

Fall and Winter Care of Golf Course Ornamentals

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The autumn colors remind us that the season is almost over — for golf and also for many landscape projects. There are, however, a number of tasks relating to ornamental plantings that are best done in the fall or winter.

Annual Flower Gardens

In annual flower beds, it's clean-up time. The plants should be removed from the garden or tilled in. Most annuals can be tilled into the soil, to add easily composted organic material. Some annuals, however, should be removed and destroyed. These include any plants that were affected this year by a disease that might be carried over in the soil to next season. Some geranium diseases fall into this category. While cleaning flower gardens, make a note of any plants that performed particularly well this season, as a reminder to include them in next year's plantings. Also make a note of any plants that performed poorly, as a reminder to eliminate them from next year's plans.

Some of next year's annual flower gardens can be planted this fall. Seeds of annuals such as Pot Marigold, Spider Flower and Sweet Alyssum can be sown in place in the fall, and will reliably produce a flower garden the following season. Select a garden that is not prone to erosion and not in an area where the snow plows will pile salt-ridden snow. Till and rake the flower bed, sow the seed lightly in place, and mulch very lightly with a fine-textured organic mulch such as leaf mould or milled peat moss. Next year, the seed will germinate early and grow into an attractive garden as soon as could be done with transplants. After the seeds have germinated next spring, thin them to final spacing (Pot Marigold 10-12" apart; Spider Flower 1-2' apart, Sweet Alyssum 6" apart).

Don't stop with cleaning up flower beds. Be sure to include hanging baskets and other containers. Remove annuals from containers and clean the

containers this fall if they are to be reused next year. This is a good time to evaluate performance of containers. Make note of any plant materials that did well this year and include them in next spring's plant list. If some plants failed, try to determine the reason — was it the summer drought, the plant selection, the container itself, or the location? Containers can be a challenge for the maintenance crew; maybe it's time to consider a new soil mix, or a larger container that will require less frequent watering, or tougher plants.

Perennial Gardens

Perennial flower gardens have flourished on golf courses in the past few years. Perennials have different requirements than annuals. Much of the maintenance can be eliminated with proper plant selection, but there are always some tasks that cannot be avoided.

Consider hardy chrysanthemums. Many golf courses use mums for fall color. Plants are purchased in late summer in full flower, and continue to be showy until they finally die back after several hard frosts. Many people do not expect more than one season of color from mums, and allow the plants to die over the winter. Most of the mums that are sold in full color in late summer are hardy, and can be coaxed into surviving most winters with just a little extra care. After the tops have died back and the plants are completely dormant, cut them back to several inches above the soil line. Cover them with a mound of soil 4-6" deep; be sure to mark the mounds for next spring. When the soil warms up in the spring, the plants will start to send up new shoots. Carefully remove the soil mulch in stages, uncovering the new shoots. These shoots can easily be transplanted in early spring. One good mound of mums will produce a dozen or more such transplants, each to provide excellent color next fall.

If you have mums that were planted in a previous year, that have survived the winters but have not flowered since the first year, you should remove them and purchase new ones next year. Mums vary in the number of weeks required to form flowers, and some need more weeks than our summers provide. These flowers may form flower buds, but the buds do not open before frost. Always purchase short-season mums (they should be labelled as 7, 8 or 9-week types).

Most perennials benefit from a protective winter mulch. Wait until all perennials have died back (after several hard frosts), then cut back the plants to a few inches above the ground. Cover the beds with a loose mulch such as evergreen boughs, straw or hay. These mulches help maintain a more than even temperature, protecting plants from the alternate freezing and thawing caused by the late winter sun. Such widely fluctuating temperatures cause plants to heave of the ground, exposing their roots to the dry winter air. Not all perennials need winter mulch, but most perform better because of it.

