredded newspapers
- dryer lint, vacuum cleaner waste
- straw
- wood ash from firepits and fireplaces, no charcoal ash
- lots and lots of corrugated cardboard
- 100% cotton, wool or silk

Where to find some browns:

- cardboard: furniture & appliance stores, hardware & grocery stores
- newspaper: ask at local newspaper office / post office for phone books and junk mail

Possible Greens (Nitrogen)

Thin-layer green materials such as:

- kitchen scraps from vegetables, melon, fruits and eggshells
- coffee grounds and tea bags
- freshly cut green leaves and grass clippings
- manure, no cat or dog

Where to find some greens:

- coffee grounds: coffee shops
- fresh manure: landscape supply, horse stalls, cow barns (non-vet)

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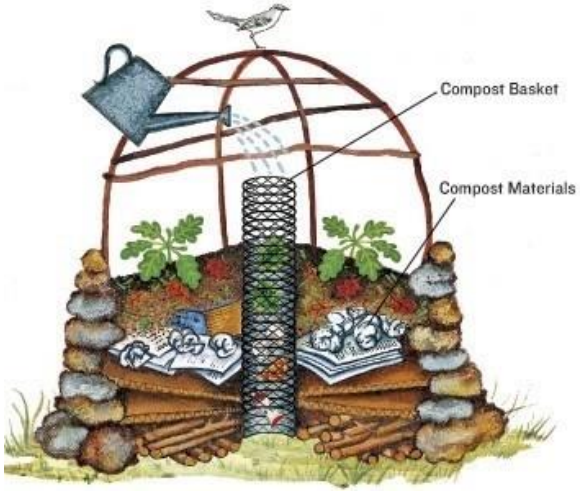
EL PASO COUNTY MASTER GARDENERS

Keyhole Gardening

The Composting Method



TEXAS A&M AGRILIFE EXTENSION

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What is a Keyhole Garden?

A **Keyhole Garden** is the ultimate raised-bed planter, often built in the shape of a circle, measuring a maximum of 6 feet in diameter. It can stand up to 4 feet high and is notched like a pie with a slice cut away. A hole in the center holds a composting basket that moistens and nourishes the growing plants. The garden, which from above looks like a keyhole, can be built with recycled materials and requires less water than a conventional garden, making it ideal for drought stricken or very arid climates, like our American Southwest.

Keyhole Gardens were developed by a humanitarian aid organization in southern Africa as a means of helping those who were unable, because of illness or physical limitations, to manage a traditional garden. It requires no tilling or turning.

A **Composting Keyhole Garden** kicks it up by filling the planting bed almost entirely with composting materials under compost and potting soil that help to retain water and provide a continuous feeding program for your plants.

Advantages of the Composting Keyhole Garden

- Overcomes gardening obstacles: poor or rocky soil, drought, flooding, physical limitations
- Abundant crops via nutrient rich compost & on-going feeding
- Easy maintenance: within arm's reach, little or no bending, no heavy digging, more time to tend garden plants
- Longer growing season: raised beds more insulated from cold, warms up quicker
- Better use of space: nutrient rich compost allows planting closer, utilizing all available growing space
- Critter free area: taller raised bed keeps most 4-legged pests at bay; netted easily to keep flying pests away
- Perfect for uneven ground: can easily be built to overcome steep garden areas; a terracing effect

Building a Composting Keyhole Garden

1. Measure a 6-foot diameter circle to define the inside wall of your garden.

2. Notch the circle (like cutting a wedge of pie) so you can access the basket at the center.

3. Construct the exterior wall about 2.5 to 3 feet high using rocks, metal, timbers or any material that can support weight of organic composting waste. Taller walls can interfere with reach.

4. Use chicken wire or hardware cloth to create a tubular compost cage about 1 foot in diameter and 1 foot taller than the keyhole walls.

5. Line inner walls and bottom with soaked corrugated cardboard.

6. Stand the compost cage in the center of the circle, positioned at the point of the notch.

7. Fill the garden area (but not the compost cage in the center), with layers of denser compostable browns material and green, soaking each layer. Fill the last 4-6 inches with compost and/or potting soil, sloping from a high point at the top of the compost cage downward to the inside edges of the top of the garden walls.

8. Fill the compost cage with alternating layers of quickly composting organic waste material: kitchen scraps, grass clippings, & coffee grounds, alternated with a layer of shredded paper or compost. This will provide the plants with moisture and nutrients.

9. Water well to establish plants via compost cage and the garden, then water mostly through the composting cage. This forces the plants' roots down toward the center basket.

10. Feed the garden by adding more kitchen scraps, lawn clippings, etc., to the composting cage. Cover with shredded paper or compost to minimize odor and discourage varmints.

11. Consider adding an arching framework over the garden to support a shade cloth in hotter months; and in winter, plastic sheeting, creating an instant greenhouse or cold frame.

12. Enjoy!

Guidelines

- Place the "keyhole" entrance to the composting cage on the west facing side
- Plant close together & place the tallest, sun loving plants on the west facing, high sides to shade more delicate plants on the lower, east facing side
- Check your garden daily for maintenance; weeding, watering, pests, disease and harvesting
- Mulch to maintain moisture
- Shade compost cage and garden as needed to prevent water evaporation
- Protect plants from extreme cold
- Water deeply every 2 days if no rain, mainly through compost cage
- Maintain wall structures and irrigation
- Replenish composting components, topping with new potting soil seasonally as needed when planting level drops