

Alternative Gardening and Watering Methods

**Grow Green Professional Landscape Training
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Zilker Botanical Garden
Austin Area Garden Center



Vegetable Gardening Methods

- Types of Veggie Garden Beds
- Square Foot Gardening
- Companion Planting
- Double-Dig Method
- Garden Templates
- Hugelkultur
- Ollas
- Wicking Beds



Types of Veggie Garden Beds



In-ground plots using existing soil



Raised beds with wooden frames, 4' x 8'



Container gardening



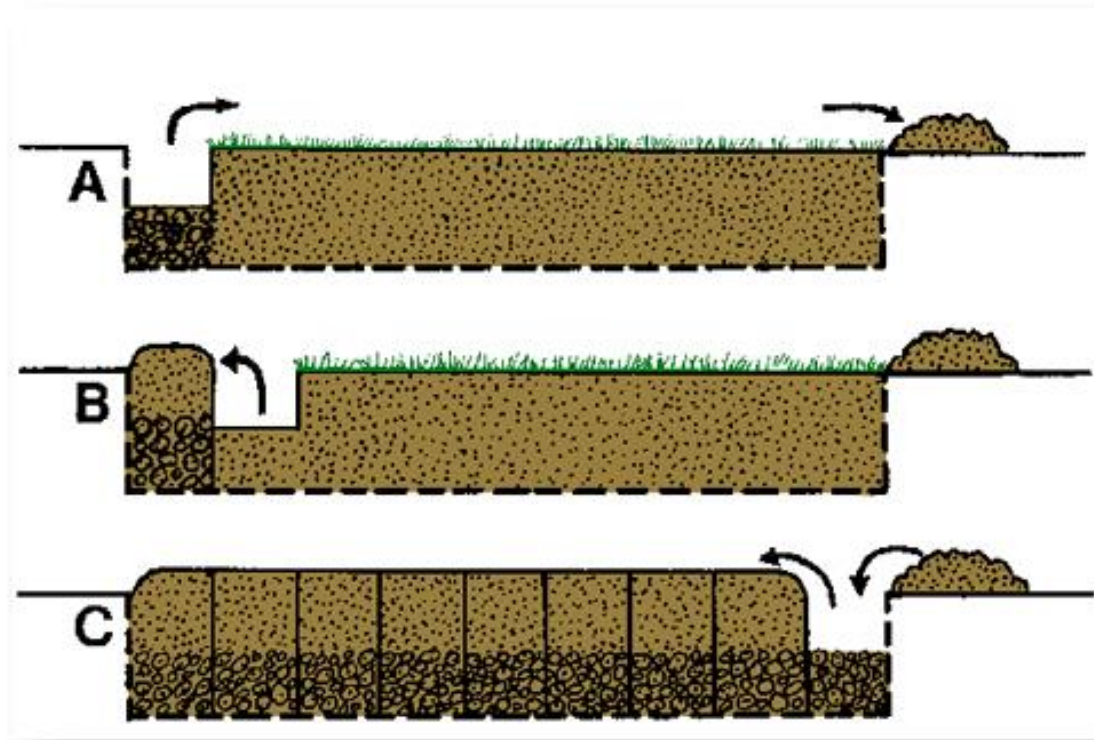
Elevated beds - may be ideal for seniors and ADA access

Square Foot Gardening



- Divide growing area into small square sections to plant intensively with different plants in each square

Double-Dig Method

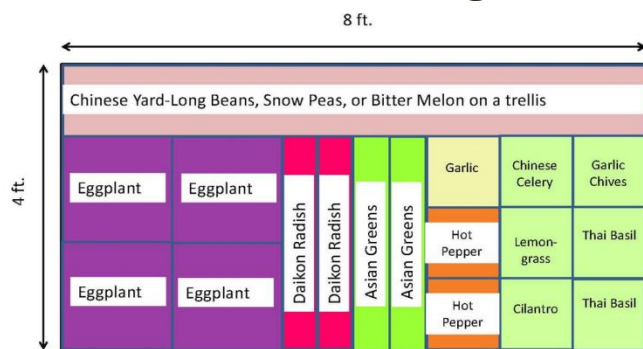


For a well-drained bed with deep, loose soil...

