

Container Gardening

- ### Benefits of Container Gardening
- Adds lots of impact in a small space
 - Is easy to maintain for a variety of lifestyles, less work than a large garden, can choose your own size
 - Outlet for creativity
 - Instant, portable landscaped look for those who move a lot or who want to move the container inside for a special event
 - Available to anyone with a window, balcony, deck, doorstep or yard

- ### Benefits of Container Gardening
- Is an option for the disabled, elderly, or the homeowner/apartment dweller with little or no land
 - Is a way to have fresh fruits, vegetables, and herbs at anytime
 - Creates a new environment with less problems, such as fungi, bacteria, nematodes
 - Gardener controls all variables: plants, water, sunlight, fertilizer
 - Lots of fun for a beginner or experienced gardener





Your imagination is the limit!

- ### Basic Steps
- Select your area and container according to function or needs of plants
 - Select your color scheme and/or plants
 - Select your plants according to foliage and growth habits
 - Select your soil mix according to plant needs

Select your area

- Finding a spot for your container garden is very important.
- Analyze the sunlight the area receives throughout the day. This is the one thing that cannot be changed, everything else can be manipulated
- Some gardeners utilize aluminum foil, white painted surfaces, and marble chips around the container to increase the available light
- If you want to plant herbs or vegetables must have at least 6 or more hours of sunlight each day
- Decide whether the container will be viewed all the way around or just from one direction

Selecting a Container

- Avoid containers with small openings
- Make sure container has adequate drainage
- Use containers between 15 to 120 quarts, Larger the container, less often it needs water
- Make sure container never held/contains toxic chemicals especially if edible or fruiting plants are being used
- Keep in mind the size and weight of the container if it needs to be moved during the season/year. Use plant dollies with wheels when necessary
- Self watering containers are great but are typically only available in plastic
- Use light colored containers to lessen heat absorption and discourage uneven root growth
- Place containers on bricks or blocks to encourage good drainage

Typical Container Materials

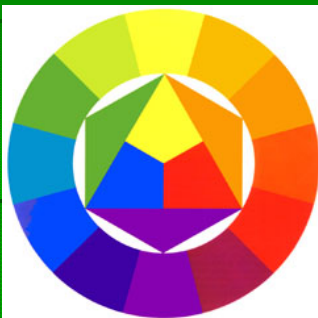
- Wooden containers are susceptible to rotting, loses moisture quickly but allow air movement into the root zone
- Terracotta dries out quickly, but typically has good drainage, and allows air movement into the root zone. Susceptible to cracking in winter freezes and thaws, may need to be protected from harsh temperatures and weather
- Fiberglass is expensive, long-lasting, lightweight and available in very attractive colors, sizes and patterns, there is no evaporation from sides of pot but may need

Typical Container Materials

- Plastic containers may breakdown over time in sunlight
- Metal, Plastic, and Glazed ceramic hold water longer since they are non-porous. Containers made out of these materials may need drainage holes added, most plants cannot have wet feet.

Color Principles

- Use more than one color to give a container or planting more dimension and make the planting more interesting
- Color is not only in the flowers but also in the foliage of these plants



Cool colors

- Blue and Violet hues
- Area will seem to recede when cool colors used
- Very subdued, tranquil look



Warm Colors

- Red, Yellow, and Orange hues
- Area will seem to stand out when Warm colors are used
- Fun, vibrant look



Types of Plants

- Select plants with similar water, light, and nutrient needs
- Example planting a container of succulents together (low water and high light requirements)
- Plant container plants at the same time they would be planted in the garden
- Over planting is recommended for a lush, full effect
- Think about year-round interest with interesting deciduous bark (oakleaf hydrangea, stewartia, hearts a bustin', kerria, coral bark Japanese maple, contorted willow, red osier dogwood, yellow twigged dogwood), ornamental grasses, or conifers

Selecting plants according to growth habits and foliage

- Select for growth habits and form-upright, weeping, tufted, branching, climbing, prostrate, dense, or airy
- Typically 3 types of growth habits in a pot
- Tall-gives vertical interest, tall plants typically go in either the center for an all around view or at the back for a one sided view
- Filler-at base of the tall, fills in empty space and adds interest and foliar contrast
- Trailer-droops over edge of pot and breaks the harsh line of the pot edge and adds more interest

Pick a theme

- Color- ex: pink and white full sun (pink flowering begonia, vinca, rose pink geranium, white petunia, white snapdragon, white nicotiana)
- Blue and pink shade (pink impatiens, pink begonia, violet impatiens, dusty miller, alyssum)
- Butterfly attracting (buddleia, asclepias, bee balm, salvia, coreopsis, Echinacea, liatris, vitex)
- Scented Plants (geraniums, herbs)
- Multi-season interest (evergreen with spring bulbs with hosta and/or ferns)

Problem areas

- Make sure plants can be maintained at the preferred height, typically no more than 2X the container height
- Make sure foliage is not too similar, you don't want a big mass of boring solid colored foliage
- Most gardeners prefer to have something of interest going on in the container at all times
- For example, under-planting bulbs beneath herbaceous plants to ensure activity year-round

Selecting soil mixes

- "If you provide a good environment for the roots, the top will take care of itself"
- When planting, leave a gap @ container edge to allow watering and mulch (1-2")
- Do not use soil from your yard, the problems with clay soil are exaggerated in a container
- Select your soil mix based on the needs of the plants
- Succulents, sedums, and cacti all enjoy a less nutrient rich mix that does not retain water (has more sand, perlite)

Selecting soil mixes

- Annuals, perennials, vegetables and other plants need a mix that will retain more water and has a higher nutrient content. A slow release fertilizer is a good addition to mixes for these plants
- These plants will also benefit from water holding crystals which slowly release water over time. These crystals can be incorporated into the soil at the time of planting

