

Woody Ornamental Landscape Plants – Month by Month Advice from the U of M Extension Services

Please Note: All recommendations are for central Maryland.

JANUARY

- Remove and destroy bagworm bags from affected trees- principally on evergreens. The bags contain hundreds of eggs that will hatch out and feed next spring.
- You can also reduce gypsy moth numbers by removing and destroying the tan colored, felt-like, 1 ½ inch long egg masses . They can be found on tree bark, firewood, lawn furniture and other outdoor structures and scraped off wherever found.
- Eastern tent caterpillar egg masses resemble black Styrofoam and are most often located on the ends of wild cherry trees; they will also feed on plum and crabapple trees. Clip them off with pole pruners and throw them in the trash. The fuzzy, tan-colored, capsule-shaped pupal cases you find on wooden structures contain Eastern tent caterpillar pupae.
- Scale insects, like pine needle and hemlock scale, can be controlled anytime that trees are dormant with a dormant oil spray. Spray trees and shrubs that have had aphid, mite , or scale problems with dormant oil. Be sure that temperatures are expected to remain above freezing for a 24 hour period after spraying.
- Trees and shrubs can be pruned now. Remove dead, diseased branches and make any necessary cosmetic cuts. Remove broken branches and make pruning cuts back to healthy wood. Avoid planting Bradford pear, silver maple, willow and other trees with weak, brittle wood.
- You can protect shrubs from winter winds by surrounding them with burlap or cardboard or constructing small, solid windbreaks located 18 inches from the plant on the windward side.
- Try to prevent snow and ice from building up on gutters and eaves above shrubs. Gently sweep snow loads off of shrubs to prevent breakage.
- Refrain from any hard pruning of vines like clematis until early spring when winter damage can be fully assessed. Ask me about appropriate varieties for spring planting. It is best not to plant clinging-type vines on or near wooden structures.
- Do not handle the hairy poison ivy vines wrapped around trees. The active oil, urushiol, can produce rashes and itching throughout the winter. However, this is a good time to sever poison ivy vines at ground level and paint the severed edge with Brush-B-Gon . Be careful not to bring firewood into the house with poison ivy vines attached.

FEBRUARY

- Trees and shrubs can still be pruned now. It is much easier to see what needs to be removed without the leaves on them. Begin by removing branches broken by winter weather, prune out dead or diseased branches and make any necessary cosmetic cuts. You may notice excessive sap bleeding from pruning cuts on elm, maple, birch, dogwood, beech, walnut, magnolia, tulip

poplar and redbud. This bleeding is harmless to the tree.

- Trees with brittle wood, such as the Bradford pear, are very susceptible to breakage in high winds and/or by the weight of ice. Carefully, remove broken branches and make pruning cuts back to healthy wood. Avoid planting Bradford pear, silver maple, willow and other trees with weak, brittle wood because they may develop breakage problems that could damage property or hurt people. Some tree pruning work may be too dangerous for the average homeowner, refer such jobs to professionals.
- Refrain from severe pruning of vines like clematis until early spring when winter damage can be fully assessed.
- February is the month when most ‘winter burn’ (brown needles or leaves) occurs. Winter burn (desiccation) results from a combination of cold drying wind, fluctuating temperatures from very cold to warm sunny days, and frozen soil. To reduce damage, consider spraying an anti-desiccant material on vulnerable shrubs (hollies, boxwood, nandina and other broadleaf evergreens). These materials coat the foliage, preventing moisture loss. The coating does wear off, however, and will need to be re-applied one more time before the end of winter. The directions state that anti-desiccants should only be applied when temperatures are above freezing for 24 hours.
- You can also protect sensitive broadleaf evergreen shrubs from damaging winter winds by surrounding them with burlap or cardboard or constructing small, solid windbreaks located 18 inches from the plant on the windward side. Gently sweep snow loads off of shrubs to prevent breakage.
- It is possible to transplant small trees and shrubs in February (provided the ground is not frozen very deep).
- Hemlocks infested with the woolly adelgid can be sprayed with dormant oil anytime between now and March 1. However, to prevent plant damage, the dormant oil directions state that it must not freeze within 24 hours of application. Finding a time that it is not freezing can be rather tricky in February. Adelgids are aphid-like sucking pests that appear as white, waxy masses on the needles. Heavy infestations can ruin or kill trees, particularly if they are stressed by drought later this summer. Infested trees can be treated with imidicloprid as a drench around the base of the tree – follow all label directions and precautions.
- Scale insects, like pine needle scale and hemlock scale, can also be controlled with a dormant oil spray anytime that trees and shrubs are dormant. Again, be sure that temperatures are expected to remain above 40 degrees F. for a 24 hour period after spraying.
- The tiny reddish brown eggs of spruce spider mites can be seen with a hand lens on the twigs and needles of spruce at this time. If you notice signs of this pest, apply a dormant oil spray, which will smother and kill the eggs.
- Inspect trees for gypsy moth egg masses. They are tan colored, felt-like and 1-2 inches long, and may be found on tree bark, firewood or any outdoor, wooden structure.
- Eastern tent caterpillar egg masses resemble black Styrofoam and are usually found on the ends of cherry and crabapple tree branches. They should be removed and destroyed.
- Remove bagworm bags from evergreen shrubs. These bags contain hundreds of eggs, which will hatch out in the spring. Discard or destroy the bags- don’t just leave them on the ground.