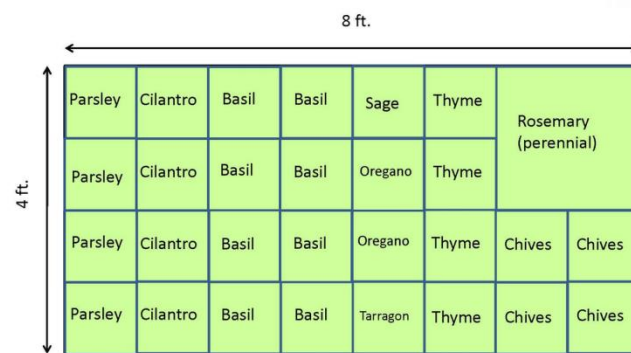
- Remove the topsoil the depth of a spade-head (at least 12 in)
- Set that soil aside and loosen the subsoil with a garden fork
- Return topsoil with any added amendments like compost
- Fill the LAST trench with soil excavated from the first

Garden Templates

- Can help you map out what you want where in advance
- Great for school gardens, church gardens

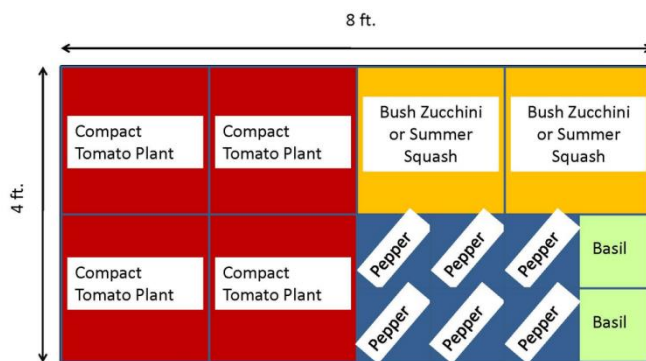


Asian Garden

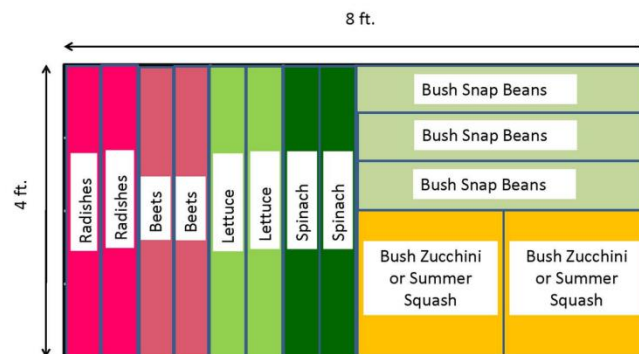


Culinary Herb Garden

Thyme, Chives, Oregano, Tarragon, Sage, and Rosemary are perennials



Summer Only Garden



Fall Garden

Garden Templates



Design Your Row or Bed

Design Your Site Map

Your Garden Name

1. Select your size:

Width: Length:



