

Smart Gardening



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PRESS

Smart winter protection for trees and shrubs

Protect your landscape plants from Old Man Winter by following these tips.

Diane Brown, Michigan State University Extension

After the devastating winter of 2013-14, people may be wondering what they should do to protect their landscape plants this winter. Consider these tips.

Keep soil evenly moist throughout growing season.

Moist soils will hold more heat than dry soils and are less subject to frost penetration. Keeping plants sufficiently watered throughout the growing season will result in better root growth and healthier plants going into winter. Even if plants are well-established, be sure to give them a good drink of water in late fall before the ground freezes and maintain a 3-inch layer of organic mulch around the trees or shrubs. Additional mulch through winter (another 1-3 inches) for recently planted trees and shrubs can help encourage root growth in fall and reduce root injury from frost penetration into the ground. Avoid placing mulch directly against the trunk, and remove the extra mulch layer in spring when growth resumes.

Location, location, location. Plant marginally hardy



Rebecca Finmeran

Be sure when siting plants to avoid downspouts and areas where ice and snow will be piled.

plants in protected locations in your landscape. Avoid planting in areas that receive heavy loads of deicing salts. When shoveling salty snow, avoid piling it around landscape plants where it will accumulate and be absorbed by roots. A well-constructed burlap screen can help protect plants subject to salt spray from passing traffic. Fix downspouts that leak and clean

Smart gardeners mulch leaves in the fall

On those slightly dewy mornings in the fall, elevate your mower deck to the highest setting and cross over the leaves once or twice. Mulching mowers can handle up to 6 inches of leaves at a time in one pass, but a traditional mower might take several trips. Depending on how many leaves fall each week, you may do this process twice in one week. There will be obvious “leaf residue” on the surface of the lawn that only lasts for a few days. The tiny pieces will eventually sift down through the turf, providing a certain amount of weed control while recycling essential nutrients that can save you money and time. Think of it as a “smoothie” for the lawn. Next spring, you won’t even notice the tiny leaf particles that have tucked themselves neatly around the crown of the grass plants.

Check out this smart gardening tip sheet for additional information, “[Mulch leaves into turf for a smart lawn](#),” or watch a YouTube [video on leaf mulching](#) to get you started!



Rebecca Finmeran

Mulching mowers can handle up to 6 inches of leaves at a time.

gutters of leaves before winter sets in. Plants beneath these areas can be damaged by heavy deposits of ice.

Winter desiccation. Winter sun and wind causes evergreen foliage to lose moisture that isn't replaced while the roots are frozen. Some plants are more susceptible than others including evergreens with short needles, such as Alberta and Serbian spruce, hemlock, yew and arborvitae, and broadleaf evergreens, such as boxwood and rhododendrons. Plant sides exposed to wind, along with sides most exposed to sun, typically the south and southwest, are most subject to winter injury of this type. Directions for building a sturdy windscreen can be found in the MSU Extension article, "[Build a better windscreen for your evergreens this winter.](#)"

Injury to thin-barked trees. Sunscald, sometimes referred to as southwest injury, can occur on cold, sunny, winter days. Bark heats up to the point that cambial activity resumes, then the temperature of the bark drops rapidly when the sun is blocked by a cloud, or when it drops behind a barrier such as a hill. The quick drop in temperature kills the active tissue. To prevent sunscald, wrap the trunk with a commercial tree wrap, plastic tree guards, or use white latex paint to reflect the sun and keep the bark at a more constant temperature. If using tree wrap, put it on in the fall and remove it in the spring after the last frost.

Leaving tree wrap on year-round is not recommended as it provides a good location for certain trunk boring insects to hide and cause damage. Newly planted trees should be wrapped for at least two winters and thin-barked species up to five winters or more. Areas of the trunk damaged by sun scald should be carefully trimmed back to live tissue with a sharp knife, following the general shape of the wound, rounding off any sharp corners to facilitate callusing of the wound.

Frost cracks may occur when the south or west side of a tree is heated by the sun. The bark and inner wood expands when warmed by winter sunlight. Once the sun sets or is hidden by clouds, temperatures of the bark drop quickly, causing bark to shrink. It takes longer for the inner wood to contract. The unequal shrinkage between bark and inner wood causes bark and the wood directly beneath it to split. Once the cracks have occurred there is little that can be done.

While it can be worth the time and effort to protect a few specimen plants in the landscape, it's better to have mostly plantings that can survive without extra pampering. Take the time to make sure plants in your landscape have been installed in the right location, and you will have fewer worries about winter protection. If the same plants prove troublesome year after year, it might be worthwhile to find them a new home in your landscape where less protection will be required, or replace them all together.

Overwintering tender garden plants

Tropical or "tender" perennials need to be lifted out of the garden before a hard freeze.

Rebecca Finneran, Michigan State University Extension

This is the time of year I wish my mother would call me up and remind me it's time to lift tender perennials such as cannas, callas and dahlias for storage indoors. Too often gardeners get caught up in the wonderment of fall football and Halloween, forgetting this money-saving chore. Left outside all winter, these warm climate lovers will die back and you will be purchasing new ones next spring. Well, consider this message your mother – it's time!

