

Preserving Flowers and Foliage



Flower preservation is a popular hobby that can be enjoyed year round. Preserving flowers and foliage is inexpensive, easy to do, and requires no elaborate equipment or previous experience. Arrangements and wreaths made from dried plant materials last for many years and require little care. By using the methods described in this article, you can use your garden's colorful blooms to decorate your home throughout the year.

Methods

There are several methods commonly used to preserve flowers and foliage including air drying, burying the flowers in a desiccating material, and pressing. No one

method is best for all flowers because what works fine for one type of bloom may not work well for another. The most common methods are described below.

Air Drying

Air drying is the easiest and most popular way to preserve flowers. The flowers are simply collected, tied together in bunches, and hung upside down in a dark, dry area, such as a closet. The darkness will help maintain the flower color. Remove the leaves from the stems, gather stems into small bunches, and fasten with a rubber band. (Large flowers, such as peonies and hydrangeas, should be hung individually rather than in bunches.) Hang the bunches from a horizontal pole or chain or a clothes drying rack. Place newspaper under the flowers to catch falling seeds and petals. Allow enough space between the bunches for air circulation. To air dry just flower heads, spread them out on sheets of newspaper and put them in a warm, well-ventilated spot to dry. Air drying takes between two and five weeks, depending on the plant and the humidity in the room. When dry, the stems will snap easily and the flowers will feel papery.

Drying with Desiccants

Some flowers that will not air dry well will preserve well using a desiccant (drying agent). Many materials can be used as desiccants including sawdust, borax, corn meal, sand, and even cat litter. Some are successful for certain flowers, but

Collecting Flowers

Flowers should be picked just before they are at their prime. The flowers will continue to open as they dry, so they should not be fully open when harvested. Pick flowers after the dew has dried and the petals are free of moisture. Choose blooms that do not show signs of injury, disease, or insect damage. Any imperfections will become more obvious after drying.

Cut the flowers with as much stem as possible. Long stems will work best for hanging bunches of flowers to air dry. Harvest more than you think you will need. Many dried flowers are very fragile, and you will probably damage a few during the drying process.

unreliable for others. Many people believe the best desiccant to preserve flowers is silica gel.

The process is generally the same, regardless of the desiccant used. To dry flowers using a desiccant:

1. Put about an inch of desiccant in the bottom of the container. (The desiccant must be completely dry.)
2. If drying flowers face down (flat flowers such as daisies), form a small mound of desiccant where each flower will be placed. This will support the flower and retain its shape. Place one flower on each mound. If drying flowers face up (such as calendula), cut each flower stem to about a half an inch and press it into the desiccant. Place spikes of flowers, such as snapdragons, horizontally.
3. Pour or spoon the desiccating material around the edge of the container, away from the flowers, mounding it up to about an inch deep.
4. Tap lightly on the container to move the desiccant to the flowers. (This method prevents the material from pushing the petals out of shape, as it would if you poured it over the flowers.)
5. Continue adding the desiccant and tapping on the container until the flowers are completely covered.
6. Add an inch more of desiccant above the top of the flowers.
7. When flowers are completely covered, place the lid on the container, label it with the contents and the date, and set it aside in a dry place.

To test flowers for dryness, run your finger near the edge of the container or tilt the container to expose the tips of the petals. The petals should feel papery and dry. If they are still soft, re-cover the container and let it go a few more days. When you are sure the flowers are dry, gently pour the desiccant from the container until the flowers are uncovered enough so you can pick them up by the stem or gently lift them. Turn each flower over and shake out any remaining desiccant. If there is still desiccant clinging to the petals, remove it with a soft dry artist's paintbrush.

Because flowers contain varying amounts of moisture while growing, the time it takes to dry them will vary as well. Drying time also depends on the type of flower you are drying, the size of the bloom, the temperature and humidity of the room, and other factors. For this reason, it's best to dry only one type of flower per container. That way they will all be dry at the same time, and you won't risk damaging them by checking often for "doneness."

Sand

Sand is very inexpensive and readily available. You can use washed fine sand, white sand, or floral sand. Don't use sharp sand, as it may make tiny holes in the flower petals. The sand must be completely clean and dry before you place the flowers into it. Flowers should be dry in two to three weeks. You can re-use the sand after sifting out any particles that might have contaminated it.