Save



Print



Load



Edit Plan



Start Over



Email

2. Drag and drop item onto bed

Previous

Next



bok choy



broccoli



brussels sprouts



cabbage



carrot



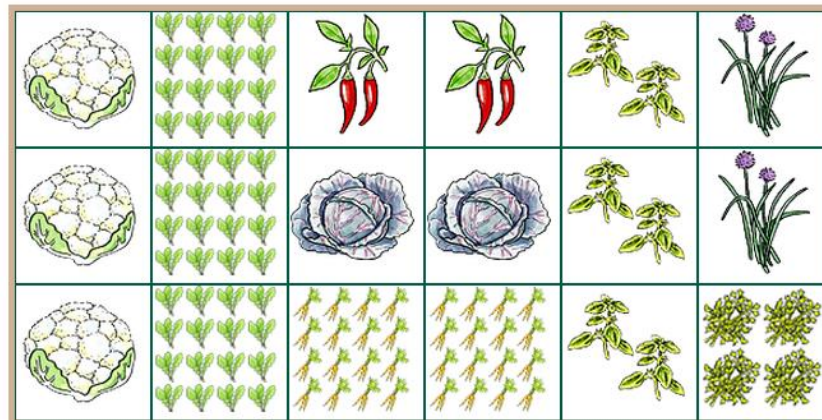
celery



chives



cilantro



Garden Resources



Vegetable Garden Planting Guide



Daphne Richards, County Extension Agent - Horticulture
 Texas AgriLife Extension Service, Travis County, 1600-B Smith Road, Austin, TX 78721 512-854-9600
 Compiled by Patty G Leander, Master Gardener Vegetable Specialist travismg@ag.tamu.edu

Plant seed unless otherwise noted	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Artichoke (crowns/transplants)	←-crowns-									←-transplants-		
Asian greens (seeds or transplants)												
Asparagus (crowns)												
Beans, snap and lima												
Beets												
Broccoli (transplants)												
Brussels sprouts (transplants)												
Cabbage (transplants)												
Cantaloupe (muskmelon)												
Carrots												
Cauliflower (transplants)												
Chard, Swiss (seeds or transplants)												
Collards (seeds or transplants)												
Corn												
Cucumber												
Eggplant (transplants)												
Fava beans												
Garlic												
Greens, cool season												
Greens, warm season												
Kale (seeds or transplants)												
Kohlrabi (seeds or transplants)												
Leeks (seeds/transplants)									--seed--			
Lettuce (seeds or transplants)												
Mustard (seeds or transplants)												
Okra												
Onion, bulbing (transplants)												
Onion, bunching/multiplying												
Peas, English, snap and snow												
Peas, Southern												
Pepper (transplants)												
Potato, Irish												
Potato, sweet (slips)												
Pumpkin												
Radish												
Shallots												
Spinach (seeds or transplants)												
Squash, summer												
Squash, winter												
Tomatoes (transplants)												
Turmp												
Watermelon												

Plants grown in winter will benefit from protection during freezing weather
 Plants grown in late summer will benefit from shade cover during establishment

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 The Texas A&M System, USDA and the County Commissioners Courts of Texas cooperating.

January 2012



Companion Planting

Compatible pairings:

- Beans with cucumber, peas, and lettuce
- Broccoli with Onion
- Cauliflower with Celery
- Eggplant and spinach
- Leeks with carrots
- Lettuce with strawberries or radishes
- Onions with bell pepper
- Potatoes with sweet corn
- Squash with sweet corn
- Swiss chard with Onions

Incompatible pairings to avoid:

- Asparagus and Garlic
- Beans and Onions
- Beets and Beans
- Broccoli and Beans
- Cabbage and Strawberries
- Carrots and Celery
- Corn and Tomatoes
- Onions and Peas
- Potatoes and Tomatoes

Hugelkultur

- Essentially, making raised garden beds filled with rotting wood
- Use up rotting wood, twigs, branches and even whole trees that would otherwise go to the dump or be burned
- Avoid using cedar, walnut or other tree species deemed allelopathic.



