



CONTAINER GARDENING

How do most of us get started as container gardeners? We place just one pot of bright red geraniums on our window sill, doorstep, patio or front walk. Why do we put it there? To catch the eye. And then we add another plant, and another. Soon we have an entire arrangement of containers. And from there we try different kinds of containers in different types of locations. And so we get hooked.

Just what is container gardening? Strictly speaking, you are container gardening any time you pot a plant in a container rather than placing it in the ground.

1. Advantages of Container Gardening

- A.) Container gardening can provide additional growing space.
- B.) Container gardening is versatile:
 - 1) enables color to be put where it is needed, and
 - 2) displays can be changed easily to maintain interest throughout the year.
- C.) Container gardening can be used to create a specific atmosphere:
 - 1) cottage garden atmosphere:
 - 2.) Mediterranean atmosphere:
 - 3.) formal atmosphere:
- D.) Container gardening can provide the opportunity to grow good but rampant plants that need to be kept in check.
- E.) Container gardening can give you room for a vegetable 'plot' if you have a very small gardening space.
- F.) Container gardening can provide you with a "mobile" garden.
- G.) Container gardening can be used to spotlight plants.
- H.) Containers can be used as focal or punctuation points, giving a garden a sense of purpose. A container can draw the eye to a particular view or angle. A container can also be used in a small garden to create a sense of distance by drawing the eye to the view beyond.

2. Types of Containers

Container gardening is very intensive, often compressing into a single container the same number of plants that might normally cover a sizeable area in your flower bed. In addition, plants with many different growth habits, sizes and growing requirements are often forced to cohabit in the same confined environment. The results can be totally stunning or a dismal failure.

Containers help to set the tone of your garden - whether it is a fun or a serious garden, for example. One of the things that make a garden distinctive is choosing the right containers to go with the right plants in a suitable setting. Your choice of containers is important because it will have a very strong effect on how your plants grow.

For a container you can use almost anything that holds soil as long as it meets two basic requirements. First, it must promote good health, providing plenty of room for roots and excellent drainage. Second, and almost as important, it must make the plant it holds look good. Choose a container that best enhances your plant (its shape, foliage and flowers) and its ultimate location.

When you're choosing containers keep in mind that they must do more than satisfy aesthetic requirements and hold enough soil for the roots. You also have to take into account porosity and drainage.

Soil in porous containers can dry out quickly so you'll need to water frequently (sometimes daily). The opposite holds true for nonporous containers. The soil tends to hold moisture so be sure that your drainage is excellent and avoid over-watering.

Poor drainage frequently causes failure in container gardening. This is a problem you can easily avoid by using the right soil mix and by choosing a container that can efficiently drain off excess water. This means using a container with 'drainage' holes. If you want to use a drainless container, you'll need to adapt it to provide proper drainage.

A.) Size: The size of your containers will often be a compromise between what the plants would like, what you can lift and move easily and what your supports or windowsills will hold safely.

1.) window boxes:

- should be large enough to hold an adequate reservoir of soil and a reasonable selection of plants
- a minimum practical depth is 6", 8" is better since you need to leave at least 1" of watering space between the top of your container and the soil mix
- boxes much longer than 3' are difficult to lift and move (can do liners in sections if necessary)
- a width of 8" is the minimum for a good display of plants (if box is too narrow there is only space for a single row of plants with a few trailers) .

2.) hangers:

- should be as large as possible bearing in mind the support available; planters can make good use of vertical space
- a large half-basket, well-secured to the wall may be better than a small, full basket on an unsubstantial bracket.
- the bigger the basket, the bolder the display
- 12" is a practical size, but larger is better if you have strong supports.

- if you place a plant in a spot where it receives sunlight from just one side include a swivel in the hanging apparatus so you can turn the plant occasionally
 - moss-lined wire baskets drain freely from the sides and bottom each time they're watered; avoid hanging them above any surface that stains easily or can't be cleaned
- 3.) tubs, pots, boxes, troughs, urns:
- generally hold plenty of soil so the skill is in choosing the container and plants that are well-balanced and look right together
- a) small containers:
- up to 8" in diameter; hold 4 quarts soil
 - for young plants and small types such as dwarf annuals and some succulents
 - small containers need lots of attention: most require daily watering
- b) medium containers:
- 8-12" in diameter; hold 1 cubic foot of soil
 - for many annuals and perennials and for some shrubs and vines
 - medium size containers need a fair amount of attention; may require daily watering in warm weather or once the root systems of the plants have grown to fill all the soil in the container
 - because of their modest size you can fit a number of them into a small space, creating a lot of garden diversity
- 4.) large containers:
- 12-18" in diameter; hold 1 1/2 cubic feet of soil
 - for large shrubs or small trees, or for mass or bouquet- style plantings of annuals or perennials (plants are not hardy in containers over a New Hampshire winter – the root system gets too cold)
 - daily watering not necessary - because of the large amount of soil containers don't dry out as quickly
 - all are heavy when you plant them so be careful where you put them
- 5.) extra-large containers
- over 18" in diameter; hold at least 2 cubic feet of soil
 - extra-large containers are so weighty that they can hardly be called portable-a really permanent design component
 - for large shrubs, small trees, large mass plantings; trees and shrubs look most attractive when surrounded by base plantings of bright flowers.