Borax and Cornmeal or Borax and Sand

Mix equal parts borax and white cornmeal and add 3 tablespoons of uniodized salt to each quart of mixture, or mix two parts borax and one part sand. Do not use just borax—it may cause bleaching. You do not need to cover the container when using a borax mixture. Flowers should be papery and dry in two to three weeks.

Silica Gel

Silica gel (a granular substance, not actually a gel) absorbs large amounts of moisture and can dry flowers much more quickly than other desiccants. Most silica gel has blue crystals in it that indicate how much moisture the gel has absorbed. As the silica gel absorbs moisture from the cut flowers, the blue crystals turn pink and then white. At this point, the silica gel must be dried in an oven before it can be reused. Silica gel is available at florist shops and craft supply stores.

Silica gel will absorb moisture from the air, so it is essential that you use airtight containers, such as plastic boxes, coffee cans, large jars, or any other container with a tight-fitting lid. Follow the same procedure as with other desiccants. Flowers should be dry in three to eight days.

Microwave Oven Drying

You can speed up the drying process considerably by using your microwave oven. Place the flower(s) in a desiccant material as described above (silica gel works best) in a microwave-safe container and put it in the microwave oven along with a small bowl of water. Do not cover the container. Cook on level three or four, or the defrost setting, for ten seconds to three minutes, depending on the thickness of the flowers. As microwave ovens differ in wattage, you will need to experiment with time and temperature settings. After microwaving the flowers, cover the container loosely with a lid and set it aside to cool for about 24 hours before removing the flowers.

Glycerin Process

Leaves are often preserved by allowing them to absorb a mixture of glycerin and water—a process known as glycerinizing. Glycerin can be obtained from a pharmacist, but it is not cheap. Ask for technical grade glycerin; it is less expensive than laboratory grade. This method makes the leaves flexible and pliable, so that they can be used for many years. Glycerinizing is the best method to use to preserve foliage; however, it does not work well for flowers.

Mature leaves work best, but smaller or younger leaves can be glycerinized also. Select a branch that is no more than 18 inches long, remove the lower leaves, and crush the bottom of the stem with a hammer to increase absorption. (To further increase the absorption rate of the glycerin solution, first place the plant stems in a solution of one tablespoon salt to one gallon of water for 24 hours.) Place the stems upright in a jar containing at least 4 inches of a mixture of one part glycerin and two parts hot water. As the stems take up the glycerin/water mixture, add more mixture so that the depth stays at least three or four inches. Leave the plants in the solution until the entire leaf turns golden brown, usually about one to three weeks. Wipe off excess moisture with a cloth and hang the branches upside down for a few days before using.

If you are preserving younger leaves, completely submerge them in a 1:1 glycerin/water solution and weight them down to keep them submerged. Remove them after two to six days when they become pliable, and wipe them off.

Pressing

Pressing is a very popular and common method of preserving flowers and foliage. Place the flowers in a single layer between the pages of an old telephone book or between several layers of newspaper or other non-glossy paper. Weight it down with a heavy object and leave it in a well-ventilated place for two to four weeks. A flower press, available in craft stores, can also be used.

Heat pressing is an easy way to preserve leaves, especially colorful fall foliage. Simply place the leaves between two pieces of waxed paper and press with a warm iron. Use new pieces of waxed paper for each pressing.

Flowers and Foliage Suitable for Preserving

Most flowers that are suitable for drying are colorful and low in moisture content. Blue and yellow flowers retain their color well when dried; pink flowers may fade. Many flowers darken in color when dried. Therefore, very dark red, purple or blue flowers may look almost black after drying. White flowers usually acquire a beige or cream color. Some flowers, such as roses, shrink somewhat when dried. Many grasses, leaves, fern fronds, and seed pods also are easy to preserve by one of the methods described above. Many common plants used for preserving are listed below, but feel free to experiment!

