

Vertical Vegetable Gardening

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Why grow vertically

- More food in less space
- Disease prevention
- Easier harvest
- Gorgeous vegetables
- Cleaner crops
- Adds beauty and privacy
- Easier maintenance



Things to consider

- Plan out your vegetable garden
- What do you want to grow?
- Brainstorm how you will incorporate vertical structures
- Think about types of materials you will use and budget constraints
- Tall structures placed at south end of garden can shade other plants
- Garden style – informal and casual vs. formal
- Proportion – be sure size of structure is proportionate to the plant you will grow
- Temporary or permanent – arbors and pergolas vs. small arches and trellising
- Height - use materials that will fit the size and height of the plants
- Strength and weight of structure – heavy vining crops
- Easy of harvesting – Teepee or tall structures (pergolas)





Vertical gardening structures

- Trellises
- Arbors
- Teepees
- Pergolas
- Arches
- Obelisks
- Cages
- Tower gardens
- A-Frames and lean-tos
- Hanging gardens

Choosing materials

- Wood
- Metal
- Garden fencing and chicken wire
- Pots and containers
- Bamboo
- String
- Upcycled materials



Choosing what to grow

- Cucamelons
 - Benefits: lightweight, prolific, and fast growing
 - Challenges: seeds aren't always easy to find, aren't great climbers so need to be trained
 - Planting tips: Wait until after last frost, plant in full-sun
 - Supports: medium to large structure such as trellises, arches, teepees, and obelisks





Choosing what to grow

- Cucumbers (pickling, cocktail, and English)
 - Benefits: easy to grow from seed, prolific
 - Challenges: insect pests and powdery mildew, need to be trained up the trellis
 - Planting tips: plant after last frost in full-sun
 - Supports: medium to large structure, can become heavy so be sure to use a strong support such as medium or large trellis, or on small arch or obelisk



Choosing what to grow

- Indeterminate tomatoes
 - Benefits: heavy producers, produce all through the season vs. determinate that ripen all at once
 - Challenges: prone to diseases and some insect pests
 - Planting tips: plant after last frost in full-sun, bury plants deeply so that they will develop strong root systems
 - Supports: need a strong support such as an A-frame, or lean-to trellis, heavy-duty tomato cage, or large trellis

Choosing what to grow

- Melons

- Benefits: easy to grow from seed, fast-growing, can fully cover a vertical structure adding a nice visual element to the garden
- Challenges: insect pests and disease, long growing season to mature and produce fruit
- Planting tips: plant after frost in full-sun
- Supports: mini melons can be grown on smaller supports such as trellises, obelisks, or small arches but full-sized melon vines will need a bigger stronger support, such as a large arch, arbor