- Look at the base of shrubs, especially mugo pine, nandina, azalea, boxwood and junipers, for signs of voles feeding on the bark. Voles are a type of field mouse that take cover in deep mulch and feed on roots, crowns and above ground wood. If you have a problem with voles remove the mulch layer and set some snap traps baited with apples or peanut butter.
 - Do not handle the hairy poison ivy vines wrapped around trees. Be aware that the offending oil of poison ivy, urushiol, is active and can produce symptoms during any time of the year. Be very careful not to bring firewood into the house with poison ivy vines attached.
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MARCH

- Non-flowering trees and shrubs can be pruned before new growth and when the worst of the winter weather is over. Remove branches broken by winter weather, prune out dead or diseased branches anytime and make any necessary cosmetic cuts. It is not necessary to paint pruning wounds. In fact, wound dressings will impede the natural healing process. You may notice excessive sap bleeding from pruning cuts on elm, maple, birch, dogwood, beech, walnut, magnolia, tulip poplar and redbud. This bleeding is harmless to the tree. If you want to avoid the “bleeding” wait until these trees have leafed out before pruning.
- Heavy pruning of healthy twigs and branches of spring flowering shrubs (azaleas, rhododendrons, forsythia, etc) at this time will reduce the number of blooms this spring. So if this is of concern to you, wait until after flowering before doing heavy pruning. To rejuvenate older, multi-branched shrubs, remove only 1/3 of the oldest wood to prevent removing all flowering/fruiting branches at once. If, however, heavy pruning is necessary, the best time to do it is right before new growth begins.
- For a bright vase of color indoors, the prunings of spring flowering shrubs can be brought in and placed in water to force early blooms. Forsythia, pussy willow and some blooming ornamental fruit trees work well for this.
- March is the beginning of the planting and transplanting season for woody landscape plants. Avoid working with wet soil; wait until the soil dries out. Common planting mistakes include planting in compacted or poorly drained soil, planting too deep and buying damaged plants with poor root systems. When properly planted the staking of new trees is usually not necessary. However, occasionally high winds and soft, saturated soils can lead to the tilting of young or newly planted trees. Simply pull these trees upright and gently tamp the soil down over the root system.
- Roses can be pruned starting in mid-March to maintain their shape and size. Roses always have some winter kill; to determine whether or not a branch is alive, simply scrape the bark with a sharp knife and look for green tissue.
- Refrain from any hard pruning of vines like clematis until you can determine which vines are alive and which have been winter damaged. Waiting until mid to late April will help you better determine what needs to be removed.
- Remove and destroy bagworm bags from affected trees (primarily needled evergreens). The bags contain hundreds of eggs that will hatch out and feed in the spring. Discard or destroy the bags- don't just leave them on the ground.
- Hemlock wooly adelgids are aphid-like sucking pests that appear as white, waxy masses on the needles of hemlock trees. Heavy infestations can debilitate trees, particularly when they are

stressed. Spray trees with ultra-fine horticultural oil when the crawlers are out in late May or early June. Infested trees can be treated with imidicloprid as a drench around the base of the tree – follow all label directions and precautions. Do not fertilize Hemlocks. Research has shown that increased nitrogen may actually increase adelgid populations on hemlock.

- The tiny reddish brown eggs of spruce spider mites can be seen with a hand lens on the twigs and needles of spruce at this time. If you notice signs of this pest, apply an ultra-fine horticultural oil spray which will smother and kill the eggs.
 - Inspect trees for gypsy moth egg masses. They are tan colored, felt-like and 1-2 inches long, and may be found on tree bark, firewood or any outdoor, wooden structure.
 - Inspect trees for the egg masses of the Eastern tent caterpillar. They resemble black Styrofoam and are usually found on the ends of cherry and crabapple tree branches. Both types of egg masses should be removed and destroyed. The eggs of Eastern tent caterpillar will hatch out when cherry tree leaves unfold. They create white silken web nests in the branch crotches of these trees. If your trees are heavily infested, you can control them with a spray application of the microbial insecticide, B.t. later this spring when they have all hatched out but still small.
 - If you had a problem last year with scale insects on woody landscape plants spray them with a dormant oil prior this month to bud swell. Spray on a dry day when temperatures are above 40 degrees F. and are expected to remain above freezing for at least 24 hours. March is the last time you can apply oil at the dormant rate because the dormant rate can burn green tissue, so if you notice bud or leaf growth, spray horticultural oils at the summer, 2%, rate. Dormant oil is an environmentally safe product to use and is very effective in controlling scale insects.
 - Prune out black knot cankers on flowering cherry and plum trees and cedar apple rust galls on cedar trees.
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APRIL