The exceptions to the mulch rule are German Iris, Hollyhock, Foxglove and Sweet William. German Irises are planted with their rhizomes at ground level, and should never have any mulch materials placed over them. The Hollyhock, Foxglove and Sweet William are biennials, and must drop seed in late summer or fall in order to ensure flowering in future years. Placing a mulch over such plantings reduces the chance that the seedlings will germinate and survive.

Perhaps the most important task related to perennials is planting spring-flowering bulbs. For early spring color, bulbs cannot be surpassed. By now, most of our bulbs are probably in the ground. Bulbs perform best if planted in mid-fall, when the cool ground encourages root establishment. But there is still time for a spur-of-the-moment purchase. Most spring-flowering bulbs can be planted until very late in the fall and still perform admirably the following spring. Select only healthy, unmarred bulbs and plant them according to their size. Bulbs should be planted to a depth of about 2½ times their diameter. That means that the "little bulbs" (crocus, glory-of-the-snow, grape hyacinth, etc.) should be planted 3-5" deep, while the largest daffodils may have to be planted 8-10" deep. After planting, mulch the ground with 2-3" of organic mulch (leaf mold or

other composted material) to keep the soil temperature somewhat protected from early frosts; this will help root formation this fall.

Roses

Shrub roses, such as Rugose Rose or Virginia Rose, do not require winter mulch. The garden roses, however, are entirely different. Hybrid teas, floribundas and multifloras will not reliably survive the winter if left totally exposed.

After several hard frosts, remove ALL leaves from the roses. Leaves can harbor fungi over the winter, providing inoculum next spring. Cut back the rose canes only if they are too unwieldy to manage. Rose canes almost always suffer some winter damage, and major pruning should be left until growth has resumed in the spring.

In late November or early December, mound 8-10" of soil over the crowns of the plants. Then add either a loose mulch such as pine boughs, or rose cones (styrofoam or wooden). In mid-spring, remove the loose mulch or rose cones when the sun is warm enough to heat up the air or soil around the plants. Then remove the soil mound in two or three stages over a period of a few weeks.

Woody Plants

Several woody ornamentals require some attention at this time of the year to improve their ornamental value and to reduce winter problems.

Fall is not a major pruning season, but it is a good season to evaluate tree and shrub branches and decide which should be removed. Winter is a good time to prune out any diseased branches or branches with weak, narrow crotches.

Hydrangea can be cut back to the ground if desired. Many people prefer to leave the stiff, upright branches throughout the winter, because the dead flower clusters provide some texture in the winter landscape.

Multi-stemmed shrubs that flower in summer may be renewal pruned in winter. Potentilla, the pink-flowered Spireas, some Viburnums and many Dogwoods fall into this category. To encourage vigor, renewal prune them this year by removing at ground level only a few of the largest, oldest branches. Do the same next year and the year after, and the plant will be rejuvenated. Do not, however, attempt to renewal prune shrubs that flower in early spring (Lilacs, Corneliancherry Dogwood and Forsythia, for example), because they

have already formed their flower buds, and pruning will remove those buds, thereby reducing their value in the spring landscape.

Young crabapples have quite thin bark, and are susceptible to winter feeding by rodents. These rodents seek the protection provided by fallen leaves or other organic matter at the base of the trees. During the winter, they gnaw through the thin bark, exposing the trunk's exterior. If trees are completely encircled with this feeding ("girdling"), they will die. Purchase commercial rodent-guards or some wire mesh, which can be formed into cylinders around the base of the trunks. Be sure to dig the mesh cylinders an inch or so into the soil, to prevent rodents from simply crawling underneath. These mesh cylinders can be left in place for a few years if desired, until they threaten the trees' growth. Rodents can also be deterred by pulling bark mulch away from the base of the trees.