Choosing what to grow

- Peas

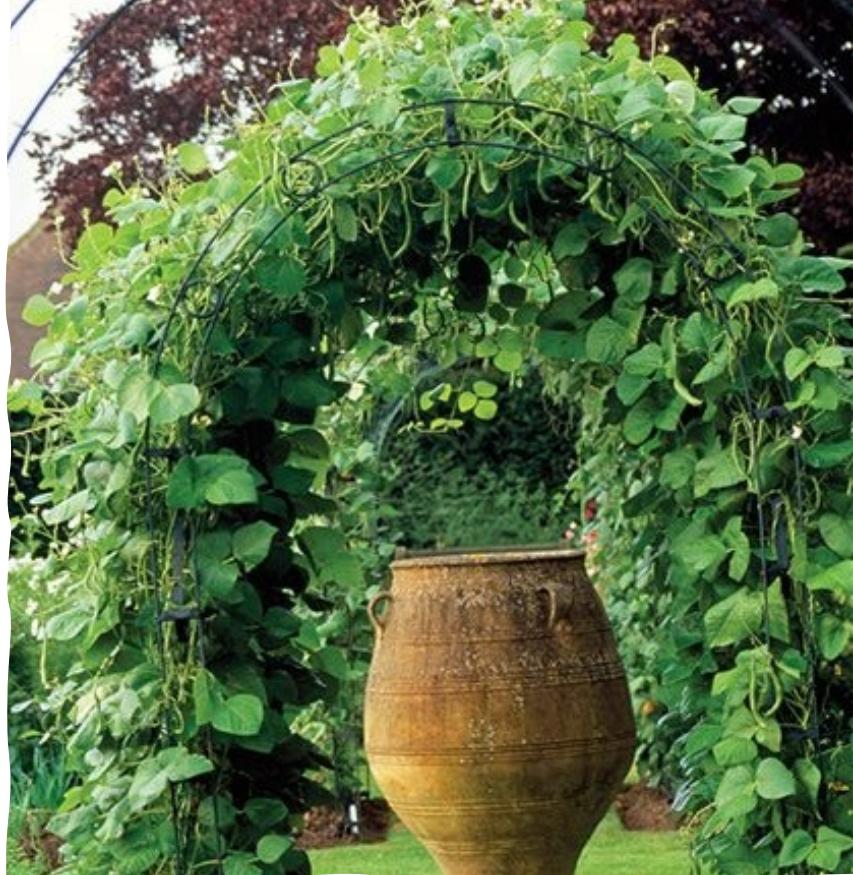
- Benefits: cold-hardy and resistant to frost, can be planted earlier than most crops, can also be a fall crop, easy to grow
- Challenges: protect from wildlife, stop producing and die-back once hot summer weather approaches
- Planting tips: sow seeds directly in garden 4-6 weeks before last frost and again late summer for fall harvest
- Supports: terrific for growing on a smaller support, such as an obelisk, fan trellis, small teepee, or tomato cage



Choosing what to grow

- Pole beans

- Benefits: easy to grow, heavy producers, and vines are lightweight, naturally grow vertically, and fast growing
- Challenges: wildlife, insect pests
- Planting tips: plant after last frost in full-sun
- Supports: use a tall support to give plenty of space but keep within reach to harvest, use structures such as arches, teepee structures, tall trellises. Can also use arbor or pergola but difficult to harvest