Plants for air drying

Flowers suitable for air drying include:

Amaranth	Chinese lantern	Hydrangea	Rose
Anise hyssop	Chrysanthemum	Immortelle	Sea Holly
Artemisia	Cockscomb	Larkspur	Sea lavender
Astilbe	Coral bells	Lavender	Starflower
Baby's breath	Daisy	Liatris	Statice
Bachelor's button	Delphinium	Oregano	Strawflower
Bee balm	Edelweiss	Ornamental onion	Tansy
Bells of Ireland	Globe Amaranth	Pearly everlasting	Veronica
Blue salvia	Goldenrod	Pincushion plant	Winged everlasting
Cattail	Heather	Pussy willow	Yarrow
Celosia	Helipterum	Rhodanthe	

Seed heads suitable for air drying include:

Iris	Milkweed	Mullein	Queen Anne's Lace
Lily	Money Plant	Poppy	

Grasses suitable for air drying include:

Eulalia grass	Hare's-tail grass	Quaking grass	Squirrel-tail grass
Fountain Grass	Pampas grass	Spike grass	

Plants for drying with a desiccant

Ajuga	Coreopsis	Grape hyacinth	Peony
Anemone	Cosmos	Hyacinth	Primrose
Aster	Daffodil	Larkspur	Queen Anne's lace

Azalea	Dahlia	Lilac	Rose
Baby's breath	Daisy	Lily-of-the-valley	Salvia
Bachelor's button	Delphinium	Marigold	Scarlet sage
Black-eyed Susan	Dianthus	Maximillian sunflower	Snapdragon
Blanket flower	Dogwood	Nierembergia	Stock
Blue sage	Freesia	Orchid	Stokesia
Calendula	Fuchsia	Pansy	Verbena
Chrysanthemum	Gloriosa daisy	Passion flower	Zinnia

Plants for drying in a microwave

Most foliage dries very well in a microwave oven. In general, flowers with thick fleshy petals, such as magnolia and hyacinth, do not dry well in a microwave oven. Here are some flowers that are suitable for drying in a microwave:

African daisy	Buttercup	Goldenrod	Sedum
African marigold	Daylily	Hollyhock	Tulip
Astilbe	Foxglove	Hydrangea	Witch hazel

Plants for glycerinizing

Anthurium	English ivy	Maple	Rhododendron
Aspidistra	Eucalyptus	Oak	Russian olive
Beech	Galax	Orange holly-grape	Salal
Boxwood	Lemon	Peony	Spirea
Camellia	Magnolia	Periwinkle	Sweet gum
Cotoneaster	Mahonia	Purple-leaf plum	Ti plant
Crabapple	Mistletoe	Poplar, white or silver	Weigela
Dracaena	Mountain ash	Quince, flowering	

Plants for pressing

Ageratum	Chrysanthemum	Heath	Primula
Alyssum	Columbine	Heather	Queen Anne's lace
Anemone	Cosmos	Hydrangea	Rose
Azalea	Crocus	Johnny-jump-up	Salvia
Bachelor's button	Daffodil	Larkspur	Statice
Bleeding heart	Daisy	Lily-of-the-valley	Sweet pea

Buttercup	Delphinium	Marigold	Verbena
Butterfly weed	Dutchman's breeches	Nemesia	Zinnia
Candytuft	Geranium	Pansy	
Celosia, cockscomb	Goldenrod	Phlox	

Storing Dried Flowers

Dried plant materials should be stored in covered, airtight containers with a small amount of silica gel added to absorb moisture in the air. Place the container in an area that is not extremely damp (like some basements) or unusually dry (like some attics). Often a garage is the best place to store dried flowers. To prevent insects or rodents from invading the boxes while in storage and damaging your flowers, place a few mothballs in the container.

Even the best dried flowers gradually fade and lose their original color. Flowers that are faded can be lightly tinted with aerosol paints, dyes, or finely grated artist's pastels or colored chalk, and then sprayed with polyurethane or hair spray to further preserve them.

Resources

[Drying Flowers](#). Texas Cooperative Extension Plant Answers. Retrieved August 6, 2004.

[Drying in the Microwave Oven](#). Retrieved August 6, 2004.

[Drying with Desiccants](#). Retrieved August 6, 2004.

[Drying with Silica Gel](#). Retrieved August 6, 2004.

[Glycerizing Method](#). Retrieved August 6, 2004.

Keuka Flower Farm. [How to Dry Flowers: A Complete Overview](#). Retrieved August 6, 2004.

McReynolds, Mary Jane. [Drying Flowers](#). University of Nebraska Cooperative Extension. Retrieved August 6, 2004.

Pertuit, Al. [Drying Flowers](#). Clemson Extension Home and Garden Information Center. Clemson University. Retrieved August 6, 2004.

[Traditional Air-Drying Method](#). Retrieved August 6, 2004.

Trinklein, David. [Drying Flowers and Foliage for Arrangements](#). University of Missouri Extension. Retrieved August 6, 2004.