Thin-barked young trees such as crabapples, mountainash and maples may suffer damage from sunscald or frost crack. Sunscald is caused by alternating temperatures during winter. The sun warms the bark on the south

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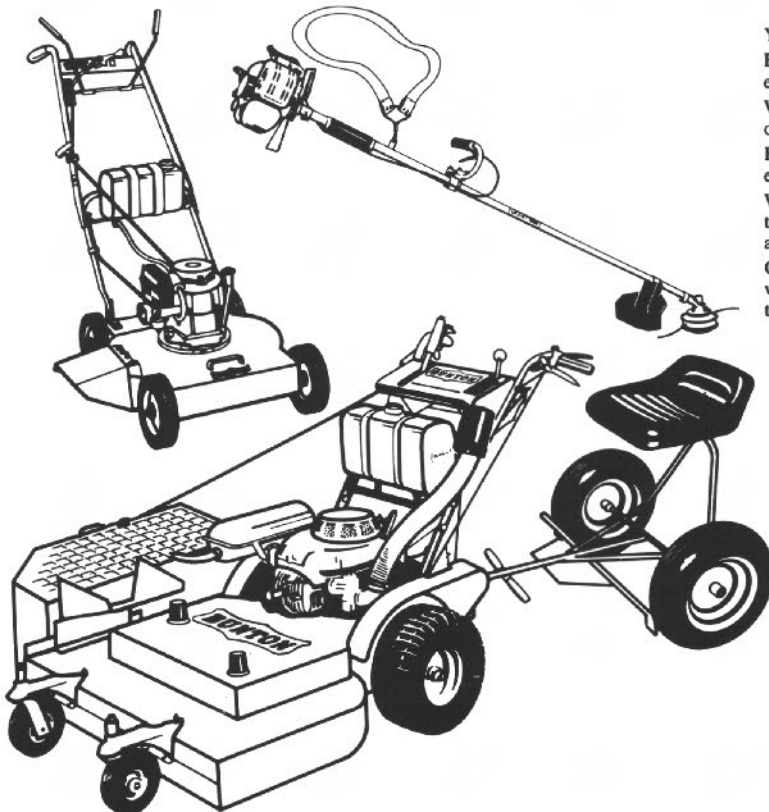
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or southwest side of the trees during the day, but when the sun goes down in the evening the temperature of the tree trunks may drop very quickly. This alternate freezing and thawing can cause rapid cell expansion and contraction, which may result in splitting of tissue.

Frost crack, on the other hand, is caused by internal mechanical stress in tree trunks during extreme cold. The bark and wood split apart. It is not always on the southern side of a tree, but it is characteristically a longitudinal crack in the trunk or a major branch. You may actually hear the crack if you are nearby.

Both of these problems can be largely prevented by protecting the trees from extreme fluctuations in temperature. Apply a plastic or paper tree wrap in late fall, to prevent the winter sun's heat from penetrating. Such protection may be left on the trees for two or three

years, until the bark develops into a stronger protective mechanism. There is little you can do to remedy winter sunscald or frost crack after the fact. Frost cracks may heal over in time, and may be successfully held together by implanting a rod or bolt.

Some evergreens require attention in fall. Multistemmed Arborvitae often break apart from heavy snow. This can be prevented by loosely wrapping them with a spiral of rope, which will cause the snow to fall around the plants rather than into their centers.

Few broadleaf evergreens are grown in the upper Midwest, but there are some, such as Oregongrape Holly, true Hollies and Boxwood. These plants often lose a dangerous amount of water throughout the winter, causing their leaves to dry and "burn" the following spring and summer. This desiccation can be minimized by following preventative measures in the

fall. Erect a protective structure on the northwest side of the plants where the wind is likely to be most damaging. Use a burlap screen or a length of snow fence to reduce the winter wind's damage. Or, apply an antidesiccant spray in early winter. These products produce a waxy coating on broadleaf evergreen leaves to reduce the amount of water lost. A second coating may have to be applied in midwinter.

Plan for 1988

Perhaps the most enjoyable task for fall is to review the year and plan for 1988. Consider plant selection, installation and maintenance procedures. Be critical about what was good and what was bad. Keep the good and improve on the bad. Remember, the seed catalogs are just around the corner, bringing hope for the new year!

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