- Now is an ideal time to plant new or transplant existing trees and shrubs. When carrying newly purchased trees, always hold them by the root ball or container and not by the trunk. Buying containerized trees and shrubs is very popular. However, sometimes they are pot-bound. Be sure to spread the roots open when planting. This will help assure that the roots will spread out properly and not grow into a tight self-constricting clump of roots. Plants grown as ball and burlap do not require spreading the roots but do need to have the ropes removed and the burlap loosened from around the trunk.
- Try to choose quality trees from the nursery. Shade trees should have a single, straight trunk. Contrary to popular belief it is unnecessary to prune or top a newly planted tree. Obviously damaged or rubbing branches, however, should be removed. Common planting mistakes include planting in compacted or poorly drained soil, planting too deep and buying damaged trees with poor root systems. It is also important to keep newly planted trees properly watered. Typically, the staking of newly planted trees is not needed. New trees that are allowed to move a little by the wind actually develop better roots and a stronger trunk than those that are securely staked.
- Trees can be pruned now. Start by removing tree branches broken by winter weather, prune out dead or diseased branches and make any necessary cosmetic cuts. It is not necessary to paint pruning wounds. In fact, wound dressings can impede the natural healing process. You may notice excessive sap bleeding from pruning cuts on elm, maple, birch, dogwood, beech, walnut, magnolia, tulip poplar and redbud. This bleeding is harmless to the tree. To avoid reducing the

bloom of spring flowering plants, prune them after they bloom.

- Prune out winter burn damage on hollies and other evergreen shrubs. Remove shrub branches broken by winter weather, prune out dead or damaged branches and make any necessary cosmetic cuts.
- Roses are available now in nurseries and garden centers as bare-rooted or potted plants. Select plants with 4-5 large canes coming from the base. Choose a sunny site, at least 6 hours of direct sun, dig a large hole, mix a starter fertilizer into the planting soil and plant so that the crown is one inch above the soil grade. Keep newly planted roses well watered. It's time to begin spraying roses with a fungicide if they are varieties susceptible to black spot disease; spray when leaves are fully expanded. Rose plants should also be fertilized at this time with a balanced fertilizer.
- Now is the time to prune roses. As they are budding you can more easily determine what is live wood and what has been killed by the winter. Prune winter damaged canes of non-climbing roses back to healthy wood or to within about ten inches of the soil to reduce the size of the rose. Prune climbers and ramblers back only to living wood, not to the ground.

Insects

- Continue to remove and destroy bagworm bags from affected trees- principally on evergreens. The bags contain hundreds of eggs that will hatch out and feed later this spring. Make sure to dispose of these bags; don't just throw them on the ground because they will still hatch.
- Armored scale insects are small sucking insects that cause considerable damage to many woody plants. Unlike other insects the adults have no legs but remain stationary on the stems protected by a small cover that helps them blend in with the plant's bark. Common types of scales include pine needle scale, hemlock scale, euonymus scale and others. They can be controlled with a summer rate application of horticultural oil.
- Eastern tent caterpillar eggs are hatching now (early April) and the larvae are feeding on cherry and crabapple leaves. You may notice webs developing in the branch crotches. Trees can generally withstand the damage; a non-toxic control is simply to remove the webs with a stick or a pole. They are not a serious threat like the gypsy moth. Trees that are stripped of leaves always recover nicely. However if your infested trees are prime landscape features and are heavily infested, you can control them now, while the larvae are young, with a spray application of the microbial insecticide, B.t.(*var. Kurstaki*).
- Carefully inspect trees for gypsy moth egg masses. They are tan colored, felt-like and 1-2 inches long, and may be found on tree bark, firewood or any outdoor, wooden structure. Remove and destroy them now as they will be hatching this month.
- Aphid colonies usually begin feeding on tender new growth in April. Aphids are small, pear-shaped soft-bodied insects that come in many different colors and suck the plant sap from a wide variety of plant leaves. They may cause leaves to pucker, twist or curl downwards. Though the damage may seem alarming at first, often if you wait, beneficial predator insects, such as lady bird beetles, hover fly larvae, green lace wing larvae, and parasitic wasps can effectively control the aphid pests. Insecticide treatments are usually not necessary for this reason, as well as for the fact that they would also kill the 'good' or beneficial insects which are helpful in the garden. The affected plant parts quickly grow out of the damage.
- The tiny reddish brown eggs of spruce spider mites can be seen with a hand lens on the twigs and needles of spruce at this time. Spider mites can be very damaging later this summer to these

plants. If you notice signs of this pest, apply an ultra-fine horticultural oil spray which will smother and kill the eggs.

