#### Little Helping Hands in the Garden

Getting children involved in gardening is a great way to engage them and make them aware of where their food comes from. It teaches valuable lessons about nature and gives them a better appreciation of healthy produce. As successful schoolyard garden programs across the country have shown, children tend to eat more vegetables when they've helped to grow them. When you garden with your children, you'll find there are endless opportunities for learning—plus it's a great way to enjoy the sunshine and play in the dirt!

#### Some easy ways to include children in the family garden:

- Have them help you decide what fruits and vegetables to grow.
- Give them their own little space or a few pots to work with.
- Let them paint wooden garden markers or stones or make pictures of different vegetables, then laminate them and post them in the garden (this is a great way for them to recognize what's growing where and how the plants look).
- Give them their own set of garden tools and gloves so they feel prepared and valued.
- Let them plant large seeds such as peas, beans and corn, which are easy for them to handle and are great for planting directly into the garden bed.
- Show them how to loosen and prepare the soil—a child-size shovel or hand shovel is perfect to allow them to help you turn over the soil while preparing it.

Courtesy of Natasha Gandhi-Rue, Williams-Sonoma Culinary Expert

### Advice from the Beekman Boys—Josh and Brent

Not everyone has access to a plot of land that they can use for vegetable gardening, but that shouldn't stop you. We started growing tomatoes, peppers, salads and herbs on our rooftop in NYC—and now look at us! You can still garden by using planters, pots and other containers.

It is important to understand how much space an adult plant will require for roots and the plant. A variety of lettuces and spinach can be grown in a long planter box, even very shallow ones. Peas and beans can also be grown in a planter box. You can place a small piece of lattice for them to grow up. Tomatoes, peppers, carrots and onions can be grown in a deep planter pot. Read the package instructions for ideal spacing and growth of the plant before choosing a specific variety. Herbs are also ideal for growing in planters. Basil, chives and oregano can be planted in a small, shallow container that can be moved inside during the winter to extend the growing season. Vegetables that require a lot of space such as corn are not recommended for container gardening. Other limitations may include the amount of light and shade where the container will be placed. Research the varieties of the desired vegetable and choose one that will grow well in the amount of sunlight available and the temperatures of the local climate.

Plants growing in a container will need regular watering, perhaps as often as every day if the weather is hot or dry. The soil in a container will dry out more quickly than soil in a garden. Check the soil daily by pressing a pencil into the pot to a depth of 3 inches. If the pencil does not have any soil attached when it is removed, the plant should be watered. It's just like baking a cake!

If you use planters that are small or get wheeled carts for larger pots, you'll be able to move them inside when the weather starts to get colder toward the end of the season. This will extend the growing season of your plants.

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## What are gardening zones?

To find out which plants will do well in your region and when to plant them, you will need to know your "hardiness zone" number. The standard is the USDA Plant Hardiness Zone Map, which is based on average minimum winter temperatures, divided into 10°F zones. Both beginning and expert gardeners will benefit from referring to the zone map before planting. Simply go to the website planthardiness.ars.usda.gov and type in your zip code to find the hardiness zone for your area. You will see the number on seed packets and in gardening books.

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#### WILLIAMS-SONOMA

# Technique Class: Intro to Gardening: Seed Starting

#### Seed-Starting Basics

Besides curing avid gardeners' restlessness during the off-season, starting seeds indoors has many benefits. It is not only more economical than buying seedlings from a nursery, but it also allows you to plant your choice of unique heirlooms as well as the best specific varieties for your garden conditions.

#### What You Need:

- *Containers*. Nearly anything will work, from egg cartons to biodegradable peat pots. Whatever container you choose, it must have holes in the bottom to provide good drainage.
- Seed-starting mix. Use a sterile, weed-free planting medium that holds water well.
- *Seeds*. Use varieties suited to your region's conditions. Be sure to keep the seed packages for reference.
- *Plant labels*. Some seed-starting kits include labels for you to write on. You can also use wooden frozen pop sticks or anything else small enough to secure on the outside of each seed pot or row.

#### How to Start Your Seeds

**Step 1:** Several hours before you fill your seed pots, put your seed-starting mix in a large container (like a bucket) and stir in enough water to moisten it uniformly.

**Step 2:** Fill your small containers with the moistened planting medium, then plant 2 or 3 seeds per pot at the depth recommended on the seed packet. Label each container and place on a tray to catch water draining.

Step 3: Cover the containers with plastic wrap or a plastic dome if you have one. The plastic helps hold enough moisture for germination. Do not wrap the plastic too tightly—the seeds need air. Seeds also need warmth to germinate, so soil temperature should be between 75°F and 90°F. Keep the seed pots in a warm, dark area. Either use a germination mat under the pots or keep them in a warm place such as near a heat source.

**Step 4:** As soon as sprouts emerge, remove the plastic and put the seed pots in a place that receives either natural sunlight or artificial light for about 14 hours a day. Seedlings do not require the same warm temperatures and will do fine with their soil around 70°F and with a room temperature of 60° to 70°F.

**Step 5:** Water seedlings gently when the soil feels dry to the touch, either with a mister or by placing a tray below the seed pots and adding water to that. The seed pots will soak up the water from the bottom.

**Step 6:** If your seed-starting mix did not contain an organic fertilizer, feed seedlings a diluted liquid organic fertilizer when they form their first leaves.

