



HERB CONTAINER GARDENS

Maggie Wolf, Salt Lake County Extension Agent
Teresa Cerny, Ornamental Horticulture Specialist

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Growing herbs can be a fun and rewarding gardening experience. A container herb garden is an attractive and useful asset to the patio, balcony, or doorstep for people with little or no garden space. The key to a successful container herb garden is selection of appropriate:

- a. Container garden sites
- b. Container sizes
- c. Potting media
- d. Container-friendly herbs
- e. Planting procedures
- f. Care and harvest methods

CONTAINER GARDEN SITE

Herbs produce more harvestable leaves and flowers when they are grown in a sunny garden site. Container gardens prefer a site with late afternoon and evening shade, especially in the southern parts of Utah. Place your container garden near a convenient water source and close to the kitchen door, so that you will be more inclined to use the herbs in your cooking or garnishing.

PROPER SIZE CONTAINER

At maturity, herbs have root systems a little larger than their top growth. Therefore, it is important to choose a container large enough to allow space for roots to grow. Herbs vary in size, but the general rule of thumb is to allow each herb one gallon of potting mix. For example, a 12-inch pot contains about 3 ½ gallons of potting media, so it can hold 3 or 4 herb plants. A 16-inch pot contains about 5 ½ gallons of media, so it can support about 5 or 6 herb plants. Make sure the pot has adequate drainage holes.

POTTING MEDIA

Container garden plants grow best in good quality potting mix or 'growing medium' rather than real soil. Potting mix is sterile, retains moisture and allows for aeration at the same time. Mixes usually contain sphagnum peat moss, perlite or vermiculite, and possibly sand or fine pine bark.

Most potting mixes contain no fertilizer, so you may either mix a granular complete

fertilizer plus a trace element fertilizer into the potting media before planting, or you may use a soluble complete fertilizer after planting. With any fertilizer, use an application rate on the low end of the scale, to encourage better herbal flavor and aroma.

CONTAINER-FRIENDLY HERBS

Some types of herbs will out-perform others in containers. Use annual herbs (See Table 1) in the Wasatch Front and northern Utah areas or plan to bring the containers of perennial herbs indoors during winter. In southern Utah, perennial herbs hardy to USDA Zone 7 and 8 may over-winter in containers, as long as the container is in a protected area and adequate moisture is provided. However, even hardy perennials may die in a container over winter.

Choose herbs that grow in a compact habit. Tall herbs, such as dill and fennel, may look too large for the scale of the container, and the increased top weight may cause the container to topple over. Select drought-tolerant herbs in case the container accidentally misses a watering. Trailing herbs are especially attractive in container gardens, because they drape in cascades over the pot edges.



PLANTING PROCEDURES

When potting transplants, be sure to plant them at the correct depth. The top of the transplant root ball should be level or slightly below the potting mix surface in the new pot. When you are transplanting plants from various size pots, you must adjust the planting depth accordingly, since the plants will have different size root balls.

Start with a moist, but not saturated, potting medium. Most potting mixes will wet more easily with warm water. Add moist potting mix into the pot until the tallest transplant root ball can sit with its top surface about $\frac{3}{4}$ inch below the pot rim. Continue adding potting media and transplants until the pot is filled to within $\frac{3}{4}$ inch of the top edge of the pot but do not pack down the potting media as you fill the pot. Water the pot thoroughly, until water drips through the bottom drainage holes.



CARE AND HARVESTING METHODS

The most common problem with container gardens is watering – either too much or too little. Watering too often may cause fungal infestation, fungus gnats, and root rot. Symptoms of over-watering include wilting, stunted growth, fungus gnats, and reduced root growth.

Too little water will cause wilting and scorching. Repeated wilting, even if the plant survives, will stunt the plant's growth and reduce flower quality. At each watering, add water until it runs through the bottom of the pot.

Ideally, you will water your container garden only when needed. Feel the potting mix 2 to 3 inches below the surface. If it is still wet, don't water. Tip the pot gently to gauge its weight. When the pot begins to feel significantly lighter in weight, it's time to water. When the plants are small, they will use less water, and you may water as seldom as every 5 to 6 days. During the heat of summer, when your herbs have matured and their roots penetrate the entire pot, you may need to water as often as every day.

If you have incorporated slow-release fertilizer into the potting mix, you should not need to fertilize again for at least 2 months. If you did not add fertilizer to the potting mix, use a soluble complete fertilizer at the recommended rate every third or fourth watering.

Herbs are usually pest-resistant, but keep an eye out for caterpillars, aphids, and spider mites. If a large caterpillar is eating your parsley, think twice about killing it; it is probably a swallowtail butterfly larva! Since you will be eating the leaves of your herb plants, use insecticidal soap rather than an insecticide to control insect pests. One teaspoon of Ivory liquid or other liquid soap (not detergent) per gallon of water, applied with a sprayer, will wash away the aphids or spider mites. This organic control must be re-applied every 3 to 4 days until the pests are no longer present.

Harvesting the herbs regularly keeps the plants' growth under control and encourages continued production. Harvest the herbs during a dry morning or just after the dew dries. Use them fresh for best flavor, or preserve them by drying or freezing.

At the end of the season, you may save some of the tender perennial herb plants, such as rosemary, and marjoram. After you are certain they are free of pests, bring them into your home. Place them in a sunny window, or provide artificial light for about 14 hours per day. Water them as you do any houseplant.