Disease

- Crabapple trees are truly very beautiful in spring bloom. Unfortunately, most are also very susceptible to two fungal diseases: cedar-apple rust and apple scab. Both diseases cause the leaves to drop off in mid-summer. You can follow a rigorous spray program, however the best option is to replace these troublesome trees with disease resistant cultivars that require no spraying.
 - April is the month that cedar-apple rust disease forms its galls on Virginia cedar (*Juniperus virginiana*). The odd-looking galls are at first bright orange gelatinous balls with long “horns” or projections; they later turn brown and become hard. They are the alternate host structure for a disease that does no harm to the junipers but is more destructive to apple trees, hawthorns and quince.
 - Powdery mildew of native dogwood is a very early season type of powdery mildew. Traditionally powdery mildew occurs in late summer but this is not the case with this specific disease. This is a new emerging disease appearing in our region. It disfigures the new growth by causing it to become distorted and wilted. Patches of white powdery fungal growth is also found on the upper surface of the leaves. Symptoms begin appearing in late April and May continue throughout the summer and fall. Over fertilization that results in succulent new growth is particularly susceptible. Provide good air circulation by removing suckers and over dense growth. Several dogwood cultivars have been identified as resistant. They are: Cherokee Brave, and the Jean’s Appalachian, Karen’s Appalachian, Kay’s Appalachian and Appalachian Joy.
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MAY

- If your azaleas, rhododendrons and other spring flowering shrubs are growing too large you can prune them after they bloom. Maintain good boxwood health by thinning out interior branches to promote air circulation. Dense boxwoods may develop disease problems such as volutella canker, a common disease of boxwoods. Improved air circulation will help prevent this devastating disease.
- When selecting a shade tree look for one with a single, straight trunk. Contrary to popular belief it is unnecessary to prune or top a newly planted tree. Obviously damaged branches, however, should be removed. Common planting mistakes include planting in compacted or poorly drained soil, planting too deep and buying damaged trees with poor root systems. Avoid planting trees that are popular because they grow fast such as silver maple, Lombardy poplar, willow, and Bradford pear. These trees have weak, brittle wood that is subject to splitting.
- Mulches should be applied only 2-3 inches deep and kept away from tree trunks. Mature trees do not benefit from being mulched except that the mulch ring keeps lawn mowers and string trimmers from damaging your trees.
- At this time in the spring the older leaves of holly and magnolia will begin to yellow and drop. This is a natural process of regeneration and does not indicate a problem with the trees. Many pine trees also drop their older needles now; others drop them in the fall.
- If needed, rhododendrons and azaleas can be fertilized with a balanced fertilizer after the bloom period.

- Roses have always been popular and with the introduction of the black spot disease resistant, ever blooming varieties of 'knock out' roses many more gardeners are using roses in their landscapes. Choose a sunny site, at least 6 hours of direct sun, dig a large hole, mix a slow release starter fertilizer into the planting soil and plant so that the crown is one inch above the soil grade. Keep newly planted roses well watered. For black spot susceptible roses it's time to begin spraying roses with a fungicide. Spray when leaves are fully expanded. There are new organic fungicides available, including neem oil that are labeled for black spot. Rose slugs can be hand-picked or controlled with an application of pyrethrum and soap. Rose plants should also be fertilized at this time with a balanced fertilizer.

Insects

- The three major insect and mite pests of boxwood can be observed now. Boxwood mites produce small white spots, known as stippling, on leaves. The boxwood psyllid causes new leaves to cup and the boxwood leaf miner produces blister and blotch mines on boxwood leaves. Ultra-fine horticultural oil can be applied to control psyllids and mites. Leaf miner damage observed now occurred last year. Consider applying a systemic insecticide this summer if you observe numerous fresh mines.
- Monitor your conifers for spruce mite by tapping a branch while holding a piece of paper below it. If present, you'll see small dots walking around on the paper. Spruce mite feeding produces fine flecking or stippling on the needles. They can be controlled now through June with a spray of water or insecticidal soap or horticultural oil. Oil sprays should be applied to dry foliage when temperatures are below 85°F. Oil sprays will discolor Colorado blue spruces trees. Blue color will not regenerate on old needles. Consider purchasing and releasing predatory mites if you observe a severe infestation in your landscape.
- Lace bug feeding begins this month and may be seen now on rhododendrons, azaleas, andromeda, and mountain laurel. You'll notice small white or yellow spots on the upper sides of leaves and small black fecal spots will appear on the undersides. Lace bugs are more of a problem on stressed plants on exposed hot sunny sites. If faced with a severe infestation, treat with a systemic insecticide.
- Cankerworms look like inch worms and are yellow to gray in color and are feeding now on the foliage of a wide range of shade and forest trees. The damage first appears as shot holes in leaves. They feed between leaf veins causing foliage to have a tattered appearance. No treatment is necessary for established trees.
- Cottony camelia scale can be found now on yews, camelias, holly, euonymous, hydrangea and beautyberry. You'll notice white waxy egg masses laid on leaf undersides. You may also notice honeydew and black sooty mold that results from scale feeding. Immatures will hatch in June. It's best to spray in June with insecticidal soap or horticultural oil.
- Remove old bagworm bags from evergreen trees. The bags contain hundreds of eggs, which will hatch out in late-May through June. Discard or destroy the bags- don't just leave them on the ground. When they hatch, you'll see the tiny bags, with the caterpillars inside, walking around. The best time to spray to control bagworm is June 15-July 15 using the microbial insecticide, B.t.
- Gypsy moth caterpillars are feeding at this time. No spraying is planned by the Maryland Department of Agriculture for Spring 2011. The eastern tent caterpillar is often mistaken for the gypsymoth.