Choosing what to grow

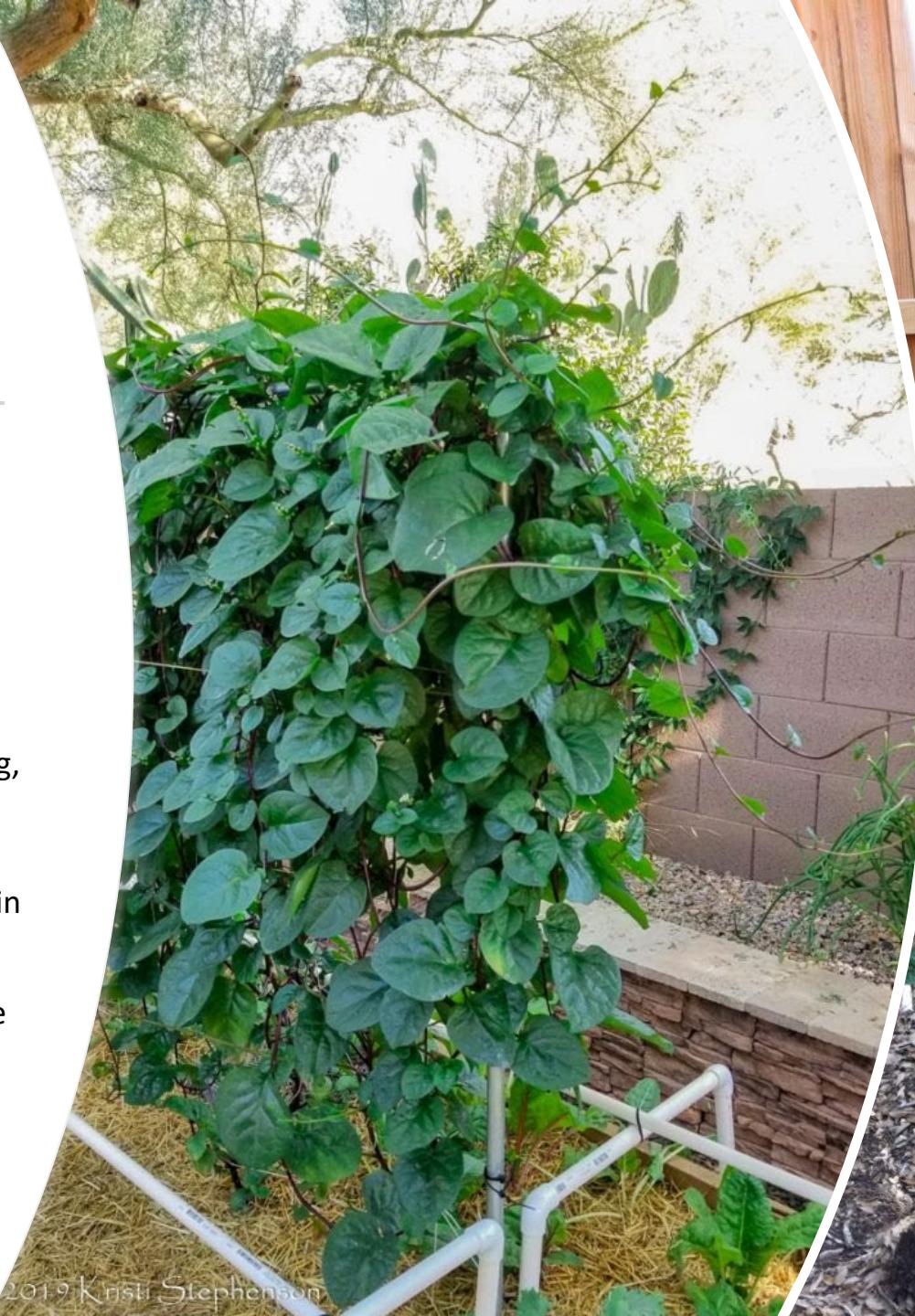
- **Yard Long beans**

- Benefits: easy to grow, heavy producers, and vines are lightweight, naturally grow vertically, and fast growing
- Challenges: wildlife, insect pests
- Planting tips: plant after last frost in full-sun
- Supports: use a tall support to give plenty of space but keep within reach to harvest, use structures such as arches, teepee structures, tall trellises. Can also use arbor or pergola but difficult to harvest

Choosing what to grow

- Malabar spinach

- Benefits: easy to grow, attractive, fast growing, good substitute for spinach in the summer
- Challenges: needs regular watering, once cooked texture is gluey like okra
- Planting tips: plant after last frost in full-sun to part-shade
- Supports: use a tall support to give plenty of space but keep within reach to harvest, use structures such as arches, teepee structures, tall trellises.



Choosing what to grow

- Tomatillos
 - Benefits: heavy producers, produce all through the season, grow to a height of 3 to 4 feet with a similar spread
 - Challenges: prone to some diseases
 - Planting tips: Transplant outdoors after the danger of frost is past
 - Supports: The plant is usually sprawling and needs support.



Choosing what to grow

- Squash, Gourds, and Pumpkins

- Benefits: easy to grow from seed, fast-growing, can fully cover a vertical structure adding a nice visual element to the garden
- Challenges: insect pests and disease, long growing season to mature and produce fruit
- Planting tips: plant after frost in full-sun
- Supports: mini pumpkins/squash can be grown on smaller supports such as trellises, obelisks, or small arches but full-sized pumpkins/squash vines will need a bigger stronger support, such as a large arch, arbor
 - If over 6 pounds need sling for support
 - Trombone Zucchini, Spaghetti squash
 - Buttercup, delicata, kabocha, table ace, butternuts, spaghetti
 - Edible Gourds - Armenian Cucumber • Snake gourd • (Harvest when young)



Choosing what to grow – Non-Climbers

- Lettuce and other greens
- Herbs
- Patio plants and bush varieties
- Edible flowers
- Roots crops
- Strawberries

