

Container Gardening



Presented by
UC Master Gardeners of Placer County



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■ UCCE Master Gardener Program

Who Are Master Gardeners?

Master Gardeners of Placer County

- ❖ Extend **research-based**, sustainable gardening and composting information
- ❖ Present accurate, impartial information to **home gardeners**
- ❖ Encourage public to make **informed** gardening decisions



Who Are Master Gardeners?

Where to find us...

Online, in the Media, and Special Publications

- ❖ Hotline: Call **(530) 889-7388** or submit your questions online
- ❖ Website: pcmg.ucanr.org
- ❖ Facebook, Twitter, Instagram
- ❖ Gold Country Media monthly column
- ❖ *Curious Gardener* quarterly newsletter on our website
- ❖ *Calendar and Gardening Guide*



Who Are Master Gardeners?

Where to find us...

Workshops, Fairs and Festivals, and Special Events

- ❖ Speakers by Request
- ❖ Workshops (various venues, check website)
- ❖ Farmers' Markets (seasonal: Auburn, Roseville)
- ❖ Fairs and Festivals Booths (varies)
- ❖ Garden Faire (April)
- ❖ Mother's Day Garden Tour (May)



Container Gardening

Agenda:

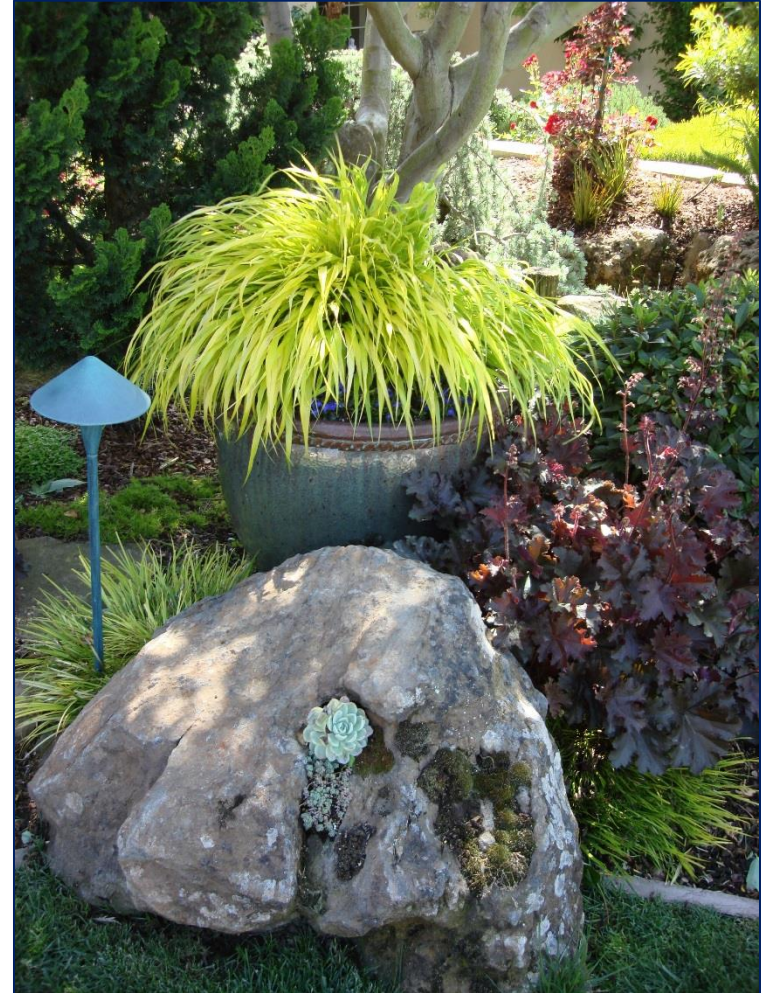
History

Advantages of Container Gardening

Get it Right

- ❖ Containers
- ❖ Planting Medium
- ❖ Plants

Planting - Repotting



Agenda Continued

- ❖ Vegetables, Fruits & Herbs
- ❖ Care & Troubleshooting
- ❖ Photo Gallery
- ❖ Summary & Tips



History

Container gardening defined

“not open to the garden soil below”

- Ancient Rome, Egypt, Orient
- Grand Gardens of Great Britain & France
- 50% bedding plants go into containers
 - ❖ Shrinking “open soil”



Advantages of Container Gardening

- Ground is not needed
- Display element
- Tailor soil to specific plant needs
- Incorporate tender plants
- Enhance flat and boring areas
- Block or camouflage eyesores



Advantages of Container Gardening

cont.