- Hemlock woolly adelgids are aphid-like sucking pests that appear as white, waxy masses on the underside of needles. Heavy infestations can debilitate trees, particularly when they are stressed. Spray trees with ultra-fine horticultural oil when the crawlers are out in late May or early June. Be sure to spray underside of needles. Another option is to consider a systemic insecticide treatment.
- Scale insects, like pine needle scale and hemlock scale, can be controlled with a summer rate application of horticultural oil.
- You may notice large numbers of 1-inch long sawfly larvae feeding on pine trees. Handpick or control young larvae with ultra-fine horticultural oil.
- Eastern tent caterpillars are actively feeding. Tents can be removed with a long stick or broom. Do not attempt to burn the tents as this may damage your tree. Larvae are now too large to be effectively controlled with B.t. Mature Eastern tent caterpillars are still moving out of nests searching for a place to pupate. If they are a nuisance around your home, sweep them up and dispose of them in a bucket of soapy water.
- Honey locust plant bug and honey locust leafhopper frequently feed on honey locust leaves, causing yellowing, deformity, or stunting. If infestations are severe, apply a summer rate application of horticultural oil.
- Locust leaf miner adults are beginning to feed on black locusts. They feed between the leaf veins, causing leaves to look skeletonized. Although unsightly, controls are not necessary. This pest does not pose a threat to black locust trees.
- Aphids actively feed in May. Aphids are small, pear-shaped soft-bodied insects that come in many different colors and suck the plant sap from a wide variety of plant leaves. They may cause leaves to pucker, twist or curl downwards. No insecticide treatments are usually necessary because they are controlled effectively by resident populations of beneficial predators like lady bird beetles, hover fly larvae and green lace wing larvae as well as by parasitic wasps. In severe infestations you can often get good control by knocking aphids off the plant with a strong stream of water from a hose. Sooty mold is a fungus that appears as a black coating on leaves. Sucking pests, like aphids, feed on leaves and excrete honeydew, a substance on which the sooty mold grows. Look for pear shaped, green aphids on the growing tips and prune out damaged shoots. You can control heavy infestations with horticultural oil. If beneficial insects are observed, do not use pesticides as it will be harmful to the good guys.

Disease

- Powdery mildew can be observed on crabapple and dogwood. The symptom is a powdery white coating on the upper leaf surface. It can be severe under humid conditions. If you have a shrub with significant damage, consider applying a labeled fungicide, like horticultural oil. Yes, horticultural oil was originally an insecticide, but it has also proven to be an effective fungicide for some plant diseases.
- Dogwood anthracnose is a serious dogwood disease. Early symptoms begin in mid- to late-May as leaf spots with tan or purple borders. These spots may enlarge in wet weather and kill entire leaves. The disease can then spread to twigs and branches and result in dieback of large limbs and even entire trees. Both cultural and chemical control strategies are necessary. Prune out all dead or dying twigs and limbs during dry weather. All water sprouts or suckers on trunks and branches should also be removed at this time. In the fall, leaves should be raked up and removed. Remove any dead leaves still attached to the branches. Avoid over application of

fertilizer results in succulent new growth with greater susceptibility to disease. Fungicides can be utilized on trees in landscapes in the spring at bud break, followed by additional sprays every 10-14 days until leaves are fully expanded. Trees should also be sprayed once in the fall after the leaves have changed color, but before leaf drop. In areas with severe disease, consider planting resistant dogwood species such as the flowering dogwood cultivar 'Appalachian Spring', and cultivars of *Cornus kousa*.

