

UNIVERSITY OF MINNESOTA
EXTENSION
MULTI-GENERATION VOLUNTEER PROGRAM

Container Gardens

Growing in Small Places

MAKING A DIFFERENCE IN MINNESOTA: ENVIRONMENT • FOOD & AGRICULTURE • COMMUNITIES • FAMILIES • YOUTH

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Container Gardens

Balcony Decks Entryways

Windowsills Hanging Baskets Landscape Accents

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Class Goals

In this class you will learn:

- Garden design basics
- Container garden tools
- Plants for small garden
- Garden care for potted plants

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Design

Gardens for Small Spaces




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Site Assessment

- Hours of direct sunlight
 - Full sun: 8+ hours
 - Part sun: 4-6 hours
 - Shade: 2 hours
- Access to water
- Available garden time for care
- Potential risks
 - Heat or cold
 - Wind
 - Pests



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Elements of Design

Color 	Texture 	Shape 
Repetition 	Size 	Balance 


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Playing with Design Elements

- Formal vs Informal
- Conform vs Contrast
- Highlight vs Hide



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Plant Structures



Thriller

Filler


Spiller

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Rule of Odd Numbers



Number of individual plants

Number of total plants

Number of containers

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Season-Long Appeal



Spring Summer Fall

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Container Garden Organization



Accent Grouping Tiered

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Section Recap

- Understand your growing conditions
- Play with design elements
- Use the Rule of Odd Numbers
- Plan for season-long appeal



Container Garden Design

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Equipment


Tools for the Container Gardener

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Containers Requirements

- Right **size** for plants
- Includes **drainage holes**
- Stable or **anchored** to prevent falls



Compare different container sizes & options.

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Container Materials

Material	Pros	Cons
Plastic (\$)	<ul style="list-style-type: none"> ▪ Many designs ▪ Light-weight ▪ Easily available 	<ul style="list-style-type: none"> ▪ Chips & cracks easily ▪ Easy to overwater
Clay/Terra Cotta (\$\$)	<ul style="list-style-type: none"> ▪ Good air circulation ▪ Natural look ▪ Easily available 	<ul style="list-style-type: none"> ▪ Heavy ▪ Visible salt build-up ▪ Dries out quickly
Ceramic (\$\$\$)	<ul style="list-style-type: none"> ▪ Stylish designs 	<ul style="list-style-type: none"> ▪ Heavy ▪ Poor drainage
Wood (\$\$)	<ul style="list-style-type: none"> ▪ Natural look ▪ Good insulator 	<ul style="list-style-type: none"> ▪ Rots ▪ Limited designs
Metal (\$\$\$)	<ul style="list-style-type: none"> ▪ Modern designs ▪ Durable 	<ul style="list-style-type: none"> ▪ Poor insulator

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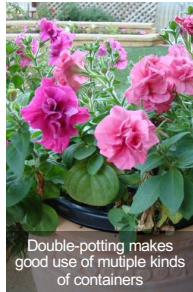
Container Size

Small	<1 Gallon	<ul style="list-style-type: none"> ▪ Good for: Single small plants ▪ Recommendation: Herbs
Medium	1-2 gallon	<ul style="list-style-type: none"> ▪ Good for: Clusters of small plants ▪ Recommendation: Annuals
Large	3-5 gallon	<ul style="list-style-type: none"> ▪ Good for: Large single plants OR Clusters of small plants ▪ Recommendation: Vegetables, accent garden
Extra Large	5-15 gallon	<ul style="list-style-type: none"> ▪ Good for: Multiple large plants & OR Clusters of medium plants ▪ Recommendation: Vegetables, perennials

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Containers Tips & Tricks

- Look for **Self-Watering** containers with a hidden reservoir
- Try **Double-Potting** to insulate containers & protect against heat
- Use **Caddies** to move easily move containers



Double-potting makes good use of multiple kinds of containers

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Check out the handouts on class resource webpage for DIY recipes

Potting Soil

- Sterilized potting medium
 - Contain NO soil
 - Hold water
 - Promotes root health
- Includes combinations of
 - Peat/sphagnum moss, coconut coir, rice hulls, bark, compost, vermiculite & perlite
 - Fertilizers
 - Water-retaining granules



Potting soil helps drainage & water retention

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Potting Soil Tips & Tricks

- Hydrate soil before planting to improve water absorption
- Keep soil covered using filler plants or mulch to reduce evaporation
- Reduce disease by sanitizing pots between seasons



