

# History of Terrariums

Transparent containers for growing plants date back to at least 2,500 years ago in Greece.

## Invention of the Terrarium

In 1827, a London physician, Dr. Nathaniel Ward, built a fern garden in his backyard. However, the ferns kept dying. They were poisoned by the pollution from the city's factories. While experimenting with cocoon spun by a caterpillar in a covered jar, Dr. Ward noticed that plants had grown in the jar. In contrast to the ferns in his garden, these plants looked healthy. He concluded that plants could flourish in London if they were protected from the polluted air. His miniature greenhouses became known as Wardian cases or terrariums. He watched the plants grow for four years, during which time not one drop of water was added, nor was the cover removed.

Sensitive tropical plants could be transported on long sea voyages well protected from the salt air and changing climatic conditions. The Wardian Case of terrarium became very fashionable in the United States in the 1860s.

Today we do not have to worry about keeping our plants away from cold or polluted air. But the air in our homes is generally dry and terrariums allow us to keep plants easily in our homes in attractive containers. The closed terrarium actually thrives on neglect.



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# What is a Terrarium?

A terrarium is a tightly closed water tight clear glass or plastic container filled with small plants in a miniature landscape. It also has come to mean an open transparent container for growing plants.

Open terrariums provide higher humidity for plants than do dish gardens. But closed terrariums retain more humidity than either the open terrarium or the dish garden. Because terrariums recycle their moisture, they need very little attention. A closed terrarium can often go a month or more between watering. They actually thrive on neglect.

The open terrarium and dish garden require more frequent watering, but danger of disease is reduced.

A terrarium container must be made from CLEAR glass or plastic. Tinted or cloudy glass does not let enough light through for healthy plant growth.

Almost any type of transparent glass or plastic container may be used: fish bowls, fish tanks, glass jars, and bottles. All closed containers should have transparent covers. The sides of the container should be as high as the plants contained. Be sure the container is clean and dry before planting.

When a terrarium is properly planted and located, it can be a source of joy for years and provide an interesting way to grow and display plants with relatively little care.



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## Caring for Your Terrarium at Home

Watch your terrarium closely for the first weeks after planting. It is at this time that *diseases* often get started. Any leaves that die or plants that begin to rot should be removed **PROMPTLY** before the problem spreads to other plants. Rots are often associated with too much moisture. If rot develops in a closed terrarium, remove the cover to allow more drying. Even after the terrarium is established, continue to watch for fallen leaves or any plant parts that begin to decay.

### Watering: NEVER OVERWATER

The closed terrarium normally will not need water for 4 to 6 months or when fogging on the sides stops, or when the plants wilt. When watering the closed terrarium, don't replace the cover until wet foliage has dried.

Open terrariums need watering occasionally, less often than regular house plants. It is important that you water lightly. Better a little too dry than too wet.

### Light:

A terrarium, open or closed, should not receive direct sunlight. Plants receiving light from a window gradually will face that direction. To keep the terrarium attractive from the desired view, turn it occasionally to keep the plants growing normally.

### Pruning:

Many plants in a terrarium will outgrow their limited space. A little trimming promotes better growth. Be sure to remove all leaves trimmed from the terrarium.

### Fertilization:

Plants in a terrarium should not grow rapidly. Don't plan any fertilization for at least a year after planting. After the first year, if some of the plants are yellowish or lack vigor, a light fertilization may be necessary. Use a water-soluble houseplant fertilizer at about one-fourth the rate recommended for house plants. Do not leave any of this fertilizer solution to remain on the leaves.

Thanks to the University of Missouri Extension website for information on designing and maintaining terrariums.



# Planting a Terrarium

Open terrariums provide higher humidity for plants than do dish gardens, but closed terrariums retain more humidity than either of the other container types. The open terrarium and dish garden require more frequent watering, but danger of disease buildup is reduced.

## Materials:

1. A container made from clear glass or plastic. All closed containers should have transparent covers.
2. Gravel to provide drainage for the plants
3. Charcoal to freshen
4. Screen or newspaper to keep soil from clogging the gravel drainage
5. Potting soil
6. Chosen plants
7. Sprayer for watering

## Plants:

Plants that have a low and dense growth habit usually are best. Larger plants can be used if they are kept small by cutting back their tips. Adding fertilizer is not necessary, since plants in terrariums should not grow rapidly.

## Light:

The terrarium should be placed within several feet of a bright window, but NOT in direct sunlight.

## Temperature:

Most tropical plants are suited for common house temperatures. At night, 65 degrees is ideal; day temperatures normally should be about 10 degrees higher.

## Accessories:

Rocks, gravel and other natural materials provide pleasing accessories in a terrarium. Sticks, wood, seed pods or bark are possible choices. Ceramic figures, frogs, mushrooms or snails suggest a natural setting.



## Assembling the Terrarium

### Design:

Chose plants for variation in size, color, and texture. Since terrariums are usually viewed from one side, plants should be arranged so that taller plants are toward the back. Hills and valleys will make the scene more interesting than a flat surface.

### Prepare the container:

Before planting thoroughly clean the container. About one quarter of the terrarium's volume will be used for soil and drainage material. Charcoal and pebbles should be place in the bottom of the container for drainage. Place ½ inch layer of charcoal above the layer of gravel. Place the newspaper or screen over the layer of gravel and charcoal to prevent soil from sifting into the drainage area. Next, add the soil. A minimum thickness of 1-1/2 inches is necessary.

### Adding plants:

Before adding the plants, arrange those selected for use in an open area about the size of the container. This will give you some idea of relative sizes and textural patterns.

To assemble the terrarium, take the plants CAREFULLY from their pots and remove extra soil to expose the roots. Trim any roots that are extremely pot bound. Trim off any leaves that are yellowed or damaged. Promptly place the plant in the container so the roots do not dry. In the closed container, try to keep foliage from touching the sides of the container. (Leaves touching the glass will collect water and be more subject to rot.)

### After planting:

Mist over the plants to wash off any soil that sticks to leaves or sides of the container. DON'T cover the terrarium and repeat the misting after one day. Allow the container to remain open until the foliage is thoroughly dried. Then, if the terrarium is the closed type, apply the cover.