- The blooms of many plants, including dogwood and peony, can be infected with botrytis blight, also known as gray mold. Flower petals will appear spotted and water-soaked and then wither and turn brown. Azaleas suffer a similar petal blight disease. Simply remove damaged blooms.
 - A common fungal disease known as anthracnose can show up on oaks, maples, sycamores, ash, beeches and apples. Irregular shaped, brown spots appear on the upper leaf surface. Leaves may wither, die and drop as the disease spreads. Healthy, mature trees can tolerate these symptoms and will put out new foliage. Young trees that are badly infected can be sprayed next spring, with a labeled fungicide. Sprays will not help once leaf spotting symptoms are observed. Rake up and dispose of fallen, infected leaves to reduce the incidence of the disease next year.
 - Ovulinia blight causes small water-soaked spots on azalea and rhododendron blooms that enlarge, causing the petals to turn slimy and brown. The petals remain attached to the plant. Gardeners often mistake this disease for natural petal senescence. However, petals that die naturally will fall off the plant. This fungal disease is more severe during cool, wet weather.
 - Exobasidium gall can be seen on azaleas and rhododendrons. Leaves develop puffy swellings that turn white in color. Pick off infected leaves.
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JUNE

- If you planted trees or shrubs this spring, be sure to keep them well watered through dry weather this summer. Thoroughly soak the root ball every few days. A 2-3 inch layer of mulch is helpful. Keep mulch away from the trunk or stem.
- The wet weather common this month will cause many plant diseases to emerge. The most common are fungal leaf spot diseases. Affected leaves can be removed and disposed. Roses are especially hard hit by leaf diseases. Funginex, a commonly used rose fungicide, will control black spot and powdery mildew.
- Monitor plants that are prone to pest problems for new signs or symptoms of insect damage or disease. Be sure you have accurately identified the problem before taking action. Cultural and environmental factors cause at least half of all the observed plant problems in home landscapes. If an insect pest or disease is the culprit, always select the best solution.
- We are getting into the thunder storm season; to reduce storm breakage to shade trees prune overlapping or overhanging branches to open up the tree. Remove the spent blossoms of lilac and rhododendrons, but leave viburnum blossoms alone because they will produce berries for wildlife. Regular renewal pruning by thinning out older canes down to the ground is recommended for spring flowering shrubs like forsythia, lilac and weigela. This can be done now.
- Rhododendrons and azaleas can be fertilized with a balanced fertilizer after the bloom period.
- Poison ivy is very visible at this time. It has compound leaves with 3 shiny leaflets. The middle

leaflet is on a longer petiole than the other 2 leaflets. Cut poison ivy vines back to the ground to weaken plants. If the stem is woody, paint the cut end with triclopyr or a glyphosate product immediately after cutting. Poison ivy that regrows after cutting can be cut or sprayed with glyphosate or triclopyr. Continue to spray or cut back plants through the growing season to eradicate this noxious weed. Do not handle the hairy poison ivy vines wrapped around trees.

- Clematis is a very popular flowering vine that is in full bloom now. It requires a soil with neutral to slightly basic (sweet) soil. The pH should be about 7.0. Test and amend your soil with lime, if necessary, before planting clematis. For best results, mulch the root system to keep it cool. It is optimal if you can plant the roots in shade while keeping the flowers in the sun.
- Wisteria is a popular blooming vine but it can quickly get over grown. To control its growth prune wisteria now after it is finished blooming. *Wisteria frutescens* 'Amethyst Falls' is a native replacement for the aggressive Asian species.
- Healthy container and burlapped and balled trees can be safely planted throughout the summer as long as they are watered during dry periods. Thoroughly soak the root ball every few days until the roots become established. Carry newly purchased trees by the root ball or container and not by the trunk. Handle the root ball gently. When selecting a shade tree choose a quality species and one that has a single, straight trunk. Contrary to popular belief it is unnecessary to prune or top a newly planted tree. Obviously damaged branches should be removed. Common planting mistakes include planting in compacted or poorly drained soil, planting too deep and buying damaged trees with poor root systems.

Insects

- Insects, both beneficial and harmful species are now in "full swing" this month. One of the smallest yet very destructive is the ambrosia beetle. It is a tiny beetle that can bore into heartwood and cause dieback even in young, healthy trees. The beetle's activity and damage to trees is favored by drought. Small holes can be observed that spiral up the trunk. [\(photo\)](#) The beetles push out short gray-colored tubes of frass from these holes. Badly infested trees may have to be removed. There is no chemical control once the tree shows signs of dieback from an infestation. Prevent this problem by keeping trees, especially young ones, well watered during droughty periods.
- Aphids are actively feeding on birch, elm, poplar and other trees. Aphids are small, pear-shaped soft-bodied insects that come in many different colors and suck the plant sap from a wide variety of plant leaves. They may cause leaves to pucker, twist or curl downwards. It is usually not necessary to spray insecticides. Native populations of ladybird beetles, syrphid flies, green lacewings and wasp parasites build up quickly to keep aphids in check. You'll see these predators and parasites at work if you observe the aphid colonies closely. Aphids excrete plant sap, known as honeydew, when they feed. This leads to the growth of a black fungus on leaves, known as sooty mold. The mold is harmless but it a real nuisance when it grows on lawn furniture covered with honey dew underneath trees infested with aphids or scale.
- Bagworm larvae are hatching out this month and constructing new bags. Look for the little bags walking around on evergreen trees and shrubs and be prepared to spray infested trees with the microbial insecticide, B.t. between now and mid-July. An application of B.t is recommended for evergreen shrubs or trees that were damaged by this pest last year. Spray after you've observed the small larvae.
- Boxelder bug nymphs and adults are congregating in large numbers on a wide variety of trees and shrubs. They are harmless but if a nuisance they can be sprayed with insecticidal soap. The

nymphs are bright red and the adults are black with red markings. These are the same boxelder bugs whose adults will invade your house later this fall.