B.) Materials:

If you plan to group many containers together on a deck, terrace or patio it's best to choose just 2 or 3 types. While a group of many different-sized containers of the same kind can be striking, using too many container materials can result in a jumble

- 1.) paper pulp pots (made of compressed, recycled paper) :

- color varies from a sun-bleached gray when the pot is dry to a water-soaked brownish black
 - short-term (usually last only 2 seasons)
 - cheap and practical where a lot of containers are desired and the flower display is more important than the container .
 - can use trailers to hide the containers
 - can cut V-shaped holes in the sides for plants
 - pots 8" and 12" deep are excellent containers for vegetables and herbs
 - empty or full, they're lighter in weight than other containers of the same size so they're particularly suited to places where weight is a consideration
- 2.) reconstituted stone:
- heavy and expensive
 - good for large, elegant urns and jardinières that would be prohibitively expensive in real stone
- 3.) terracotta:
- timeless appeal that makes them look right in almost any type of garden
 - advantages: porous so roots don't become waterlogged and evaporation of water from the outside of the pot in hot weather keeps the roots relatively cool
 - disadvantages: they're breakable and because they're porous they tend to dry out rapidly in warm weather
 - make sure it's frost proof or bring it indoors or empty it for the winter
- 4.) unglazed clay pots;
- have a natural, understated look that enhances most plants and garden settings
 - most are classified and sold by their top diameter
 - same advantages/disadvantages as above apply
- 5.) plastic:
- widely used and cheap; come in white, green and brown (dark colors absorb heat)
 - becomes brittle after several years exposure
 - because they're non-porous, you shouldn't need to water too often
 - some have built in saucers, some designed for hanging because of their light weight, plastic containers are easier to lift
 - plastic is ideal for cheap liner boxes or as liners for baskets or decorative pots
- 6.) wooden tubs (circular or hexagonal) and boxes (square or rectangular)
- if you are making your own containers wood can be stained or painted to be integrated into your house
 - wooden containers are expensive, but will last for many years if they're cared for
 - often made out of durable woods like redwood and cedar; coat the inside with a nontoxic wood preservative

- to be sure that your container is water retentive, check to make sure the joints fit tightly 'before you buy
 - containers with thick walls (at least 7/8") don't have to be watered as often (takes the sun's drying heat longer to penetrate)
 - to promote good drainage and prevent decay, raise containers at least 1" from the surface on which they stand
- 7.) half barrels
- these are halves of barrels originally built to hold wine or whiskey; typically made of oak; less apt to leak than other types of barrels; have thick walls
 - to lengthen the barrel's life, coat the inside with a wood preservative and the hoops with rust deterrent
 - because of their proportions and depth these are often used for trees and shrubs in mild climates
- 8.) stone troughs and sinks:
- hold a lot of soil; good for permanent plantings of topiary, alpiners, dwarf shrubs (with winter protection)
- 9.) concrete and aggregate containers:
- can be heavily pebbled (aggregate) or smooth sided
 - concrete troughs popular with rock gardeners
 - heavy, especially when full of soil
- 10.) hangers: hangers require much more attention than window boxes and tubs. They are more exposed, hold less soil, and dry out more quickly. They can also bring an otherwise uninteresting space to life.
- 11.) plastic bags:
- you can fill a plastic bag with soil mix and plant it so that flowers and foliage hide the plastic itself,
 - or you can buy a bag of potting mix and simply plant through slits cut in the sides
 - the result is a dense mat of vegetation in a flexible container
 - very inexpensive

As you're selecting containers keep in mind that the real test for a decorative container is whether it's worth looking at when empty.

III. Types of Plants

There are many, many books on container gardening you can borrow from the public library or purchase that will help you decide which plants you may want to use in your containers. There are also kits that have plants pre-selected with harmonious color combinations, similar growth rates and similar needs for water and light. You can find container kits at garden centers. Or you can type "plant combinations for containers" into your favorite computer search engine and look at more combinations than you can possibly plant in your lifetime. In fact, you may want to do this on an annual basis as there are many, many new annuals, tropicals, perennials, shrubs and small trees recommended for use in containers each year.

IV. General Culture

In general, container plants need the same basic care they'd require if they were growing in a flower bed. But because of their restrictions - plant roots can't move to procure more nutrients once they've used up what's in the pot - container plants require more diligence. You must pay close attention to the essentials: provide a properly draining soil mix; adequate fertilizer; enough water, but not too much; the right kind of light; and protection from extreme weather, pests and diseases.