**Step 7:** After your seedlings are well established, gently pluck out the weakest seedling in each cell, giving the strongest seedling plenty of room to grow.

**Step 8:** To simulate wind, once your seedlings are established, lightly brush your hand over the tops or have a gentle fan blowing on them. This will promote sturdy stems.

Step 9: After 4 to 6 weeks, your seedlings will be ready for transplanting outside. Make this transition less stressful by slowly adjusting them to outside conditions. This process is called "hardening off." Choose a spot in a sheltered location or a partially shady spot, such as a patio, and let them remain there for about a week, bringing them in at night and gradually moving them into brighter sunlight each day. After your plants have been hardened off, they will be ready for transplanting into your garden in a location that meets their requirements (see back of seed packets).

Courtesy of Natasha Gandhi-Rue, Williams-Sonoma Culinary Expert

#### Plant Requirements

Anyone interested in gardening has one question in mind when choosing a new plant: Will it thrive in my garden? When buying seeds, it is important to read the requirements on each packet to determine whether your garden meets them. This information will also help you plan where you will be placing specific plants, as well as what plants can be planted together (those that have a commonality in requirements—day length, water, etc.).

- *Day length*. The length of days is usually the most critical factor in regulating vegetative growth, flower initiation and development, and the induction of dormancy. Plants utilize day length as a cue to promote growth in spring and later to prepare them for cold weather.
- *Light*. Light is the energy source for plants. Cloudy, rainy days or the shade cast by nearby plants and structures can significantly reduce the amount of light available. Shade-adapted plants cannot tolerate the bright light of full sun. Plants survive only where the amount is within a range they can tolerate. Before planting, it is important to know what areas in your garden get only morning sun, get full sun throughout the day, are shaded by a tree, fence and so on.
- *Temperature*. Plants grow best within an optimum range of temperatures, and the range may be wide for some species, narrow for others.
- Cold. This is also referred to as plant hardiness. Plants differ in their ability to survive cold temperatures. Some tropical plants are injured by temperatures below 60°F. Based on the zone you live in, there are many vegetable plants that can be started in early to mid-spring (after the last frost), such as cruciferous vegetables (broccoli, cabbages, cauliflower) and lettuces (spinach, romaine, arugula).
- *Heat*. Heat tolerance varies widely from species to species. Many plants that naturally grow in arid tropical regions are very heat tolerant, while subarctic plants and alpine plants show very little tolerance for heat. High night temperatures are often the most limiting factor for many plants.

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- *Water*. Different plants have different water needs. Some tolerate drought during the summer better than others, while other plants need a consistent supply of moisture to grow well.
- *pH*. The ability of plant roots to take up certain nutrients depends on the pH, which is a measure of the acidity or alkalinity of the soil. Most plants grow best in soils that have a pH near 7.0. Lime can be used to raise pH, and materials containing sulfates such as aluminum sulfate and iron sulfate can be used to lower pH.

Adapted from the United States National Arboretum

## Successive Planting—How to Extend Your Gardening Season

Many of us are familiar with the succession of flowers that grace our front gardens, from tulips and daffodils in the spring, to summer blooms of daisies and lantanas, to early fall's hardy mums. Likewise, successive planting for our vegetable gardens is a great way to stretch the harvest over a period of time so as to continue to have fresh, home-grown vegetables. Besides extending your harvest, successive planting keeps the soil productive and helps discourage weeds.

One successive planting method is to simultaneously sow seeds into your prepared garden bed and start seeds of the same variety in seedling pots indoors. The transplants (seedling pots) will germinate quicker, will be ready to transplant into the garden and will be ready to harvest before the direct-seeded vegetable plants.

Another method is to sow seeds of several different varieties of the same type of vegetable that mature at different rates. Planting rows of different varieties is an easy way to extend the harvest. For carrots, radishes and salad greens, you have the option of mixing the seeds of different varieties together and planting them all in the same row.

A third method is to replant at periodic intervals. Sow radishes and spinach once a week; sow beans, beets, carrots, scallions and salad greens every 2 weeks; sow cucumbers and summer squash once a month. Since you can't tell in advance just how warm or cool the season will be, keep planting until seeds stop sprouting well.

With the methods of successive planting described above, it is important to provide enough space between seedlings and to continue to thin the seedlings as they establish themselves so that they are able to become mature plants. Refer to the seed packets for ideal spacing.

And the last method of successive planting is to use the seasons and temperature as your guide. Using this method, you will replace spring crops (cauliflower, broccoli, delicate lettuces) with summer crops (tomatoes, peppers, corn) and then fall crops (winter squashes, pumpkins). Based on the heat of your summer, there are some vegetables that can be planted twice—zucchini and other summer squashes can be planted this way, for example. Plant your first set of summer squash seedlings in late spring/early summer, enjoy the harvest, then plant another set of summer squashes in late summer/early fall for a second harvest.

This method of successive gardening requires less organization and allows you to enjoy different vegetables during different times of the growing season. But remember that this only works with vegetable and fruit plants that are annuals (plants that complete their life in one growing season). It cannot be done with perennial vegetables and fruits (plants that come back every year), such as strawberries, berry bushes and asparagus.

Courtesy of Natasha Gandhi-Rue, Williams-Sonoma Culinary Expert