- Late this month the first generation of fall webworm may be observed at this time on a wide variety of shade trees. This pest feeds within webs they construct on the ends of branches. Fall webworm is hairy with black spots and varied body color. They do not cause significant harm to trees and can be pruned out if desired.
- A variety of galls may be observed at this time on the leaves and twigs of oak, maple, hickory and other trees. Galls are tumor-like growths of woody and leaf tissue. These galls pose no threat to the tree.
- The hemlock wooly adelgid is an aphid-like sucking pest that can debilitate hemlock trees, particularly when they are stressed. Adelgid crawlers are feeding now and can be sprayed with ultra-fine horticultural oil throughout the summer or use an imidicloprid drench around the base of the tree. Check the label for rates and instructions and if registered for use in your area. ([HG 2](#))
- Honey locust plant bug and honey locust leafhopper frequently are observed feeding on honey locust leaves, causing yellowing, deformity, or stunting.
- Lace bug feeding can be observed on azaleas, Japanese Andromeda, hawthorn, serviceberry, oak and sycamore. They feed from the underside of the leaves, sucking the plant sap causing a white stippling to appear on the upper leaf surface. Monitor the feeding damage. Insecticides are only necessary when plants are heavily infested.
- You may notice large numbers of 1-inch long sawfly larvae with dark heads feeding on pine trees. Handpick or control young larvae with ultra-fine horticultural oil.
- Spider mites are starting to become active on many shade and spruce trees. Damage is greater during hot, dry weather to follow later this summer. The mites feed on the leaf undersides and can be seen with a magnifying glass. The upper leaf surface will look yellow or scorched. Upon close examination you will see fine, yellow dots, known as stipples.
- Spider mites can be controlled with horticultural oil. Apply to dry foliage when temperatures are below 85°F. Another helpful control for mites is to spray the needles with a strong spray of water from the garden hose.
- You may notice small, white bits of fluff floating down from the sky. These may be wooly apple aphids or wooly alder aphids. They are harmless.
- An insect that is the larval stage of a sawfly known as the rose slug is eating small jagged holes in the leaves of roses. Sometimes its feeding can be quite extensive. If you notice it getting out of control, apply a labeled insecticide such as insecticidal soap. Dogwood anthracnose is a serious fungal disease on the native dogwood (not the Kousa dogwood.) The symptoms are leaf spots with tan or purple borders that enlarge in wet weather and kill entire leaves. The disease can then spread to twigs and branches and result in dieback of large limbs and even entire trees. It's important to remove all the suckers from the trunks. These suckers are the primary way that the disease enters and kills the dogwoods.

JULY

- If you have not yet applied mulch to your landscape now is the time to discourage weeds and

help conserve moisture. Mulches should be applied 1-2 inches deep and kept away from tree and shrub trunks. Mature trees do not really benefit from being mulched except that mulch keeps lawn mowers and string trimmers from damaging the trunks.

- Problem branches (very low or storm damaged), may be removed from trees and as needed. It is not necessary to wait until fall for this type of pruning.
- Aphid infestations on plants are beginning to be managed by the many naturally occurring predators and parasites. No chemical controls are necessary. In some situations a forceful stream of water from the hose is all that is needed to remove most of them.
- Many different kinds of caterpillars are feeding on shade trees. No controls are necessary unless severe defoliation is observed.
- Lacebug feeding is coming to a peak on hawthorn, serviceberry, oak and sycamore as well as rhododendrons, azaleas, andromeda, and mountain laurel. You'll notice small white or yellow spots on the upper sides of leaves and small black fecal spots will appear on the undersides. Isolated shrubs grown in full-sun are more susceptible to lace bug damage. They are more of a problem on stressed plants on exposed sunny sites. If faced with a severe infestation, drench the soil with a systemic insecticide containing imidacloprid. Monitor the feeding damage to catch it early. Insecticides are only necessary on trees three years or younger.
- The hemlock woolly adelgid is an aphid-like sucking pest that can severely damage hemlock trees, particularly when they are stressed. Adelgid nymphs are feeding now and can be sprayed with ultra-fine horticultural oil throughout the summer. Follow label directions carefully. Oil sprays should be applied to dry foliage only when temperatures are below 80 degrees F. Research has shown that excess nitrogen may enhance adelgid populations on hemlock, so it is advisable not to fertilize hemlocks that are infested with the hemlock woolly adelgid. It is also possible to use a systemic insecticide registered for control of hemlock woolly adelgid. Apply as a drench around the base of the tree following label instructions.
- Bagworm caterpillars are now very active. Look for the little bags crawling around on evergreen trees and shrubs and be prepared to spray infested trees with the microbial insecticide, B.t. before late July. After late July the older bagworms are not well controlled with B.t. They are best collected by hand and destroyed or sprayed with insecticides containing spinosad. If you are having trouble finding the proper control product please call our 800 line for advice.
- Japanese beetles feeding on plants will usually drop to the ground when disturbed. Therefore in many cases, the best control technique is to simply knock the beetles into a bucket of soapy water. Single Japanese beetle traps will attract Japanese beetles to your landscape resulting in increased damage. If using Japanese beetle traps always place them very far away from the plants you are trying to protect.
- Fall webworm nests may be noticed on various shrubs and trees. Webworm is easily controlled by pruning out and disposing of the nests in the trash.
- Soft scales may be found feeding on a variety of shade trees. Soft scales are insects related to aphids but they do not move once they are adults. They have a white waxy covering. Control them with a summer-rate application of horticultural oil. Oil sprays should be applied to dry foliage only when temperatures are below 80°F.
- Spruce spider mite usually becomes very active this month feeding on evergreens, especially

