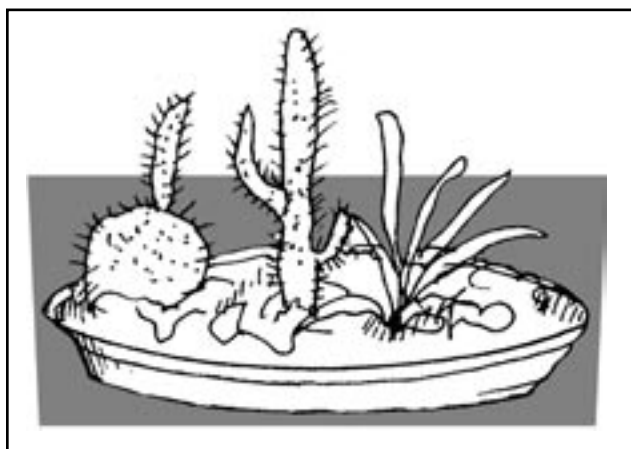


4-H Indoor Gardening Project: Making a Desert Dish Garden



Prepared by Madge Balden Adams, former special assignment writer for Horticulture



With just a few essentials, a few minutes, and your creativity, you can make a desert dish garden. All you need are some cacti or other slow-growing succulent plants, a shallow dish, and sand. That's it. And the best part is that your garden in a dish will last for years with very little care. Succulents raised in dish gardens are even easier to care for than are single specimens. Fertilization is not needed because you do not want the plants to outgrow the container.

By combining the plants rather than raising them in separate pots, you can arrange them to make a miniature landscape scene. You can make the dish garden as an interesting decoration for your home or a gift for a friend.

Facts about Your Dish Garden

A dish garden is a collection of similar plants grown in an open container. In a desert garden, the plants are all succulents. Succulents are plants that can survive in a hot, dry climate because they can store moisture in their stem or leaves during rainy periods. During drier times, succulents give off moisture much more slowly than most plants.

Evaporation is slowed down by protective coverings of wax or hairs or by a reduced surface area. (Many succulent plants have a spherical shape because a sphere has the smallest surface area for a given volume.) Succulents grow naturally in semi-deserts where long, dry periods are broken by short, rainy periods. Cacti are one kind of succulent.

What to Do

Materials

Plants

You can buy cacti and other succulent plants from a florist or at a garden store that has a plant section. Choose plants of different sizes and shapes that will go well together to make an interesting garden. Choose plants that are in scale with the container you plan to use. Select small plants that grow slowly. Plants should fill the container but not crowd it. Some suitable plants are:

Cacti	Agaves	Aloes
Euphorbias	Jades	Echeverias

Containers

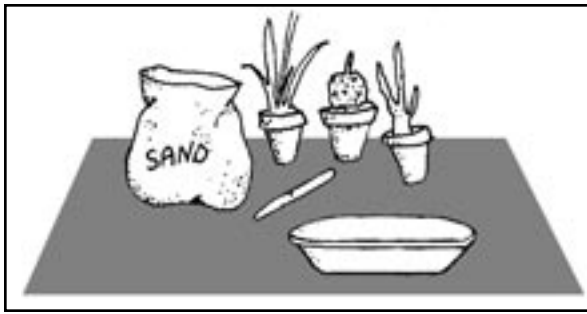
Any shallow dish, pan, or tray that is about 2 inches deep can be used. The size of the container will depend on the number of plants that you plan to use. Some suitable containers are plastic bowls, pottery dishes, or aluminum pie pans or trays.

Growing Medium

- Sand or
- Mix two parts sand, one part loam soil, and one part peat moss

Accessories (optional)

To add interest to the scene you have created, use rocks or figurines.



How to Do It

1. Clean your container.
2. Fill the container with the growing medium (soil mixture or sand), and lightly press it in. The soil should be $\frac{1}{4}$ inch from the top.
3. Remove plants from the pots they come in. Wear gloves or use tongs or tweezers when handling cacti to protect yourself from the thorns. Loosen the soil around the edges with a knife or stick, and then turn the pot upside down and gently pull out the plant.
4. Decide how to place the plants. If the dish garden is to be viewed from all sides, place taller plants in the middle and shorter ones around the outside. If the dish garden is to have a front and back, place taller plants in the back and shorter ones toward the front, so that all plants can be seen well. You can place the plants on top of the soil and then move them around until you find a pleasing design.
5. Scoop out the soil to make holes large enough for the plants' roots. Set the plants in position, larger ones first, and press the soil firmly around the roots. Some of the soil around the plants' roots may have to be removed for them to fit into the container.
6. Add other items to beautify your dish garden.
7. If a growing medium other than sand is used, put a layer of sand or small pebbles on the soil surface to keep the leaves and stems dry.
8. Water the garden immediately, but do not flood it. Tilt the container to drain off any standing water.
9. Place in a location with bright sunlight. The desert garden will do well in a hot, dry room.
10. Keep the soil of the desert garden rather dry. Do not water too frequently. Some desert gardens may not need to be watered for two or three months. Always drain off any standing water.

11. Turn the container occasionally so that different sides are toward the sun to give the plants a balanced form.
12. If any plant outgrows the container, remove it and grow it as a single specimen in a separate pot.

Project Suggestions

1. Complete one of the activities listed below.
2. Take pictures or make drawings of what you did in this project.
3. Present a demonstration concerning this project, or exhibit your dish garden at a fair or flower show.
4. Fill in the project record sheet.

Suggested Activities

First Year Project

Make a dish garden with at least three types of desert plants. Learn to identify five desert plants and find information about the plants—where they grow naturally, legends about them, uses of the plant parts, and such.

Second Year Project

Propagate new plants by taking cuttings from plants in your dish garden. With branching plants, break off a side branch and stick it in a shallow container of coarse sand. Many succulent plants can be propagated from single leaves. Break off a leaf and place it on the surface of the sand so that the base of the leaf is just covered. A new plant will develop. The new plants and rooted cuttings can be used to make another dish garden. Learn to identify five more desert plants and find information about them.

Third Year Project

Add more desert plants to your indoor garden. These can be grown in a dish garden, or you may want to find out how to raise and care for single specimens.

References:

Succulents and Cactus, A Sunset Gardening Book (Lane Magazine and Book Company).

Cacti and Succulents by Walter Hoage, trans. and rev. by E. E. Kemp, 1963 (E. P. Dutton).

The Cactaceae: Descriptions and Illustrations of Plants of the Cactus Family, by N. L. Britton and J. N. Rose (Dover).

4-H Indoor Gardening Project: Making a Desert Dish Garden Record Sheet



Date _____

Name _____ Age _____

Address _____

Club _____

Years in 4-H _____
(including this year)

Years in this project _____
(including this year)

1. Tell what you did in this project. Include any pictures or drawings related to your project work.
2. If you have taken this project in past years, briefly explain what you did then.
3. What kind of container did you use? Where did you get the container?
4. What plants did you use in your dish garden? Where did you get them?
5. What succulents did you propagate? How? (Second or third year project)
6. Where did you put your dish garden when it was finished?
7. What did you learn about succulent plants?
8. What problems did you have in making or caring for the dish garden?
9. Do you plan to raise more succulent plants in the future? What do you have in mind?
10. List and describe five or more desert plants and give any interesting information about them.

Plant Name	Description	Geographic Area of Natural Growth	Use	Other

11. Did you do a demonstration related to this project?

Where

Ribbon

Title _____

Describe what you did.

12. Did you exhibit your dish garden?

Where

Ribbon

13. Cost of Project

Container _____
Soil _____
Plants _____
Other _____
Total _____