Choosing and Caring for Your Christmas Tree

BY KEN JOHNSON

Evergreens have been used for thousands of years to celebrate winter festivals. The first printed reference to Christmas trees dates back to 1531 in Germany. Whatever your reasons for selecting and decorating an evergreen tree this season, keep these points in mind:

1. When choosing an indoor home for your tree, be sure to pick a spot away from heat sources (TVs, fireplaces, radiators, air ducts) as well as clear of doors.
2. Measure the area where the tree will be placed and measure the tree you select to make sure it will fit.
3. Learn about the different species of trees you are likely to see for sale. Some will have a more open look, stiffer branches, or longer needles. How you plan to decorate your tree may affect the type you choose.
4. Make sure you select a fresh tree:
   - Look for a healthy green appearance and few browning needles.
   - Run your hand along a branch: the needles should be flexible and not fall off easily. The outer branches should be pliable.
   - Lift the tree a few inches and drop it on the butt end: very few green needles should drop off. (It’s normal for a few inner needles to drop.)
   - Make sure the base of the tree is straight and has 6 to 8 inches free of branches (you can trim the branches off if needed) so it will easily fit into a stand.
5. If you’re not putting the tree up right away, store it in an unheated garage or another protected area. Also, make a fresh 1-inch cut on the butt end of the trunk and place the trunk in water.
6. When you’re ready to bring your tree indoors, make another fresh cut of the trunk and place the tree in a sturdy stand that holds at least one gallon of water (you’ll need about one quart of water per inch of stem diameter).
7. Check your tree’s water level daily, and be sure to keep it above the base of the tree. If the cut end dries out, resin will cover and seal it and the tree won’t be able to take up water. Trees can take up several quarts of water per day!
8. Use plain water to hydrate your tree. You don’t need to use commercially prepared mix, aspirin, sugar, or other additives; research has shown that plain water will keep a tree fresh.
9. Take down your tree and remove it from inside before it dries out. A tree properly cared for can last at least five weeks.
10. Recycle your tree when you’re done with it. Many communities will pick them up from the curb, or you can place it in the backyard and use it as a bird feeder or as habitat.

For more information on Christmas trees, visit University of Illinois Extension’s website “Christmas Trees & More” at extension.illinois.edu/trees.
The Illinois Cooperative Agricultural Pest Survey (CAPS) program is seeking positive identification of the invasive brown marmorated stink bug (BMSB) in a county near you.

A stowaway from Asia, the brown marmorated stink bug was first identified in the U.S. in Pennsylvania in 2001. With piercing mouthparts, BMSBs can damage a multitude of crops, from apples to pears to soybeans to landscape ornamentals. According to a new study by a University of Maryland entomologist, adults have a strong preference for ripe fruit, leaving the nymphs to eat other plant material. This reality has caused many growers on the east coast, where the population has skyrocketed, to forfeit efforts to be organic and start using chemicals.

Kelly Estes, CAPS state survey coordinator, has noted in the past that, in Illinois, the combination of lower populations of BMSB and the state’s highly managed crop systems have kept detection and economic injury levels low. Most reports of BMSB have come from urban areas in early spring and fall, generally from homeowners and master gardeners detecting these invasive insects looking for a place to overwinter inside homes. But the species is expanding its territory, with almost half the counties in Illinois having positive identifications (including seven new counties just this year—Christian, Hancock, Woodford, Mercer, Douglas, Jersey, and Grundy).

The BMSB, with the characteristic shield shape of stink bugs, is as wide as it is long. Its three key identifying characteristics are smooth shoulders, black and white banding on the antennae, and alternating dark/light banding on the edge of the wings.

I encourage homeowners and gardeners to be on the lookout for this invasive pest. If you have found BMSBs in a county not colored blue on the map, please contact your local extension office. For more information on BMSB, visit go.illinois.edu/BMSMfactsheet.
Keep Gardening All Winter Long

BY RHONDA FERREE

Gardening is not limited to being done outside in the summer. For example, I’ve been growing basil, dill, cilantro, and parsley indoors this winter, harvesting herbs to make fresh pesto, teas, salsas, and more.

Herbs are probably the easiest indoor crop, but salad tomatoes and carrots do well, too. You might be surprised at how many food crops can be grown indoors.

Options for edible indoor gardens include window gardens, containers, special systems, and indoor greenhouses. The most limiting factor for growing plants indoors is light, so whichever option you choose, you need a bright window or supplemental lighting. Many herbs will grow successfully in a window that receives several hours of sunlight daily.

