



PUTTING YOUR GARDEN TO BED

the healing gardens
MSU DEPARTMENT OF RADIOLOGY

Fall maintenance can be beneficial for a successful head start for next season's gardens and crops. Ideally, autumnal garden tasks include perennial plant maintenance, weeding, edging, winterizing ponds, watering, soil enhancing, mulching, composting, digging up and storing non-hardy bulbs, planting spring flowering bulbs, turf grass maintenance, and plant propagation. Cleaning up is an important task as it helps reduce diseases, insects, and other problems for the next season. Weather, of course, is THE determining factor as to what and how much can be accomplished.





*preparing your flower garden
in the fall months*

PERENNIAL PLANT MAINTENANCE

TAKE OUT

Weed! Pulling weeds in the fall will reduce the number of weed seedlings in next year's beds.

Remove dead and diseased leaves from perennials. Plant debris that overwinters in garden beds will provide a home for insects such as rose curculio, slugs, fruit flies, and currant worm.

Cut back perennials without flowers to about six inches above their basal growth. The few inches of 'stubble' remaining will create an area where snow will be drawn in and act as an insulator. The 'stubble' will also prevent a potentially heavy snow load from weighing down on the foliage and will act as a plant marker.

Prune sucker growth from trees and shrubs, such as Forsythia, Crabapples, and Lilacs.

Cut iris leaves down to 4 or 6 inches and at an angle. If iris borer is present, remove and destroy the rhizome and affected foliage.

Cut back and clean out areas with low-lying or fallen foliage. Destructive rodents such as mice and voles find these environments especially appetizing and inviting for their own personal overwintering.

LEAVE IN

Allow herbaceous perennial flowers to remain in the garden, until necessary to remove. The flower heads will provide seeds for songbirds during the winter and add winter interest to the garden.

Add fallen leaves around the crowns and lower leaves of shade loving plants such as hellebores and coral-bells. Leaves will decompose throughout the winter and eventually add nutrients to the underlying soil. Doing so mimics conditions the plant would experience in nature.

PLANT

Transplant self-sown biennials. Sow perennial seed such as Echinacea, Rudbeckia, Shasta daisy, Yarrow, Delphiniums, Coral-bells, Phlox, Columbine, Gaillardia, and Salvia.

In September, plant or divide any spring- or summer-blooming perennials such as peonies, poppies, or irises. Keep them watered until the first frost. (If desired, this is the time to plant garlic.)

Spring-flowering bulbs can be planted from October to the end of the year. If digging is still possible, the bulbs can still be planted, but remember: the later they are planted, the later they will bloom.

WAIT FOR IT

Mark any plant that emerges in late spring, such as Balloon flower (Platycodon), to avoid digging up in the early spring.

Plants with green leaves should not be cut back. Green leaves indicate that the plant is still capable of photosynthesizing and manufacturing nutrients for the next growing season.

For winter interest, wait until March or April to cut ornamental grasses down to the ground. If the grass clump is resting on the ground or seems unsightly, cut it back to the ground in the fall.

Wait until spring to cut back woody perennials such as Artemisia, Blue Mist Shrub (Caryopteris), Butterfly Bush (Buddleia), and Russian Sage (Perovskia).

WINTER PROTECTION

*how to keep your garden healthy
through the cold weather*

MULCH

Mulching provides winter protection for plants by maintaining a uniform soil temperature and reducing the potential damage of frost heave. Frost heave occurs during the winter months when soil (especially sandy soils) expand and contract due to freezing and thawing temperatures. Frost heaving exposes plant roots and can cause them to dry out or break. Mulching recently planted material before a freeze will provide insulation and the opportunity for newly planted roots to develop. Mulch consists of organic matter, such as shredded wood chips and bark, composted plant material and manures, and decomposed leaves, and is available at every garden supply store.

Apply two to three inches of mulch in garden beds, but do not cover the crowns of the plants. Keeping mulch about eight inches away from the base of trees and shrubs reduces the threat of mulch-dwelling insects and diseases.