Mulching can reduce water evaporation

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Potting Soil Myths & Facts

You can't reuse potting soil



False

Adding gravel to the bottom improves drainage



False

Water crystals in soil reduces the need to water



False

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Container Garden Tools

- Gloves (Cotton, Nitrile-coated)
- Small shovel or trowel
- Hand cultivator or garden fork
- Watering tools
- Pruning shears
- Bucket
- Planter caddy




The right tools make gardening easier

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Support Structures

- Add immediately after planting
 - Enhances design
 - Minimize wind damage
 - Improves air-flow
- Types of supports
 - Labels
 - Border fences
 - Trellises
 - Bamboo stakes



Tomato cages are just the right size to help control container plants

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Section Recap

- Pick the right size container
- Choose the right container material for your garden
- Start with loose, moist potting soil
- Find small tools that fit your container garden
- Set-up support structures



Container Garden Equipment

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Plants

Plants for Pots



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Growing Requirements

- Pair similar needs
 - Light
 - Water
 - Nutrition
- Avoid competing needs
 - Size
 - Space or height



Succulents have similar growing needs

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Check out the handouts on class resource webpage for Plant Recommendations

Recommended Qualities

- Look for compact varieties
 - “Bush-type”
 - “Dwarf”
 - Short-vine
 - “Cut-and-come-again”
- Avoid larger plants
 - Long-vine
 - Deep taproots
 - Woody plants (trees/shrubs)



Dwarf & Determinate tomatoes grow well in containers

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Planting & Transplanting

Steps

1. Choose a cloudy day
2. Position container garden
3. Fill container 2-inch below top
4. Confirm plant positions
5. Dig planting holes
6. Remove plants from pots & place into holes
7. Sow seeds
8. Add support structures
9. Water gently



Be gentle when moving small plants


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Section Recap

- Know your garden conditions
- Look for small-size plants
- Choose plants with similar needs
- Plant your garden in on an overcast day



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Care & Maintenance

Caring for Potted Gardens



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Good Garden Care

- Check often
- Water & fertilize as needed
- Keep gardens clean
 - Pinch & deadhead
 - Remove dead growth
- Winter care & storage



Watch over your plants to keep them healthy

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Watering

- Water only as needed
- Check daily or twice daily
 - Soil dried faster in hot, dry, or windy weather
 - Small pots dry faster than big pots
 - Clay pots dry faster than plastic pots
- Early morning watering is best
 - Apply to soil
 - Keep adding until water comes out the bottom



Fertilizers

- Always follow the label
- Fertilize only as needed
 - Start 2-6 weeks after planting
 - All-purpose fertilizer work well
- Methods
 - Slow-release good to start
 - Soluble for quick supplement




Pruning, Pinching, Deadheading



Common Problems

- Poor conditions
 - Light
 - Water
 - Temperature
- Pests
 - Animal pests (deer, rabbits)
 - Insect pests (slugs, aphids, spidermites)
- Always confirm cause **BEFORE** acting (Integrated Pest Management)

Learn more in our Pest Detective class



Overfertilizing can lead to tip burn in leaves

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Common Problems Overlap

Problem	Cause
Plants are wilted	Too much light
Leaves turn yellow (or brown) & drop off	Too little light
Leaves are discolored (speckled or splotchy)	Too much water
New leaves are pale or faded	Too little water
Plants are undersized or stunted	Too much nutrition
	Too little nutrition
	Herbicide
	Wrong temperature
	Insects

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Maintenance Tips & Tricks

- Avoid wind risks
 - Weight containers in bottom
 - Anchor containers
 - Cluster pots to reduce wind force
- Reduce heat damage
 - Use light-colored containers
 - Cluster pots to create shade
 - Double-pot to insulate


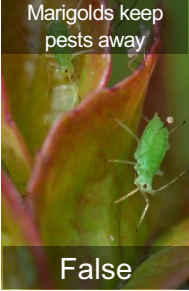



Strong winds can tip over top-heavy containers

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Maintenance Myths & Facts

<p>Organic fertilizers are better & safer</p>  <p>False</p>	<p>Marigolds keep pests away</p>  <p>False</p>	<p>Watering during a sunny day will burn plant leaves</p>  <p>False</p>
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Winter for Container Gardens

- Enjoy until winter
- When winter arrives
 - Sink container into the ground
 - Cover container in leaves/straw
 - Tip containers on the side
 - Store container in garage/shed
 - Move container gardens indoors



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Section Recap

- Check container garden often
- Water when needed
- Fertilize according to plant needs
- Remove dead growth
- Have a plan for winter



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MASTER GARDENER VOLUNTEER PROGRAM

Thank you

This class was developed by members of the
Ramsey County Master Gardener Volunteer Program

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to sign-up for more classes like this

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