Selecting soil mixes

- As the heat of the summer increases, these containers may need to be water one to two times a day depending on the needs of the plants and the water holding capacity of the soil mix
- The Botanical Garden uses Fafard 3B as the base mix and then adds to that according to the needs of the plants. This could mean the addition of Perlite, sand, water holding crystals, or slow-release fertilizer

Selecting soil mixes

- Or you could create your own mix: equal parts peat moss, garden loam, clean coarse builders sand and some slow release fertilizer (14-14-14), lime may be necessary to adjust soil pH

Maintaining your Container Garden

- Watering may be necessary 1-2 times daily (especially on sunny patios, brick walls, or small single containers)
- Extra watering will be necessary on hot, dry, windy days
- Fertilize with water soluble fertilizer every 2-3 weeks in addition to slow release
- For annuals, replace soil mix each time replanted



Maintaining your Container Garden

- For perennials, trees and shrubs, incorporate new media each year
- For other plants, replace some media when plants become root bound
- Water in the mornings to decrease the risk of disease and virus (this allows leaves and soil to dry out before nighttime)
- Prune and deadhead to maintain reasonable height and shape and promote flowering

Herbs

- ◆ Grow well in full to partial sun (6 or more hours)
- ◆ Do not need to be watered or fertilized as much as annuals and vegetables (fertilizing creates more vegetative growth spreading the oils thinner-herbs not as potent)
- ◆ Most herbs are drought tolerant

Herbs

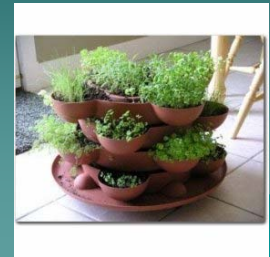
- ◆ Typically do well in strawberry jars (good drainage), giving lots of variety in a small area (pay attention to mature size before planting)
- ◆ Strawberry jars also give trailing plants room to cascade freely
- ◆ Watch the water needs of the plants, water each plant, not just the top of the strawberry jar (the water may not soak all the way down)

Herbs

- ◆ Know the growth patterns of the plants
 - planting mint in one notch of a strawberry jar means mint in all notches within weeks
 - planting fennel or dill in a lower notch of a strawberry jar could look odd (tallest plants at the top of the jar)

Strawberry Jar Hints

- ◆ To ensure proper watering, place a PVC pipe in the center of the pot while planting with holes drilled in it and duct tape covering the bottom opening to ensure water gets to the bottom plants (do not put soil in the pipe)
- ~ In a strawberry jar, plant from the bottom up



Annuals

- ◆ Have a long bloom time but only survive for one season
- ◆ Require pruning and/or removal of spent flowers to promote more blooms and not go to seed
- ◆ Typically require lots of water and fertilizer to continue the prolific blooms
- ◆ Lots of variety in size, shape, bloom/foilage color, and sun and water requirements

Some Annual options for Containers

- ◆ Sun-Marigolds, Begonia, Spike, Petunia, Geranium, Portulaca, Million Bells, Pansies, Lantana, Coleus, Sweet Potato, Asparagus Fern, Gomphrena, Dusty Miller, Salvia, Annual Vinca, Nicotiana, Blue Daze, Ageratum, Alyssum, Celosia, Dianthus, Nasturtium, Snapdragon, Verbena, Zinnia
- ◆ Shade-Impatiens, Begonias, Caladiums, Wandering Jew, Lobelia



Perennials

- ◆ Typically incorporated into pots with other plants due to limited bloom time
- ◆ Do not need to be replanted every year like annuals and most vegetables
- ◆ Like annuals, perennials have a wide variety of sun and water requirements and bloom and foliar possibilities

Some Perennial options for Containers

- ◆ Sun-Sage, Black-eyed Susans, Veronica, Verbena, Agastache, Yarrow, Stokesia, Iris, Belamcanda lilies, Aquilegia, Mums, Gaillardia, Sedum, Shasta daisy
- ◆ Shade-Hosta, Foxglove, Dahlia, Heleborous, Astilbe, Acorus, Hemerocalis (Daylily)



Vegetables/ Fruits

- ◆ Need at least 6 hours of sunlight and also have high water and fertility requirements
- ◆ May need to be staked to support fruiting due to limited root stability in pots, provide stakes, cages and other support when plants are young to minimize root damage

Vegetable Possibilities	Fruit Possibilities
<ul style="list-style-type: none"> ◆ Tomatoes, peppers, eggplant, green onions, beans, lettuce, squash, radishes, pole beans and cucumbers 	<ul style="list-style-type: none"> ◆ Banana, blueberries, blackberries, strawberries, citrus, peaches, apples

Vegetable Containers

"Cages" can be used with containers to support such crops as tomatoes, cucumbers and pole beans.

A potato bag - a unique way to grow potatoes.

Small fruited tomato varieties make excellent hanging baskets.

Green onions, radishes or beets can be grown in a cake pan.

<http://aggie-horticulture.tamu.edu/extension/container/container.html>

Succulents and Cacti

- ◆ Very drought tolerant
- ◆ Needs very little fertilizer
- ◆ Most are not winter-hardy in our zone

Succulents and Cacti

Shrubs and Trees

- ◆ Can be under-planted to provide year-round color
- ◆ Shrubs: Bay, boxwood, holly, acuba, camellia, quince, pyracantha, eucalyptus, azalea, rhododendron, juniper, butterfly bush, Japanese plum yew
- ◆ Tree: Japanese maple, camellia, stewartia, redbud, crepe myrtle, sourwood, chinese fringe tree, fruit trees

Water Plants

- ◆ Examples: acorus, horsetail, pitcherplants, sundew, louisiana iris, swamp sunflower, lobeia, water lilies, lotus



References

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