

4-H Container Gardening

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Learning Objective

You will be able to
1) find plants that are suitable for growing in a container, 2) establish plant(s) in container(s) and 3) know how to care for container plants.

What is container gardening?

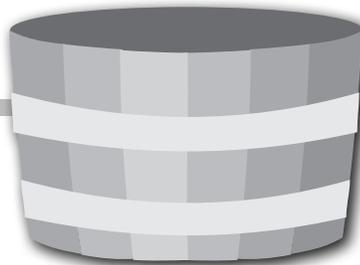
Container gardening is growing plants in containers instead of the ground. Container gardens can be used when traditional gardens are not possible because of limited space, sunlight or access.

Containers

Just about any container can be used to grow vegetables.

Examples of possible containers are: bushel baskets, gallon cans, tubs or wooden boxes. Use your imagination. Think about recycling objects around your house.

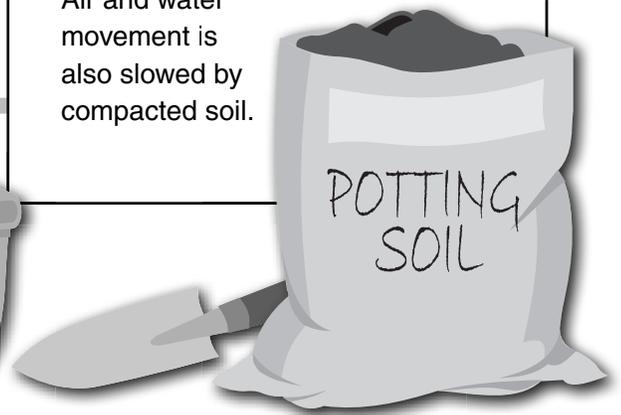
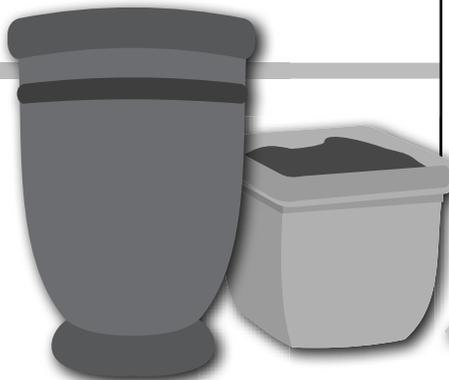
The container needs to have holes in the bottom for proper drainage. If your container has no existing holes, make multiple holes in the bottom and 1/4 inch up the sides of the container.

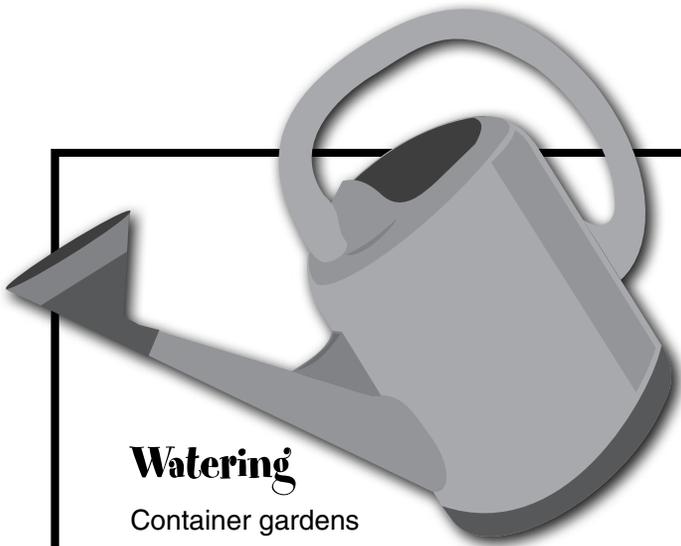


Potting Mixes

A good potting soil can be bought at most garden stores. Potting soil may contain peat moss, vermiculite, perlite, compost and pasteurized soil. Regular garden soil that contains clay is not a good choice to use in containers. Clay compacts very easily and plant roots have a hard time growing through the soil.

Air and water movement is also slowed by compacted soil.





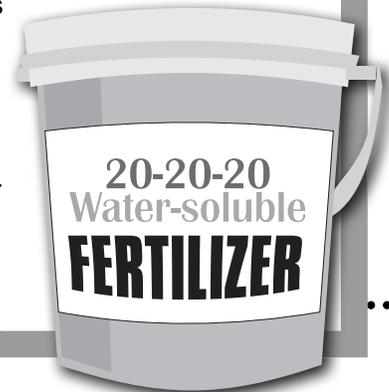
Watering

Container gardens will need more regular watering than a normal garden. All sides of the container are exposed to the sun, wind and heat. This exposure causes the soil to lose water fast.

Make sure the soil doesn't get so dry that your plants wilt. Dry soil hurts the small roots that do all the work for the plant. When the plant gets watered, it spends its energy growing new roots and doesn't produce food for you. Too much water can hurt the plant, too. Really wet soil decreases the amount of air roots can use. Roots need air to work, just as we do. Feel how dry or wet the soil is by inserting your index finger in the soil about an inch deep.

Plant Food

Plants need food to grow, too. Container plants need more added nutrients than plants in a regular garden because the amount of soil is limited. Roots in a regular garden can find nutrients wherever they grow and they have a lot of space to grow. Roots in a container don't have much room to grow and quickly use the nutrients in the soil. Container gardens can be fertilized once a week with a water-soluble fertilizer. Many commercial fertilizer mixes are available. Look for one with a balanced nitrogen, phosphorus and potassium analysis, such as 20-20-20 or 15-30-15.