Window gardens are very easy to create, especially using a prepared herb kit. Try growing small pots of cilantro and lettuce on a windowsill. Simply sprinkle some seed in a small container, give it a little water, and place it in a mock greenhouse (a zippered vinyl bag like the ones linens are sold in, a resealable plastic bag, or a plastic deli container with a lid).

If rosemary doesn’t overwinter in your area, try growing it indoors. Plant a mixed container of herbs in a large bowl or strawberry pot. Or try growing a small patio or salad tomato in a 5-gallon bucket. (Just remember that with no wind indoors, you will need to pollinate the tomatoes by gently shaking the flowers to spread the pollen.)

Many products are sold to make indoor gardening easier. For example, Aerogardens—hydroponic systems where plants grow in water with a premixed nutrient solution—are an easy, self-contained way to grow herbs, greens, and other food crops indoors all year long. The system includes lights that raise and lower as needed to facilitate plant growth.

Herbs commonly grown indoors include basil, chives, oregano, parsley, and thyme. Harvest them continuously, as soon as they have enough foliage to sustain growth. Not only does this provide fresh herbs for cooking, but pinching back the foliage keeps plants bushy.

Wondering what to do with your fresh herbs? Try adding them to your hot tea. A few sprigs of basil add a subtle spicy flavor to green or black tea. If you don’t have a special brewing infuser, simply use a strainer or a small tied cloth.

Plant some herbs or other suitable plants for your enjoyment this winter. While cold and snow blanket your outdoor garden, your indoor garden will continue to thrive and provide.
Understanding Photoperiodism, One Key to Plant Flowering

BY GEMINI BHALSOD

Ever have trouble getting your favorite winter holiday plants to bloom again? The answer to plant flowering lies with temperature and the phenomenon known as “photoperiodism.” Lucky for us, winter is a perfect time to delve deep into horticulture questions!

Photoperiod, or day length, is the duration of light in 24 hours. Photoperiodism, which for plants refers to their response to day length, is one tool plants use to determine the time of year, enabling them to flower at an optimal time.

A plant is either short-day, long-day, or day-neutral, depending on how it reacts to photoperiod. Short-day plants flower when the day length is less than a critical length, and long-day plants flower when it is more. Day-neutral plants are less sensitive to day length and can flower regardless; a different mechanism usually controls their flowering.

All that said, though, these terms are misleading. Studies have found that it is actually the length of uninterrupted darkness that is critical for optimal plant flowering. Depending on changes in photoperiod, plants switch from vegetative growth to reproductive growth (flowering). Plants that are long-day actually require short nights to stimulate flowering; they usually flower in the summer. Plants that are short-day require long nights; they usually flower in the fall. For example, a poinsettia flowers when days are shorter and nights are longer, making it a short-day plant. The poinsettia you buy in December is grown in a greenhouse, where growers manage day and night length with lights and dark covers to get plants ready just in time for holiday gatherings.

By now I bet you’re wondering, how does this affect my gardening? Besides being interesting, photoperiodism does influence planning. For example, plants grown for their leafy greens rather than their flowers, like spinach, need to be planted earlier or later in the year, so they do not go to seed because of day length. The next time you have a question about your plants flowering, start by thinking about their specific photoperiod requirements.

Propagating Houseplants to Expand Your Collection

BY KARI HOULE

One of my great loves regarding plants is propagating more plants. A number of houseplants are easy to propagate, and if you’re like me you can never have enough!

The method you use to propagate houseplants is determined by what plant you are trying to grow. The three most common types of cuttings used are herbaceous/softwood cuttings, leaf cuttings, and cane cuttings. I’ve listed examples of what plants can be propagated by each method.

- softwood/herbaceous cuttings (outer tip of the plant—usually 3 to 6 inches long with a few leaves attached): Dracaena, Croton, Holiday Cactus
- leaf cuttings (the entire leaf, keeping the petiole short): Jade, African Violet, Kalanchoe
- cane cuttings (the stem, usually 2 to 3 inches long, planted with no leaves—plant horizontally in the container, slightly covered): Dracaena, Dieffenbachia

Whatever plant you plan to propagate, make sure to choose healthy plant material for the best success. Avoid using materials with any insect or disease issues.

You can use one 6- to 8-inch pot to “root out” multiple cuttings in one container, or you can use individual smaller containers. Whatever your choice, use a good quality potting mix or perlite and peat moss mixed 50/50. Make sure all pots or containers are sterilized before using them for propagation.