- Accessible for physically challenged
- Rotate displays
- Plants to go ...



Photo courtesy of
The Arc at Gray's Harbor

Adding a Focal Point and Color



Photos courtesy of
Steve Moeller



Get it Right .. Containers

Size...Large & deep

❖ Water and nutrient retention



Containers... cont

Clay / Terracotta

Plastic

Wood

Metal

Fiber

Stone

Reconstituted stone

Tufa

Concrete

Fiberglass

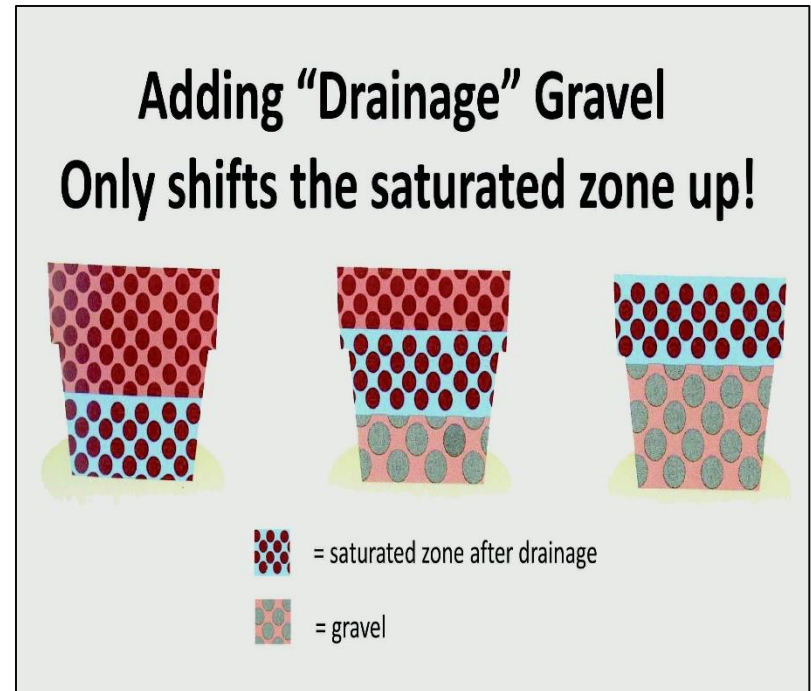
Glazed earthenware

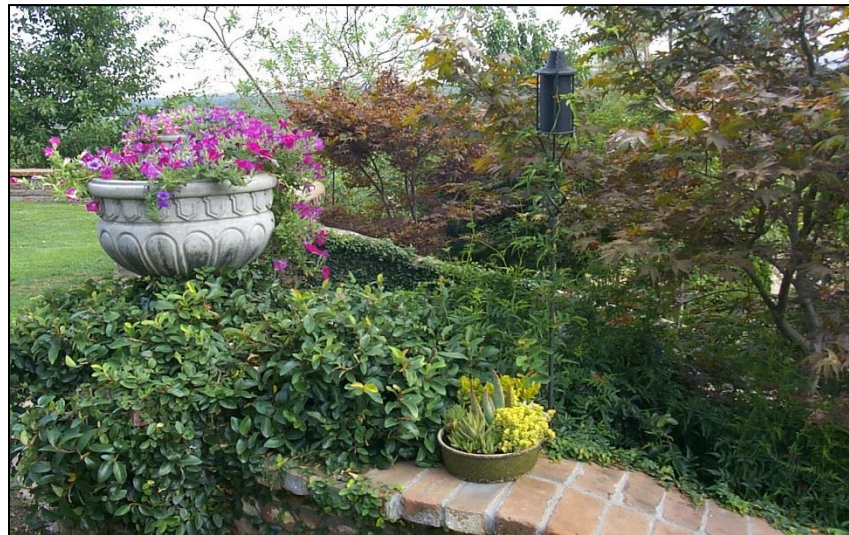
“The Unexpected”

❖ Have fun, use your
imagination

Drainage

- Plants need a few drainage holes and should be at least 1”
- Don't add gravel to the bottom of the pot.
- Saucer vs No Saucer





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The “Unexpected”