Tender perennials may be protected in winter if they are planted in the ground next to the south wall of your home or on the south side of a stone wall. Such a site will protect herbs that are hardy within one or two USDA zones. Apply mulch around the herbs 6 to 8 inches deep. Check them frequently for rodent damage. Don't forget that herbs over-wintering outdoors may need water, especially during a dry winter.

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Table 1. Herbs for Container Gardens in Utah

Name	Plant Type	Height	Maintenance	Harvest/Uses
Basil , <i>Ocimum basilicum</i>	Annual	Variable by variety, ranges from 6" to 3'.	Keep flowers pinched off. Continually harvest for renewed leaf production.	Cut or pinch off stalk from top of plant. Remove leaves and use in pesto, sauces, salads.
Pot Marigold , <i>Calendula officinalis</i>	Annual	18"	Deadhead flowers for repeat bloom.	Pick off petals. Use fresh as garnish or dry and grind them as a saffron substitute.
Catnip or Catmint , <i>Nepeta cataria</i>	Perennial, Hardy to USDA Zone 3	1' to 3'	Cats may damage foliage. This plant can become invasive if not grown in a container.	Pick leaves and dry them to use in cat toys.
Roman Chamomile , <i>Chamaemelum nobilis</i> German Chamomile , <i>Matricaria recutita</i>	Perennial, Hardy to USDA Zone 3 Annual	Large flowers on 1' stems Tiny flowers on stems up to 2'	Do not over-fertilize.	Flowers may be dried for teas.
Chives , <i>Allium schoenoprasum</i>	Bulb-type perennial	1' to 2'	May be divided or thinned at the end of the season.	Snip leaves as needed throughout season. Flowers are also edible and make a nice garnish.
Cilantro , <i>Coriandrum sativum</i>	Annual	About 1'	This plant may decline as summer heats up. Plant again for fall harvest.	Cut leaves at base, use fresh in salsa. The seed is called coriander
Horehound , <i>Marrubium vulgare</i>	Perennial, Hardy to USDA Zone 4	1 1/2' to 3'	May become invasive if not grown in a container.	Leaves used to flavor candy and cough syrups.
Lavender , <i>Lavandula angustifolia</i>	Perennial, Hardy to USDA Zone 5	2'	Divide in the fall. Protect during winter to prevent winterkill.	Leaves are popular filling for sachets. Flower stalks may be hung to dry.
Lemon Balm , <i>Melissa officinalis</i>	Perennial, Hardy to USDA Zone 4.	3', shorter if clipped	This plant can become invasive if not grown in a container.	Use leaves fresh in teas or as garnish.
Marjoram, Sweet Marjoram , <i>Origanum majoranum</i>	Tender perennial, Hardy to USDA Zone 9. Grow as an annual.	1'	Grow in nutrient-rich medium for best flavor. Harvest before flower buds open.	Leaves and flowers may be used fresh or dried. Commonly used in meat dishes.
Mint , <i>Mentha spp.</i>	Perennial, Hardy to USDA Zone 5	1 1/2' to 2'	There are many varieties of mint, all of them can become invasive unless grown in a container.	

Name	Plant Type	Height	Maintenance	Harvest/Uses
Nasturtium, <i>Tropaeolum majus</i>	Annual	Bush type to 2', Vine type 6' to 8' Some dwarf varieties exist.	Flowers best with minimal nitrogen fertilizer.	Flowers may be used as garnish in salads. Hummingbirds will use as a nectar source.
Oregano, <i>Origanum vulgare</i>	Perennial, Hardy to USDA Zone 4	2' to 3'	May be divided in the spring. Protect during winter if growing in Zone 4.	Leaves are commonly used in Italian cooking. May be dried.
Parsley, <i>Petroselinum crispum</i>	Biennial	6" to 2'	Maintain consistent moisture in container.	Cut leaves at base and use fresh in recipes and garnish. Leaves may be dried.
Rosemary <i>Rosmarinus officinalis</i>	Tender perennial, Hardy to USDA Zone 8.	2' to 3'; may get taller in Zone 8 and 9.	In Zones 7 and lower, bring the plant indoors during winter. Keep it in a sunny window and water regularly.	Leaves may be stripped from stems and used in recipes, as a meat rub or dry marinade.
Sage, <i>Salvia officinalis</i>	Perennial, Hardy to USDA Zone 4.	1 1/2' to 2'	Variegated varieties may be less hardy than the common sage, protect them during winter.	Use leaves in stuffing, sausages, and stews. Leaves may be dried.
Scented Geraniums <i>Pelargonium spp.</i>	Tender perennial, Hardy to USDA Zone 10	1' to 2'	Take cuttings in the fall and root them indoors for next year's crop.	Use leaves in herbal teas, potpourris and sachets.
Tarragon <i>Artemisia dracunculoides</i>	Perennial, Hardy to USDA Zone 4	1' to 3'	Propagate from cuttings in the fall for next year's crop.	Leaves can be used to season salads, sauces, fish, and poultry.
Thyme, <i>Thymus vulgaris</i> (many cultivars exist)	Perennial, Hardy to USDA Zone 5.	1'	Tolerates stress. Replace every 3 years to get rid of woody growth. Protect during winter.	Use fresh or dried in meat dishes and vegetable dishes.
Summer Savory, <i>Satureja hortensis</i>	Perennial, Hardy to USDA Zone 5.	1'	Protect during winter.	Leaves may be used fresh, frozen, or dried. Use as a salad garnish or meat rub.
Winter Savory <i>Satureja montana</i>	Tender perennial, Hardy to USDA Zone 6	6" to 1'	Grow as annual in most of Utah.	Use chopped leaves to season meats and vegetables.