A.) Soil Mixes

You can find excellent potting mixes at most nurseries and garden centers. Although the ingredients tend to vary somewhat, good mixes always contain an organic component (peat moss, compost, wood by-products), vermiculite or perlite (to help retain moisture), sand, nutrients and limestone.

There are also water-absorbing polymer gels which you can mix into your potting soil to extend the period between waterings. These absorb high quantities of water and then release that water (to your plants) through osmosis.

B.) Fertilizers

Almost all container plants require fertilization at some point. How much depends on the soil mix you choose and on whether the plants you choose are heavy feeders or not.

Fertilizers come in 3 basic forms: dry, liquid and timed-release. More and more, timed-release fertilizers are being incorporated into the soil mix at planting. Choose one that releases its nutrients slowly over 3 to 4 months. Then you can use a liquid feed (20-20-20 or a similar fertilizer) occasionally if your plants seem to stop growing or the new foliage begins to yellow.

Liquid fertilizers supply nutrients immediately rather than releasing them slowly. They are also easy to apply and can be diluted to varying concentrations to meet individual plant needs.

Dry fertilizers (ex: 5-10-10) usually granular in form, are applied to the soil surface and should be watered in to avoid burning plant roots. You can also use fertilizer pellets or sticks pushed into the soil around the plant roots, but these are a very costly way to fertilize.

C.) Planting

Design considerations: Most books on container gardening contain a wealth of planting schemes which provide plenty of ideas for grouping particular plants. Most assume that you will be starting out with small-sized plants.

Container plants are usually used as accents to draw attention. Just as we pay attention to the type of container we choose for a certain location, so we pay attention to the plants we put in our containers. The most successful plantings have both height and depth. In addition, using plants with various colors, forms and textures helps to provide balance. Always arrange plants on the surface first

to make sure your design and plant spacing will work. Also take into consideration the various growth rates of the plants you are using. Over the course of time very vigorous plants can often smother slower growers.

D.) Watering

Watering is a regular, daily chore that has to be faced up to as the one major negative aspect of container gardening. Some plants will need soil that's kept constantly moist, and others will do best if the soil is allowed to dry out between one watering and the next. Which plants you choose should be at least partially based on your ability to provide adequate watering.

How much water do you give? Give each plant enough water to moisten the entire container full of soil, not just the top few inches. You'll know the soil is saturated when the excess water runs freely from the drainage holes. Making sure water comes through the drainage holes also avoids the build-up of soluble salts from fertilizers.

If you have lots of containers or very large containers you might want to consider the use of a hose.

Two irrigation systems that can be adapted for container gardening are drip systems and the standard sprinkler head system.

1.) Watering Tips:

- a.) Water from a hose that has been baking in the sun can be hot enough to damage tender roots, Let water run from the hose until it's fairly cool before you begin to water.
- b.) On-off valves are convenient. They allow you to conserve water and avoid messy splashing by turning the water off, while walking between containers.
- c.) Submersion can be used to revive plants whose soil has become dangerously dry. Simply lower the pot into a tub of water and keep it there until it stops releasing bubbles. Then lift it out and hold it above the tub to drain.
- d.) To water hanging plants equip yourself with a long-handled, angled extender fitted with a bubbler. This makes overhead watering using a hose much easier, and prevents water from dribbling down your arm when you lift.
- e.) When planting be sure to leave at least 1" of watering space between the top of your container and the soil mix.

2.) Container types from most to least water retentive:

- Plastic
- Metal
- Concrete
- Glazed ceramic
- Wood
- Unglazed red clay
- Paper pulp
- Pressed peat
- Wire lined with sphagnum moss

E.) Keeping Up Appearances

Plants in containers need routine care just like any other garden plants.

- 1.) Once a year you should check all your containers to see if they require any maintenance.
- 2.) Deadheading will extend the flowering season and keep containers looking their best.
- 3.) Mulch the top of your containers with a fresh layer of soil, shredded bark or decorative stones for a finished look.
- 4.) Support tall, floppy plants with wire supports, or climbers with a trellis.
- 5.) Remove weed seedlings when they are small, before they become a problem.

F.) Avoiding Pests and Other Problems

1. Grow resistant varieties whenever possible.
2. Avoid plants that are known to be particularly susceptible to -pests or diseases unless you are prepared to spray (for example, aphids on sweet peas and nasturtiums, spider mites on impatiens).
3. Examine plants for diseases and pests before you buy them.
4. Always use clean containers and sterile potting mix when planting seeds or vegetable transplants.
5. Keep containers clear of weeds, fallen fruit and dead flowers and leaves.
6. Know your plants and give them the growing conditions they need. Healthy, well-established plants are less likely to attract, and more able to withstand, pests and diseases.
7. Observe: make a point of checking for early signs of pests and diseases when you water or else once a week. Nip any problems in the bud.

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June 2007