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Get it Right..Plant Medium

- No garden dirt. .roots require air & water
- Compost with sterile topsoil
- Compost with peat or peat & sand
- Bagged potting “soil”
 - ❖ Perlite or vermiculite
- Extras:
 - ❖ Water holding granules
 - ❖ Slow release fertilizer



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Get it Right...Plant Selection

Select suitable high-quality plants

Location .. Location
..Location



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Planting

- Plan your design
 - Medium should be moist
 - Provide for adequate drainage
1. Start with the largest plant & dig a hole large enough for the root ball
 2. Remove the plant from the pot set in the hole - the top of the root ball should be just at or just below the surface
 3. Leaving about 1" space in the top of the container, firm in by replacing some of the medium taken out from the hole & press down with your fingers
 4. Continue planting – finishing off with the edging plants
 5. Water gently



Repotting

1. Remove plant; clean pot
2. Loosen roots from medium
3. Trim roots <25%
4. Put plant back into same pot



Vegetables

Many vegetables do well in containers

Same principles apply:

- ❖ Proper plant selection
- ❖ Suitable container
- ❖ Good planting media
- ❖ Location, location, location



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Vegetables: try these

Cucumbers

- Salad bush hybrid, Spacemaster, Bush Pickle



Bush pickle: sets a huge supply of crisp 4-5” fruits. Bushy vines grown just 2-3 ft long. 45 days.



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Vegetables: try these..cont

Eggplant

- Bambino, Slim Jim, Florida Market, Black Beauty, Long Tom



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Vegetables: try these ...cont

Green beans

- ❖ Kentucky Wonder, Blue Lake, French Dwarf

Green Onions

- ❖ Bettsville bunching, Crystal Wax, Evergreen bunching

Lettuce

- ❖ Buttercrunch, Salad Bowl, Bibb, Romaine

Peppers

- ❖ Frigitello, Cubanelle, Sweet Banana, Apple (Hot) Red Cherry, Jalapeno, Robustini



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Vegetables: try these ...cont

Radishes

- ❖ Cherry Belle, Scarlet Globe, (White) Icicle

Squash

- ❖ Ronde de Nice, Gold Rush



Ronde de Nice.. Pick at 1"-2" diameter. Steam or saute 3-4" stuff & bake- skin tender and bruise easily; not found in supermarkets.



Vegetables: try these...cont

Tomatoes

Patio, Pixie, Saladette

Toy Boy, Spring Giant

Tumbling Tom, Small Fry



Fruits & Berries

Try ...Apples, Plums, Cherries,
Apricots, Citrus, Nectarines,
Peaches

And ... Strawberries,
Blueberries, Gooseberries,
Grapes

Notable Exceptions:

Blackberries and certain hybrid berries are difficult to grow in pots because they can't seem to 'contain' themselves due to vigorous growth



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More on Blueberries...

- ❖ Look for low growing bushes
- ❖ Need acidic soil Ph5
- ❖ Remove all flower buds or blossoms that appear the first year
- ❖ Drainage is key ... do not allow to sit in water
- ❖ Never let a berry pot go dry



Citrus

Some of the most popular dwarf citrus trees to grow in containers are:

Meyer lemon: Imported from China in 1908, it is believed to be a cross between a lemon and a mandarin. The fruit has a very sweet flavor and is less acidic than a true lemon.

Calamondin: Prized for its attractive shape and foliage, it produces fragrant flowers nearly year-round. It is grown primarily for aesthetics and less for actual, edible fruit.

Dwarf Kaffir lime tree: The rind of the fruit and the unique double-lobed, aromatic leaves are often used in cooking.



Herbs



Basil

Easy to grow from seed. Likes heat and sun. Usually only lasts a season (clip flowers to extend life). Small-leaved varieties like 'Spicy Globe' good in pots.

Chives

Easy to grow from seed. Likes heat and sun. May last for years. Clip individual leaves at the base, rather than cutting several at the top.

Parsley

Needs bright light. Usually lasts only one season. New leaves grow from the center, so clip outer stalks first.



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Herbs...cont

Rosemary

Needs bright light, not hot sun. Will live many years with good care.

Scented geraniums

Likes sun. Scented leaves, some with pale, delicate flowers.

Sweet marjoram

Easy to grow from seed. Likes sun. May last several seasons (clip flowers to extend life). Leaves have refreshing, heady scent.

Lavender

Will live several years with good care. Species like *Lavandula augustifolia* is good for containers.