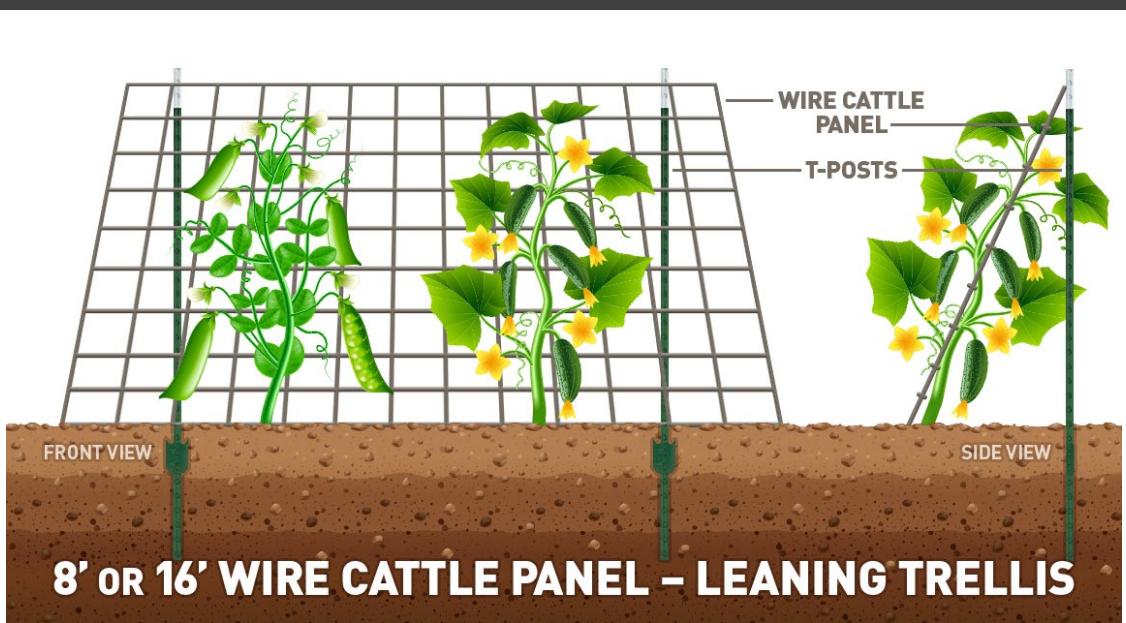


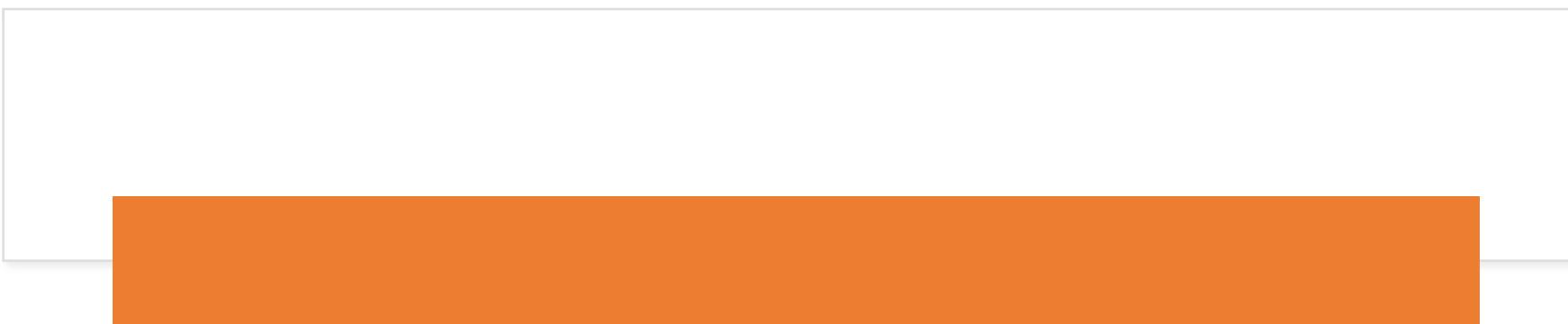


Trellises and other structures

Large arch tunnel (cattle panels)









Trellises and other structures

Large teepee fort

Trellises and other structures



- Obelisk

Trellises and other structures



- Trellis



Trellises and other structures

- Utility rack planter
- Antique ladder hanging planter
- Gutters

DIY TIERED Strawberry Planter





Training and tying





Questions?

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