K·STATE
Research and Extension
Master Gardener
Johnson County

Don't Leave Me Out in the Cold!

How to Overwinter Plants and Pots

In the Kansas City metropolitan area, we are in plant hardiness zone 5 (temperature lows of minus10 to minus 20^0 F) with pockets of zone 6 (lows of 0 to minus 10^0 F). True annuals and plants that we grow as annuals (considered tender perennials further south) cannot survive our winter temperatures. As the cold and gray winter months approach in the Midwest, we say goodbye to much of the greenery and blossoms we loved so much throughout the gardening season.

Hold on! It doesn't have to be that way.

Many of the plants you planted in your spring garden or grew on the deck can be saved by bringing them inside for the winter and caring for them until it's time to move them back outside again in the spring. Even tender plants that need a winter dormancy period can be rescued so they can shine again the following spring.

Try overwintering your plants. There's really nothing to lose, and everything to gain.

Things to Consider

Before you bring any plant inside for the winter, there are a number of factors to consider.

- **Space.** How much indoor space do you have? You may have more plants in the garden or on the deck than you have space for inside. That may require some decisions to be made. Which plants are your keepsakes? Which are the most expensive to replace?

- **Healthiness.** Only consider bringing in healthy plants. Plants that have struggled all summer outdoors will most likely only continue to decline indoors.

- **Lighting.** Consider the lighting in your selected areas. Remember: In winter, even a west or south facing glassed area has only the winter light intensity of a shady area in the summer.

- **Maintenance.** Consider your commitment to maintenance for periodic watering and inspection for insects. While Mother Nature does a fairly good job at watering plants outdoors and even maintaining a balance in the insect world, you are solely in charge of your destiny indoors.

Once you've determined your available indoor plant space, selected your plants, and made the mental commitment to properly care for the lucky ones, you're ready to spring into action.

Plant candidates for bringing inside broadly fall into two groups: those that require a winter dormancy period, and those that remain actively growing through the winter months.

Plants That Require a Winter Dormancy Period

Tender bulbs is the common term for plants grown from corms, tubers, rhizomes, and bulbs that are not winter hardy in the Midwest. They require a winter dormancy period in a cool place where the temperature is still well above freezing. Examples of tender bulbs are:

- Caladiums
- Calla lilies
- Cannas
- Dahlias
- Elephant ears (Colocasia)
- Gladiolas
- Tuber roses

Published 2004 by the Johnson County Extension
Master Gardeners, a volunteer program of
K-State Research and Extension, Johnson County

Overwintering them is easy and especially satisfying because many of these bulbs are expensive. Here's how.

Step 1	Keep the tender bulbs in the ground until after the first frost. This kills back the top foliage and the residual warmth of the soil temporarily insulates them.
Step 2	After the first frost, dig them up. • Cut the foliage back to the ground level and discard. • Brush off as much soil from the bulb as possible by hand.
Step 3	Place them in a warm, dry area for 7 to 14 days to dry. This removes excess moisture from the bulbs and from any remaining soil.
Step 4	Store the bulbs in an open container or cardboard box. Pack them loosely in the container and separate them with shredded newspaper or dry peat moss. *Do not place them in a closed plastic container where there is no air circulation.* Most tender bulbs prefer a storage temperature between 45 and 50 degrees. An unheated basement or garage will typically approach this range during the winter months. Beware of heated basements that are closer to 70 degrees, which is too warm for most bulbs.
Step 5	Check the bulbs monthly. Discard any bulbs that have decayed.

Plants That Remain Actively Growing through the Winter Months

Even green is a welcome color during the winter months and this group of plants will continue to give you some color through the winter. This includes annuals, tender perennials, herbs and tropicals.

Annuals	You can extend the growing season of many annuals by bringing them inside for the winter. Annuals that require less intense lighting respond better to indoor conditions. Examples: Geraniums, coleus, impatiens, and fibrous begonia.
Tender perennials	This group of perennials are perennials rated for zone 7 (cannot withstand temperatures lower than 5 to 10^0 F) or a warmer climate. They are considered annuals in the Kansas City area (zones 5 and 6). Any perennial growing outdoors in a container is effectively exposed to conditions one zone lower since the container itself is not insulated by the earth. Therefore even a zone 6 perennial growing in a container may be a candidate for overwintering inside. Examples: Lantana and many plants that we often refer to as herbs and tropicals.
Culinary herbs	If you enjoy cooking with fresh herbs, consider bringing part of the herb garden inside for the winter. Some herbs are annuals, some are tender perennials, and some are hardy perennials. • Examples of annual herbs to bring in: basil, cilantro and dill. • Examples of tender perennial herbs to bring in: lemon verbena, lemongrass, scented geraniums, pineapple sage, bay laurel, rosemary and the various tender lavenders.
Tropicals	What we commonly refer to as houseplants are really tropical plants that often find their way outdoors during the summer months. Examples: Hibiscus, ficus, palms, mandevilla, alamanda and bananas.