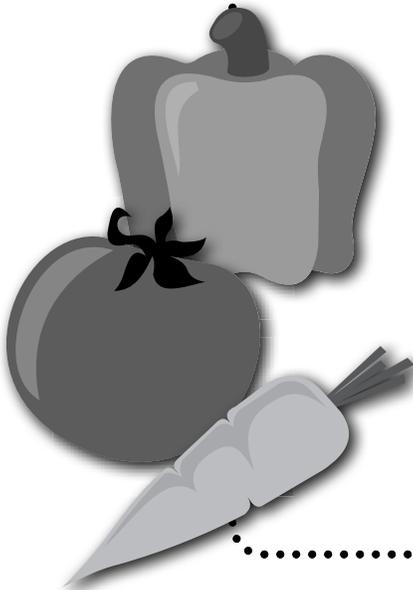


Vegetables

You can try growing any vegetable you like to eat. Make sure to look for the words "bush," "dwarf" or "compact" in the plant description. Some examples of vegetables that can be grown in containers easily are tomatoes, peppers, eggplant, green onions, beans, lettuce, radishes and herbs.

The vegetables you grow will determine the size of your container. Smaller vegetables, such as lettuce, radish and herbs, can be grown in a gallon-size pot. Larger vegetables, such as tomatoes, peppers and beans, need larger containers — 5-gallon size or more.

Larger containers provide more room for roots to grow and also will hold more water than smaller containers. If the container is too small, the soil will dry too fast. Plants will produce food only if they have enough water.



Light

Your plants need sunlight to grow. To make sure they get enough light, below are some recommendations:

- Vegetables such as tomatoes and peppers need at least eight hours of sunlight. Root vegetables, such as radishes and carrots, need at least six hours of sunlight and leafy vegetables, such as lettuce, need at least four hours of sunlight.
- Keep your container at least 12 inches away from stone, brick or reflective walls or surfaces. These surfaces reflect a lot of heat and light and can injure your plants.

Do:

- Check to see if your container has drainage holes. If not, make some in the bottom and along the sides of the container.
- Fill the container to the top with potting soil. Tap the container on the sides to make sure the soil has no large air pockets.
- Decide which vegetables you want to grow. You either can start the seeds directly in the container by following the directions on the seed packet or you can buy plants already started at a greenhouse.
- Place the container where it will get plenty of sun.
- Sprinkle the soil with water until water runs out the bottom of the container.
- Check the container every day to see if it needs water. As the plant gets bigger and the days get warmer, your container garden will need more water.
- Fertilize your container once a week with a water-soluble fertilizer.
- Harvest your vegetables when they are mature and enjoy.

Find:

- A container in which to grow your plant
- A spot where your container can sit and your plant can grow
- Pre-packaged potting soil mix
- Vegetable plants or seeds

Think about it

Reflect

What type of container did you chose? Why?

What type of vegetable worked best in your container garden?

How much water did your container garden need in the spring?
In the summer? In the fall?

What did you learn about plants?

Did you have any challenges growing your vegetables?

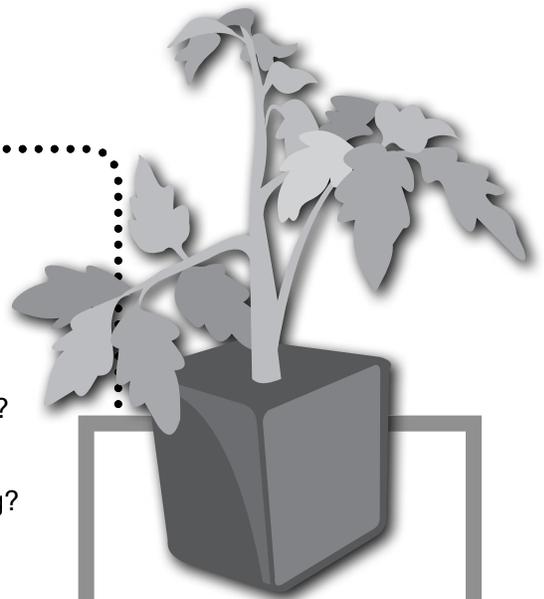
How did harvesting your vegetables and enjoying them with
your family feel?

Apply

How are plants similar to humans?

How can you use what you learned to help a friend? A neighbor?

How could you improve your container garden?



Growing Up

- Try flower gardening in containers.
- Start seeds in your home.
- Learn about the soil types in your area.
- Find out what fertilizers are best for vegetables.

Resources

Educational materials from NDSU Agriculture and University Extension:

Everybody's Garden Guide, H-618

Vegetable Maturity Dates, Yields and Storage, H-912

How to Succeed at Seed Starting, H-1139

Growing Great Vegetables in North Dakota, H-1185

From Garden to Table: Herbs for Healthy Living, H-1267

From the Garden to the Table: Salsa!, FN-584

References

Demboski, Karen, Annette Swanberg and Jane C. Martin. *Container Gardening Vegetable Gardening* (HYG-1647-00), Ohio State University.

Roll, M., and C.R. Wilson. *Container Gardens* (7.238), Colorado State University Cooperative Extension.

Cotner, Sam. *Vegetable Gardening In Containers*. Agri-Life Extension Texas A&M.

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