WIND PROTECTION & RODENT DETERRENTS

Cut back diseased and damaged branches of shrubs or rose bush canes. Prune long branches or canes that can break in winter winds.

Encircle perennials susceptible to harsh winter winds such as tree peonies or roses with wire or burlap cages. After a freeze, add a four-inch layer of compost and lightly fill the cage with straw, leaves, or other airy material to allow for 'breathing' room, when winter temperatures rise above freezing. Covering vulnerable perennials with too much material or too early in the fall restricts the plant's ability to respire while it is still photosynthesizing.



For large areas, create well-ventilated, pliable windbreaks by using pruned evergreen branches, burlap, snow fencing, or whatever is available. Doing so will break the intensity of the cold, drying winds of winter. Well-placed shrubs will also do a serviceable job.

Rabbits, mice, and voles love to gnaw on young trees, low hanging branches, ornamental shrubs, and rose bushes. Encircle these plants with wire cages and tree wraps.

WATER

November is one of the driest months. Be sure to water perennials, trees, shrubs, and evergreens thoroughly before the ground freezes, ideally between November and December. Plants may be going into dormancy, but their roots are still growing and functioning. Don't forget to water the compost pile too.

Holly, Rhododendron, Azalea, Boxwood, Juniper, Pine, Yew, and Spruce transpire during the winter and their roots need water to replenish water lost.

BULBS

Plant spring-flowering bulbs any time in the fall before the ground freezes. If possible, turn over the soil before planting begins, add organic material, and turn it into the soil. Avoid waterlogged areas. When placing, remember that most bulbs prefer a sunny exposure. Plant bulbs at the recommended depth and spacing. Bulbs, which are planted deeper than recommended, will bloom later than expected or might succumb to rot.

BIRDS

Don't forget the birds! Clean and fill all bird feeders. Provide suet for insect eating birds, and put away hummingbird and oriole feeders. Our feathered friends will help keep the population of insects down as well as provide us with entertainment throughout the winter months.

WINTER PROTECTION



PROPAGATION

Before a hard frost, take tip cuttings of non-hardy plants such as *Helichyrsum*, *Plectranthus*, African Blue Basil, Geraniums, or any of your favorites. Cuttings should be five to seven inches long. Remove about a third of the lower leaves, and then use a rooting hormone while inserting the cuttings into a pot of moistened Perlite. Place a saucer under the pot and cover the top of the plant with a plastic bag that has several holes for aeration. Keep the saucer filled with water and place in a partially shaded area indoors. Check back for root growth in about two weeks. If roots are present, place the cutting in a pot containing a soil-less mix (see "A Guide to Container Gardening" for a homemade recipe). Remove the plastic and place the plant near a sunny window. Keep it moist for a few days and then gradually decrease the water as the roots begin to develop. Overwinter in a sunny window. Feel free to trim where necessary to promote branching and to prevent legginess.

Some plants (like Annual Purple Fountain Grass) or your favorite hanging baskets or containers can be brought indoors for the winter (space permitting, of course). When doing so, cut back the plant considerably, and decrease the amount of water for these plants; water them about once a month, but do not allow them to dry out. Place them in a cool, shaded area such as a basement, root cellar, or warm garage. In February or March, gradually increase the amount of water and place it in a warmer, sunny area.

TOOLS & EQUIPMENT

To prevent rusting, clean all garden tools and coat any metal with a mineral oil. Wipe wood handles with linseed oil. Oiling will reduce drying and future splinters. Sharpen shovels, pruners, and trowels. Before freezing temperatures, drain all hoses and store them for the winter.

WINTER PROTECTION



Till under healthy plant material as well as fallen tree leaves (preferably chopped or mulched with a mower) or grass clippings. Buried plant material decomposes faster than material left on the soil surface. This will also reduce the number of disease organisms that may cause problems next year.