Once you’ve taken your cuttings and planted them in moist potting medium (but not too moist, as you want to avoid rot), cover the container with a plastic bag to increase humidity. This is important because the cuttings don’t have roots yet to take up water. Place the container in a sunny location, but avoid direct sunlight. Also, be aware that some plants, such as Jade, don’t do well with the plastic covering, as the excessive humidity may cause rot.

The time it takes for roots to form varies greatly between types of plant. Some form roots quickly; others may take weeks. Keep a close watch on the cuttings, monitoring for any rot issues and for adequate moisture; don’t let the planting medium dry out. If cuttings begin to rot, the moisture is too high (either the humidity is too much, the soil medium is too wet, or even both); remove the cuttings that have begun to rot and reduce humidity/moisture as needed. Once the cuttings have rooted, transplant them as desired.
Caring for Your Houseplants in Winter

by Richard Hentschel

Winter brings many challenges for houseplants, which often struggle in conditions that are less than ideal. One of the biggest challenges is the low levels of light available: days are shorter and often cloudy, and plants may be located in spots without enough light each day.

Gardeners know that in summer the sun is strongest on the south side of their homes and weakest on the north. In winter, that north-facing window may offer too little light for even the most shade-tolerant of houseplants. Using your house’s south-facing windows can be a good indoor winter option. But many houseplants are too big for a windowsill, and light levels drop the farther a plant is moved from any window. A houseplant not getting enough light will lean toward the window (the source of light—see the cactus in the photo for an example).

Watering houseplants can go wrong very quickly and requires careful monitoring. Plants indoors typically slow their growth or even stall completely in winter. Overwater just once and soils may never dry out, with root rot setting in. It is better to keep plants on the dry side in winter.

The type of soil mix and container you use can make a big difference, too. Clay pots are much more forgiving than plastic, as moisture not only drains out the bottom drainage holes but escapes through the porous sides. Plastic pots should have many drainage holes to compensate. If you use the same soil media with all of your plants, watering will become more consistent overall. But the houseplant itself can complicate the situation. Once plant roots reach the bottom of the pot, they begin to circle the container and can block the drainage holes from working properly.

To make the best of the available sunlight, leaves need to be clean. Outdoors that happens automatically, but indoors dust and lint can build up, so rinsing the leaves occasionally allows them to function better. Plants preferring higher humidity are often placed in the kitchen, but cooking can add another layer to what is already on the leaf.

If new leaves are a lighter green, that is a sign that your houseplants are properly adjusting to reduce light levels. Older leaves may hang down and look wilted, but are not. Houseplants will need to balance their “leaf load” with available light, so loss of leaves can be expected.
Meet Me Under the Mistletoe

BY ALICIA M. KALLAL

Many plants enter our homes for the holidays as we deck the halls with holly boughs and adorn an evergreen tree. Perhaps one of the most interesting botanical holiday traditions, though, is kissing under the mistletoe.

Mistletoe has long been a part of human folklore and tradition. In Europe, the Druids and other ancient peoples believed that mistletoe possessed supernatural powers because it remained green in winter when the trees lost their leaves. Because of this, the Druids used mistletoe for sacred rituals during the winter solstice.

Today we recognize mistletoe as a sprig of greenery with spoon-shaped leaves and white berries, tied up with ribbon during holiday festivities. Washington Irving wrote about the kissing tradition in 1820 in The Sketchbook of Geoffrey Crayon, Gent:

“The mistletoe is still hung up in farm-houses and kitchens at Christmas, and the young men have the privilege of kissing the girls under it, plucking each time a berry from the bush. When the berries are all plucked the privilege ceases.”

Outside of its use as holiday decor, the existence of mistletoe is rarely considered. In nature, it grows not on the ground, but high in the branches of trees. One species of mistletoe, Phoradendron leucarpum, is native to southern Illinois.

The scientific name Phoradendron translates to “thief of the tree.” This name is apt, as mistletoe is a hemiparasitic plant that steals water and nutrients from the tree that it lives on. Because mistletoe depends upon a host for survival, it requires a specialized dispersal mechanism that delivers seeds to tree branches.

Mistletoe berries, while toxic to humans, are a prized food source for birds. However, simply being eaten by a bird and excreted in midair, only to fall to the ground, would not do. Instead, mistletoe seeds have a sticky coating that causes them to cling to bird feathers and feet after being passed. The bird must land and scrape these sticky seeds off onto another surface like a twig, thus delivering them to their desired destination with great frequency.

Named for its seed, the word “mistletoe” is derived from two Anglo-Saxon words that meant dung and twig. It is both ironic and beautiful that a parasitic plant called “dung on a twig” can be a symbol of love and vitality. I hope this brief botanical history lesson gives you a new appreciation for mistletoe this season.