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Theme Herb Combinations

An Italian chef's selection

- Sweet basil
- Italian parsley
- Oregano
- Marjoram
- Thyme

A perfume pot

- Lavender
- Rose scented geranium
- Lemon balm
- Lemon thyme
- Pineapple sage

A salad bowl

- Garlic chives
- Rocket
- Salad burnet
- Parsley
- Celery

A French chef's selection

- Tarragon
- Chervil
- Parsley
- Chives
- Sage

Care & Troubleshooting

POOR feeding & watering = stress

- ❖ Consider a drip system

Winterizing

Maintenance

- ❖ Inspect plants regularly
- ❖ Remove dead blooms
- ❖ Trim dead branches
- ❖ Use Chemicals sparingly
- ❖ Turn on a weekly basis if against a wall or fence



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Container Gardening Troubleshooting- most problems are cultural

Symptom	Possible Cause(s)	Action
Few or No Flowers	Too much shade	Move to sunnier location
	Too much nitrogen	Add postash
	Dryness at the roots delaying flowering & flower & bud drop	Change watering schedule
	Frost damage (improper or no hardening off)	Wait until frost is past or provide frost protection
	Poor pruning – too much; too little; too late	Research pruning needs & follow them
Leaf Wilt, Leaf Drop, Yellowing	Insufficient watering during summer months	Water thoroughly during summer months.. sprinkle the leaves at the first sign of wilt



Troubleshooting...Cont

Symptom(s)	Possible Cause(s)	Action
Limp-soft leaves – stem & root rot	Waterlogged	Check drainage holes for blockage. Add more drainage holes or slits if using a growing bag
	Growing medium too heavy	Replant with lighter growing medium
Brown / dead evergreens	Cold induced drought ~ bright sunny weather after a cold spell	Spray leaves of newly planted specimens – provide protection from frost & east winds
Brown patches on leaves	Sun scorch is likely the problem (in the absence of any pests or disease) caused by overhead watering. The droplets of water act as lenses & burn the leaves.	Minimize the suns' effect on water droplets .. water early in the day or in the evening



Troubleshooting...cont

Symptom	Possible Cause(s)	Action
Twisted leaves & twisted leaf stalks	Exposure to lawn weed killer	Minimize the sun's effect on water droplets..water early in the day or evening.
	Over watering	Reduce watering &/or check drainage
	Lack of sunlight	Move plant to a sunnier location
Lanky plants	Lack of sunlight	Move plant to a sunnier location
	Under nourished	Feed regularly per pkg instructions
	Crowded	Thin out



Troubleshooting

Symptom	Possible Cause(s)	Action
Plant Death: Summer	Container too small; Dark container absorbing too much heat. Container poorly insulated. Exposure to sun all day.	
Plant Death: winter	Frozen plant medium causes root damage. Container too small &/or poorly insulated	
Pot bound	Roots growing through drainage holes	Release root ball from soil; trim roots and pot in same or larger pot
	Plant dries out quickly	Release root ball from soil; trim roots, pot in same or larger pot.



Troubleshooting...cont

Symptom	Possible Cause(s)	Action
Stunted growth, small pale leaves, weak stems	Nutrition deficiencies (Nitrogen shortage)	Apply a balanced fertilizer
Leaves wit brown brittle edges. Small flowers, Low disease resistance	Nutrition deficiencies (Potash shortage)	Use a lime-free compost
Lime haters affected: Yellow between veins. Oldest leaves worst	Nutrition deficiencies (Manganese shortage)	Use a lime-free compost



Photo Gallery





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Summary & Tips

- Design elements
- Container .. Almost anything goes
- Plant selection .. Few limitations
- Regular watering, feeding and maintenance = Success
 - ❖ Winterize & guard against frost



References

- UCCE: Tip Sheet – Getting Started With Container Gardening
https://ucanr.edu/sites/Nutrition_BEST/files/191401.pdf
- UCCE Tip Sheet- Helpful Hints for Successful Container Gardening <http://pcmg.ucanr.org/files/171549.pdf>
- UCCE Tip Sheet - Container Gardening
<http://cestanislaus.ucanr.edu/files/111733.pdf>
- California Master Gardener Handbook – 2nd edition



Thank You!

Any Questions?

Master Gardener Hotline: **(530) 889-7388**

Master Gardener Website: **pcmg.ucanr.org**



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