Test the soil through MSU (www.msusoiltest.com). This requires obtaining several soil samples from over a wide area, and a trip to MSU Extension or Plant and Soil Sciences Building. For a nominal fee, the soil lab will send the homeowner results from the sample, and fertilizing recommendations. The website has a more complete list of instructions.

Make a note of where crops were grown and plan for the rotation of these crops.

ANNUAL & VEGETABLE *what to do when the season ends* BEDS

Collect seed from favorite annuals.

Plant pansies, flowering kale, cabbage, mums, and ornamental grasses for winter interest.

Amend soil by adding compost or organic material. Do not fertilize at this time.

Before freezing temperatures arrive, drain hoses and turn off water. If faucets are not frost-free, disconnect the hose from the faucet.





DIG IT?

how to save your corms and tubers for the next season

Yes, digging up your corms and tubers can definitely be a pain, but putting in the extra effort will save you the money you would have spent buying new ones each spring, and will also reward you with fuller, larger plants.

Here are tips to help you get the most out of your corms and tubers.

CORMS

GLADIOLAS

After the first killing frost, dig up the gladiolas. Be careful not to bruise or cut the corms.

Cut back stems to about one to two inches from the crown, shake off as much soil as possible, and place the corms on paper or screens in a frost protected, ventilated area to dry, or place them in the sun if the temperature is above freezing.

'Cure' these corms for about three weeks in warm temperatures.

After three weeks separate the Gladiola corms and allow them to dry for two more days.

When corms are dry place them in paper bags, muslin bags, mesh bags, paper boxes, used egg cartons or screened trays.

Store them in a dry, area about 45°F such as a basement, attic, root cellar, or cool closet.

Hang the bags to allow for air movement, remember to check them occasionally during the winter for any diseased bulbs that require removal.

TUBERS

DAHLIAS & CANNAS

Dig up Dahlias and Canna Lilies after a killing frost as well.

Use the same procedure for removal as stated above for corms, except cut the stems all the way back to the crown.

Turn the tubers upside down on paper or a screen so the roots dry out.

Bag them in the same manner as corms or store them in containers, covering the tubers with moss or sawdust, and place them in a cool dry area for storage.

Check the tubers from time to time and remove any diseased tubers.

CALADIUMS

Remove Caladiums from the garden as soon as their leaves begin to turn yellow.

Dig them up, but leave the soil around the roots and tuber for easier transfer to pots or tubs.

Place them in a cool dry area, but do not allow them to freeze.

TUBEROUS BEGONIAS

Tuberous Begonias should be removed after the first frost.

Remove them from the garden bed or pots and leave the plants and soil intact.

Place them in a dark, dry, frost-free area and allow them to dry for a few weeks.

When the soil has dried, shake the excess soil from the tubers, remove the stems, and place in moss, peat, or sawdust.

Store Tuberous Begonias under the same conditions as the other tubers.

DIG IT?



WINTERIZING

PONDS *keeping your water environment healthy while frozen*

Before the temperature dips below freezing, three different pond elements must be especially protected: fish, plants, and the surface. Fish can make it through a winter underwater but they need to be sheltered to some degree. Deep-water plants will survive the pond's frozen state. During the winter, the pond's surface is the most volatile area. When water freezes it expands, which puts pressure on the stiff walls of the pond. In addition, a sealed surface blocks all of a pond's natural exchange of gases.

To save the pond for next year, take the following steps:

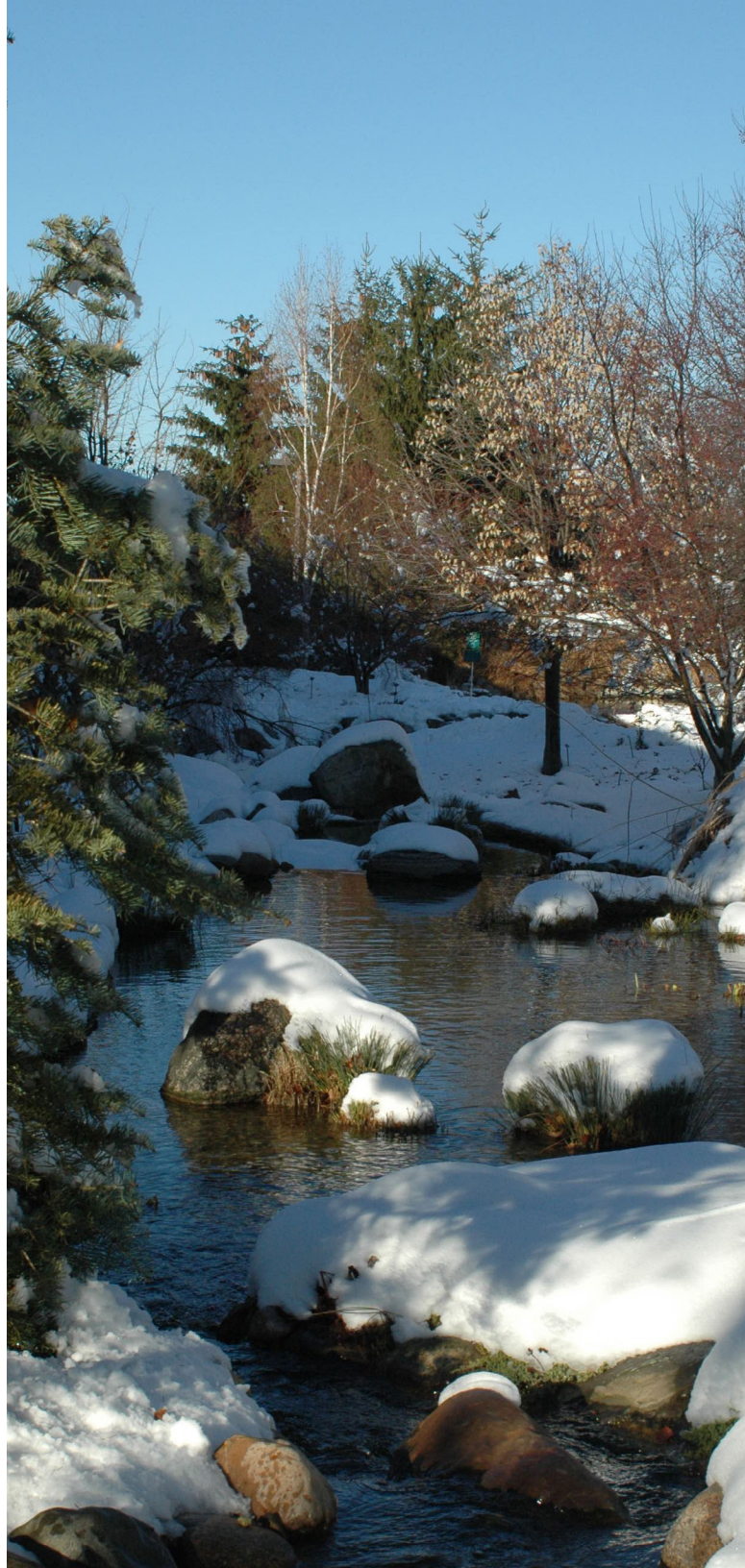
Place terra cotta pipes or some similar shelter underwater for fish to hide within from predators.

Keep a section of the pond from freezing with a heater or stock tank deicer. A hole in the ice will allow gas to exchange naturally, making for healthier fish and plants.

Floating items on the surface of the pond, such as rubber balls or wood, reduce the pressure on the sides of the pond caused by freezing.

Check the pond daily to see that all is in order.

Never smash the ice. Violent vibrations will shock and quite possibly kill sluggish, cold fish. Use salt, a heater, or boiling water to break the ice more gently.





MSU RADIOLOGY HEALING GARDENS

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space for*

PATIENTS

AWAITING ANSWERS,

STUDENTS

UNWINDING AFTER EXAMS,

EMPLOYEES

DE-STRESSING DURING DOWNTIME,

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