raised garden bed hugelkultur after one month



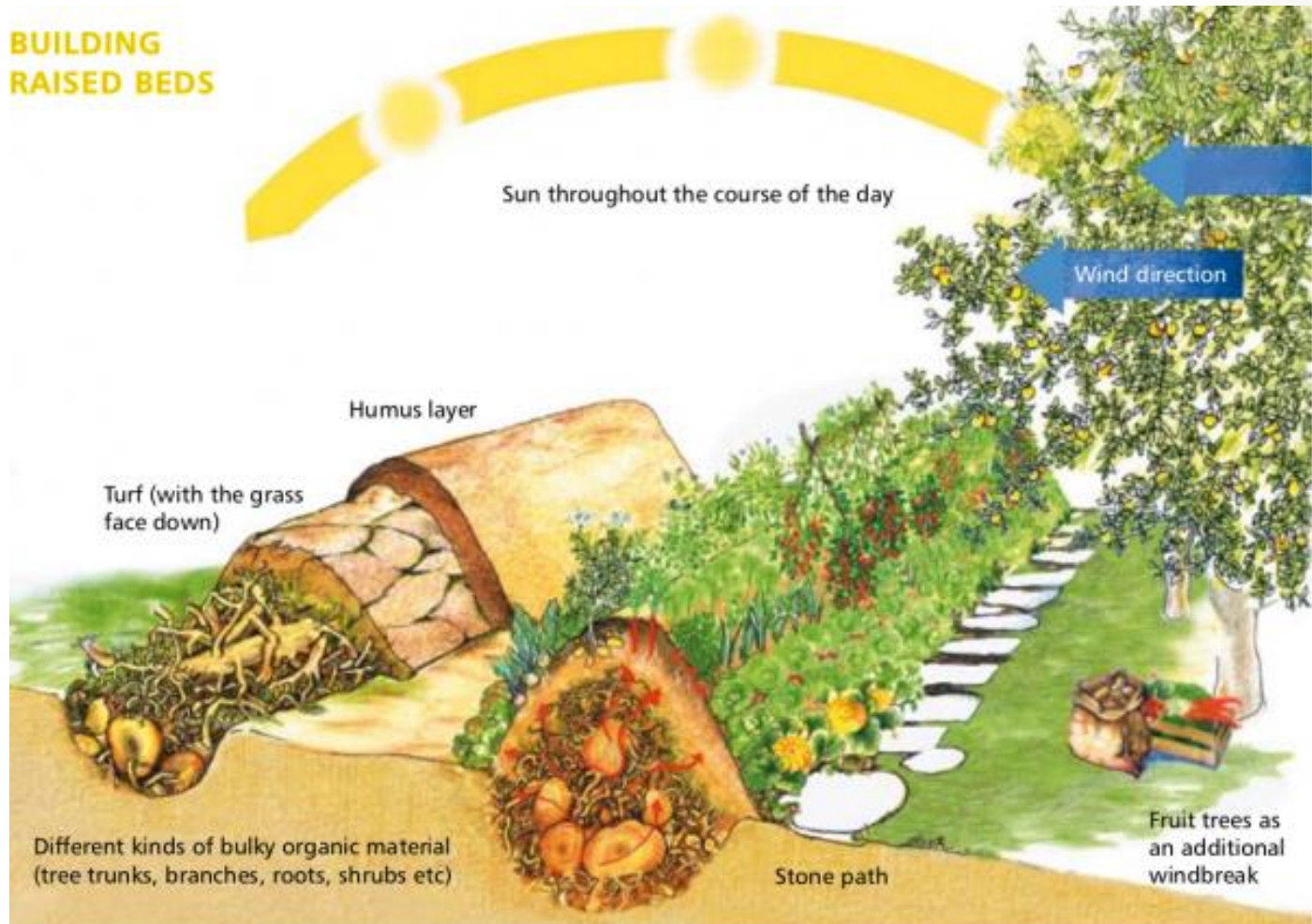
raised garden bed hugelkultur after one year



raised garden bed hugelkultur after two years

Hugelkultur

BUILDING RAISED BEDS



Hugelkultur Basic Steps

- Select area approx. 6 feet by 3 feet
- Gather material:
 - fallen logs, branches, fallen leaves
 - nitrogen-rich material (kitchen waste/manure)
 - top soil
 - mulching material (such as straw)
- First layer: logs
- Second layer: branches, twigs (roughly til it's 3 feet high)
- Water these layers
- Fill in the space between with leaf litter, manure, kitchen scraps
- Top off the bed with 1-2 inches of top soil and a layer of mulch



Waterwise Gardening Methods



Drought Restrictions: Alternative Compliance for Vegetable Gardening

- Austin City Code now allows an exemption to drought restrictions that permits watering of vegetable gardens using:
 - Hand watering
 - Soaker hoses
 - Drip irrigation

Caveats:

NO sprinklers, no unattended watering

Ollas Are Drought-Friendly



Credit: Dripping Springs Ollas



- Unglazed clay pots buried in soil with neck exposed
- Water through top opening, water seeps out naturally at steady rate to ensure constant water source at the roots
- Results in fewer weeds, less evaporation, no soil compaction

Wicking Bed Construction

15" Compost

Filter Fabric

2" Sand Layer

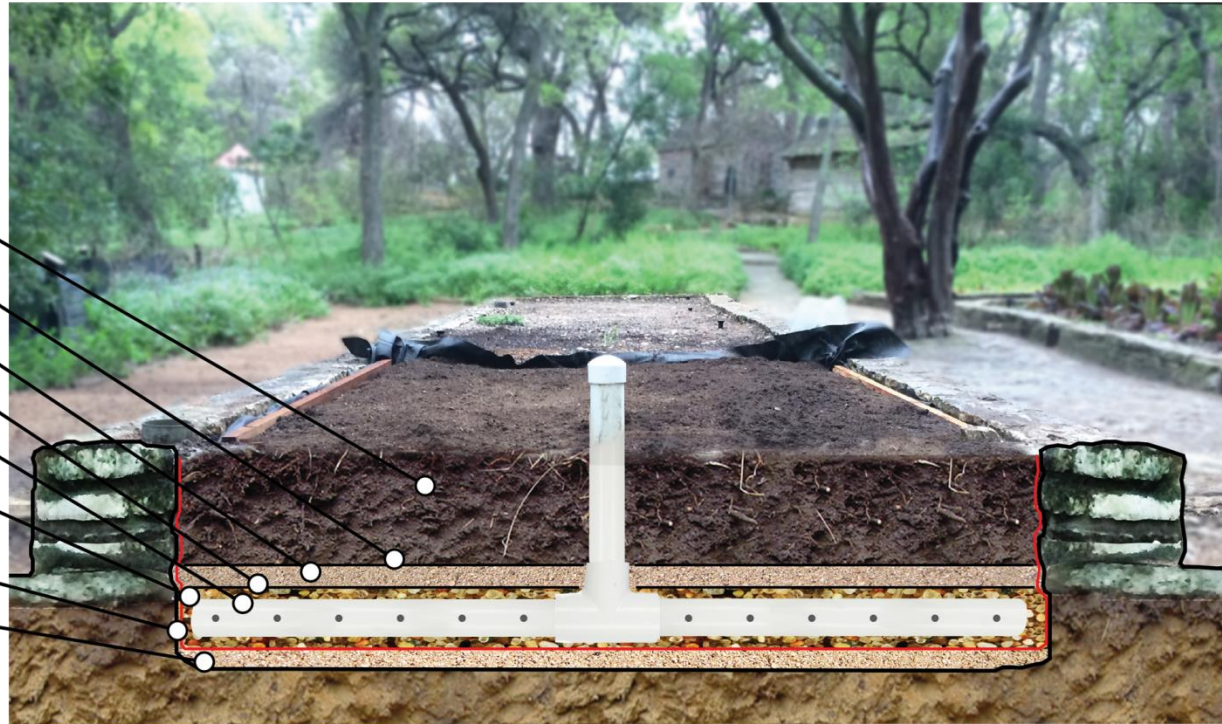
Filter Fabric

4" Perforated
Pipe

6" Washed
Pea Gravel

Pond Liner

2" Leveling
Sand Base



Location: Zilker Botanical Garden

Wicking Bed Construction



Location: Zilker Botanical Garden



Planting

- Resources for planting assistance
- Resources for planting techniques
- Innovative planting and gardening resources
- Austin Grow Green program support



THANK YOU!

Any questions?

Special thanks to:

Cullen Finnegan, PARD (wicking bed expert)

Liz McVeety, PARD

**Please visit the wicking bed at Zilker Botanical Garden, and
the hugelkultur beds at Blackshear Community Garden!**

Recommended Books:

How to Grow More Vegetables, John Jeavons

The New Central Texas Gardener, Cheryl Hazeltine & Barry Lovelace