When in doubt, lift them out

Green giants of the garden such as the majestic Canna are in a group of plants known as "tender"

perennials. In their native area where the frost does not kill them back, these plants live as perennials. In northern climates, it is best to be thinking about taking them out of containers or the garden bed as soon as temperatures dip to the freezing level.

Storage of plants like Canna is best when the foliage and stalks are removed, leaving the stubs to dry for a few days before placing in storage. Many gardeners like to wait until a hard freeze that kills off the top of the plant first, but they can be lifted earlier than that as well. While the requirements for lifting and storage of tender perennials are unique for each plant, there are three things to remember when storing over

winter: they cannot be too wet, too dry or freeze. Never store these plants in a refrigerator where there is fresh fruit like apples, which produce a gas known as ethylene that will harm the rhizomes.

Cannas are one of the easiest plants to store over winter, but other plants such as Dahlia and Elephant Ear can be treated this same way. When plants are in storage, they are essentially dormant. Dormancy is a relative term because in their native range, cannas do not truly go dormant. It might be better to think of this resting period as a “hibernation” period. Once lifted and dried out for a day or two, the rhizomes can be stored in a variety of ways, but should be held over winter in a cool area where there is little or no light. Two things can happen to canna rhizomes during the winter: drying and rot. This means there is a balance between keeping the rhizome moist enough to avoid shriveling and dry enough not to rot. (Success rates will vary between cultivars.)

While it is often recommended that Cannas be stored in damp peat moss, one of the most practical ways to keep cannas is simply shake off the garden soil they were growing in, and “re- pot” them in a container with fresh media. (Do not store in your garden soil.) Cut off all the stalks to 1 inch above ground and simply set the pot in a cool, dark area such as a heated garage (40-50 degrees). This way, the containers will not dry out so much that the rhizomes shrivel. When stored in peat moss, one would be prudent to check rhizomes once a month to see if they are too dry.

In the north, it is seldom wise to plant tender perennials outside when the soil is cold and soggy. If they are potted, they can be placed indoors in March on a sunny windowsill to get a jump start on spring. You can also begin growing your cannas in a cold frame or outdoors under a clear tarp. With soils warming up after Memorial Day, it is much safer to place them into the garden at that time.



Trim Cannas back to ground level.

Rebecca Finmeran



Shake off soil, repot into moist container media.

Rebecca Finmeran



Store in pot in a cool, dark area until spring.

Rebecca Finmeran

Saving seeds - smart tips for next season

Is saving seeds from vegetables or flowers for planting next season a good or bad idea?

Gretchen Voyle, Michigan State University Extension

If you are considering saving vegetable or flower seeds for next season, the first important step is to know if your plants are hybrids or not. Saving seed packages or tags from plants you purchased earlier this spring can give you that information. It is never a good idea to save seeds from hybrid plants unless you are not concerned with the quality of future plants. A hybrid is created by crossing two closely related plants. Both “Mom and Pop” provide the genes responsible for qualities that make the hybrid exceptional. The problem with saving seeds from the hybrid is that resulting plants may not replicate the traits most desired in the original planting.

On the other hand, “open pollinated” crosses will provide a plethora of genetic variation that is both interesting and fun. Open pollination means that seeds resulted from natural pollination methods, such as insects or wind, and are the result of two or more “parents.” Like a game of Bingo, planting out open pollinated seeds from squash, gourds or pumpkins from a patch that had many cultivars will reveal dozens of options. Some of them might be totally useless.

There are several things to consider when dealing with open pollinated seeds. Some vegetable garden seeds could be a problem if another closely related

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vegetable is growing nearby. An example would be corn. Sweet corn growing near popcorn, Indian corn or field corn could give a bizarre mix-and-match ear that is inedible.

Timing is right

Light frosts will probably not affect the quality of the seeds, but a heavy frost could damage them if not fully ripe at the time of freezing. It is best when seed pods dry naturally on the plant, but ripe seeds can be brought indoors to finish drying. The seed head should be withered and the contents should be brown. Seeds that are green or yellow are unripe. Often, these seeds will not germinate next season.

The only time that rule of brown and dry does not apply is if we're talking about weed seeds. They attained their "weed" status by being able to put up with the most adverse conditions.

When picking the seed heads from plants, remove the seeds from the pod or whatever is enclosing the seeds. This allows them to dry more. Dampness is the enemy of seeds. The seeds could either mold or



Howard Schwartz, Colorado State University, Bugwood.org

begin to grow and neither event is wanted. Spread seeds in one layer in an open container. The seeds will dry more indoors in the presence of warm, dry air.

Store your dry seeds in a paper envelope or paper bag. Avoid plastic because it can trap moisture. If the seeds mold, they are very likely dead. Store your seed packs at room temperature

with good air circulation or a cool garage or garden shed. Label the envelopes so you remember what you have.

In the spring, plant as you would regularly. Unless you are experienced at collecting and storing seeds, you may not want to just use your stored seeds if a food crop is important. Mark your rows and compare between what you have gathered and what you purchased. Be a smart gardener and compare the crops.

Michigan State University Extension has dozens of helpful tips on growing vegetables that can be found at www.migarden.msu.edu. The last opportunity to collect seeds is right now. Just for fun, consider collecting some seeds for next year's garden.

Looking for more?

For more information on a wide variety of **smart gardening** topics, or to find out about smart gardening classes and events, visit www.migarden.msu.edu.

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