Preparing the plants

Before bringing any plant or container inside for the winter, you must first prepare it.

Step 1	It is wise to acclimate the plant to a lower lighting level for a few days. For example, move a plant that's in full sun outdoors to a shadier area outside. Be aware that many tropicals do not like temperatures below 40 to 45 degrees, so you will need to act in advance of any actual frost or freeze to acclimate them.
Step 2	If the plant needs some pruning to temporarily reduce its size, prune it before bringing it inside.
Step 3	Spray the plant and its container with a mild, general purpose insecticidal soap. **Important:** Always check the compatibility of the insecticide for your specific plant. Most insecticides include a "Do not spray" list of plants on the label. Don't forget to spray under the lip of the container as well as the bottom of the container where insects can hide. An indoor climate is perfect for many insects to multiply with abandon, so a proactive approach is in order. Allow the plants to dry after spraying before actually bringing them indoors.

Bringing the plants inside

Step 1	As fall approaches and night temperatures reach 50 degrees, bring the plants inside for the winter. Once indoors, these plants will require less water since there is no wind, and winter daylight hours are shorter and lighting levels lower. Remember more houseplants are lost to over watering than under watering. Water only when the top ½ inch of soil is dry to the touch. Plants require little, if any, fertilizer during the winter months due to lower light intensity levels.
Step 2	Once inside, inspect your plants for insects from time to time. The most common problem insects on plants in the house are aphids, mealybugs, spider mites and whiteflies. As soon as they are observed, treat an infestation with an insecticidal soap or other insecticide labeled for these pests.

Cuttings

Rather than bring an entire plant or container inside for the winter, you can conserve space by taking cuttings. Here's how.

Step 1	Choose healthy shoots and trim them back about 2 to 3 inches just below a leaf node. Remove any lower leaves and flower buds.
Step 2	Pick a rooting medium—such as coarse sand, vermiculite, or sterile potting mix (which typically contains both peat and perlite)—and moisten the medium. **Tip:** It is optional, but consider dipping the cutting in a rooting hormone prior to planting. It may help the odds of success. Insert the cutting in the moist rooting medium. Insert at least one leaf node below the medium surface.
Step 3	Place the cutting in bright, indirect light. Maintain an even moisture level during the rooting process. Covering the container with a plastic hood or clear bag will reduce overall moisture loss.
Step 4	Rooting typically takes one to three weeks depending on the specific plant. Monitor for root development prior to transplanting to a larger container.

Moving Plants Back Outside in the spring

There's a great deal of satisfaction that goes with overwintering plants. Not only are you able to enjoy the plants during the cold winter months, you are also able to continue the enjoyment by moving them back outdoors in the spring.

The timing on when to move plants or bulbs outdoors is the real key to success. Wait until after the last frost. Historically in the Kansas City area, this occurs anywhere from mid-April to mid-May. To be on the safe side, a good rule of thumb is to wait until mid-May.

Winterizing Garden Accessories

Freezing can be a problem for more than just plants. Good accessories are expensive. Here are some tips for preparing them for winter and maintaining your investment.

Pots and containers. Plastic and wooden containers can be left outside for the winter. Terracotta clay containers, however, can not. They are porous and hold moisture. The combination of residual water and freezing temperatures causes the clay to crack and split. Although some glazed clay containers provide wintertime resistance, they are usually much more expensive. Why take the chance? Bring in all your clay containers for the winter.

Hoses. Before the temperature drops to freezing (32 degrees), disconnect gardens hoses from any outdoor faucets. Fully drain the hoses and screw the ends together to keep out any insects and debris. Then store them under the deck or in the garage.

Underground sprinkler systems. They need to be properly drained and winterized, usually by professionals who use compressed air to blow the lines free of water. After the sprinkler system is drained, close the main inlet water valve (located underground).

Garden tools. Good tools are expensive. You can maintain your investment if you take a few minutes to do some year-end maintenance. Clean tools with a wire brush and sharpen the surfaces. Apply a coat of light oil or product such as WD-40 to metal surfaces. Wipe wooden handles with an all-purpose cleaner and apply a light coating of wood preservative. This prevents splintering of the wood as it ages. Store the tools in a protected, indoor area until next spring.

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Extension Master Gardener Hotline

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For your lawn, garden and horticultural questions
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