Plants and Youth: Creating Dish Gardens and Windowsill Desert and Water Gardens

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A dish garden is a miniature landscape in an open, shallow container. Ceramic or plastic dishes (Figure 1), milk cartons, jars, cans and hollowed-out logs make good containers. Provide drainage by punching holes in the bottom of soft containers or drilling holes in ceramic dishes. If this is not practical, provide internal drainage by placing a thin layer (1/2 to 1-1/2 inches) of pea-size gravel in the bottom of the container (Figure 2). Cover the gravel with a piece of nylon hosiery, weed cloth or other synthetic fabric to prevent soil from settling into it and destroying its ability to drain (Figure 3). Then add a layer of potting soil or a mixture of 1 part peat to 1 part sand. It should be 2-4 inches deep, depending on the depth of the container (Figure 4).

Figure 1. Shallow ceramic pots make good dish garden containers.

Figure 2. Place a 1/2- to 1 1/2-inch layer of pea-size gravel in the bottom of the container.

Figure 3. Cover the pea-size gravel with a piece of synthetic fabric.

Most garden centers sell small foliage plants in 2- to 3-inch pots. Select your plants according to how much light they will receive in the home (low or high light).
Arrange them according to how the dish garden will be seen. If it will be viewed from all sides, the largest plants should be planted near the center (Figure 5). When viewed from one or two sides, the tallest plants should be placed in the background.

Figure 5. Plant the largest plants in the center of dish gardens that will be viewed from all sides.

Set plants in holes only as deep as they were growing in their containers and firm the soil around the roots. Water just enough to moisten the soil. Put a saucer under containers with drainage holes to catch run-off and protect furniture or windowsills from water stains. With a little care your dish garden will remain a beautiful decoration for your home (Figure 6).

Figure 6. With proper care, a dish garden should provide years of enjoyment.

Making a Desert Garden

A desert garden is a miniature landscape made with cacti or succulents. These plants can survive hot, dry climates because of their ability to store water in their stems and leaves during rainy periods. They lose moisture slowly because their leaves and stems have protective coverings of wax or hairs. Their ability to survive drought conditions for long periods of time makes them excellent plants for a dish garden.

Select a container which is at least 2 inches deep. If the dish does not have a drainage hole, provide internal drainage by placing a thin layer of pea-size gravel in the bottom of the container. Fill the container to within 1/4 inch of the top with a commercial potting soil blended for cactus or make your own from 2 parts sand and 1 part peat.

Many types of cacti and succulents can be used in dish gardens. Succulents need a little more water than cactus, so don't mix them in the same container. Choose small plants of different sizes and shapes and arrange them on top of the soil until you find an interesting design. Use care (and gloves) when doing this as many cacti are thorny and most succulents are brittle. If the dish garden is to be viewed from all sides, place taller plants in the center and smaller ones along the sides. If the garden is to be viewed from one side, place taller plants in the back and smaller ones toward the front, so that all plants can be seen well. Scoop out soil to set plants in holes and press the soil firmly around the roots. Place a layer of sand or small pebbles on the soil surface to keep leaves and stems dry. Pieces of wood, rocks, and/or figurines can be added for interest.

Water the garden and place it in a window where it will receive 4-6 hours of sunlight each day. Do not water again until the soil becomes dry. Over-watering will increase the chances of root and stem rot, and eventual death of the plants in your desert dish garden.

Windowsill Water Garden

Many foliage plants can be grown without soil in a container filled with water. Select a container that will hold water and fit on your windowsill. Purchase small plants or take cuttings from plants that root easily in water. Purchase a small bag of decorative stones or aquarium gravel and wash thoroughly.

To create the garden, slip the plants from their pots and rinse any soil clinging to the roots. Trim away any dead or damaged roots and leaves. Place the plants in the container so that the roots are just below the top of the container. Backfill around the roots with the gravel or stones, filling no higher than the base of the stems. Leave enough room for a top layer of decorative stones, glass beads, marbles, etc.
In a one-gallon milk jug, mix water and soluble fertilizer at 1/4 the recommended rate. Add the fertilizer solution until it covers the roots of the plants. Store the unused solution in a labeled container and add it to your water garden as needed. The solution should be changed every 6 weeks. Place your water garden in an east or north window. Plants that grow too tall for the window should be pruned back.

**Definition of Terms**

**Cacti and Succulents** - Plants that are able to survive hot, dry climates because they store water in their stems and leaves during rainy periods. Cacti are distinguished from succulents by the presence of spine cushions. Whether or not spines are present, all cacti have spine cushions.

**Cutting** - A section of a plant (stem, leaf or root) capable of developing into a new plant.

**Foliage plants** - Plants grown primarily for the beauty of their leaves and stems. These tropical plants usually tolerate lower light levels, but are tender to cold. They are often used as house plants.

**Peat** - Partly decayed plant material that retains large amounts of moisture.

**Porous** - Possessing pores or holes which allow passage of a liquid.

**Further Reading**

*Houseplants for the Purple Thumb*, by Maggie Baylis, 101 Productions, San Francisco, 1973. This book is out of print, but used copies may be found in libraries or purchased online.