dwarf Alberta spruces. Their feeding damage is favored by hot dry weather and can be very devastating. Control them with a strong stream of water or an application of ultra-fine horticultural oil. Be aware that oils will discolor blue spruces; the oil temporarily removes the wax coating, turning the trees green. Oil sprays should be applied to dry foliage only when temperatures are below 80°F.

- The pear leaf blister mite is a tiny pest active on ornamental pear trees. Its feeding damage is very evident at this time. Small raised bumps will appear on leaf undersides followed by dark brown spots. Dormant oil sprays applied in the winter can help control this pest.
- Boxwood mites produce small white spots, known as stippling, on leaves. Often predators will keep them in check but if the mite damage starts to be increasing spray with horticultural oil at the summer rate to kill mite eggs and adults. Another pest of boxwood that also appears in July is the boxwood psyllid which causes new leaves to cup inward. It is usually not a serious problem unless so severe that the new growth and overall health of the plant is damaged.
- Rose slug sawfly larvae are voraciously feeding on rose leaves at this time. These look like small bright green caterpillars that eat small holes in the leaves. They can be handpicked or use a systemic, all-in-one, rose product. Aphids may also be active on roses but predators and parasites will soon control them.
- A variety of abnormal-looking growths (galls) may be observed at this time on the leaves and twigs of oak, maple, hickory and other trees. Galls appear as growths of varying size and shape on leaves and twigs. These are harmless to the tree and should cause no alarm.
- Early summer is when common types of fungal and bacterial leaf spot diseases are active on a wide variety of shade trees. These can be ignored in most cases, and do not require fungicide sprays.
- Volutella stem blight can be observed on boxwoods. This is a very destructive fungal disease that kills the entire stem or branch of boxwood. Look for stem discoloration and salmon colored fruiting bodies on leaves and stems. Prune out damaged wood and open the shrub up for better air circulation with selective pruning.
- Branch dieback and wilting on rhododendron could be caused by Botryosphaeria. This fungal disease occurs on drought, heat or heavy soil stressed plants. The treatment is to remove infected parts and try to identify and correct the stress problem.
- When there is a lot of rain, anthracnose, a common fungal leaf blight, becomes widespread on shade trees such as oak, maple, ash and especially American sycamore. Leaves will appear blighted with large, irregular, brown-colored lesions. The lesions typically follow leaf veins. Trees that were defoliated earlier in the spring will re-leaf this month. The dryer, hotter summer weather will stop symptoms.
- Powdery mildew is a fungal disease that causes dogwood leaves to droop or curl and take on a purple or white color. Powdery mildew has also been very noticeable on crabapple and many other kinds of trees. A powdery white growth can be observed on the upper leaf surfaces and trees will look ragged and unthrifty. No fungicide spray will be effective now. However, next year you can apply a labeled fungicide, like horticultural oil, before bud break. Try to select resistant cultivars when planting new trees.
- Apple scab is a fungal disease that produces olive colored lesions on crabapple trees and will cause some leaf drop. Plant resistant varieties to eliminate this problem. There is no cause for

alarm.

- Slime flux, which is a dark wet, sometimes smelly discharge on trunks, may be observed flowing from maple, poplar, mulberry and elm trees. This is a common, unsightly condition that cannot be controlled.
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AUGUST

- August is frequently dry. If so, water deeply by allowing water to soak the soil directly underneath and around newly planted trees and shrubs. Check the depth of water penetration into the soil by digging a small hole after watering. Hard-crusting mulch will repel water and needs to be broken up with a rake or hoe to help the rain and irrigation water to penetrate the soil.
- Fall webworm is a late summer pest is a 1-2 inch long hairy caterpillar that creates large tent like nests on the ends of branches of various shade trees and shrubs. It is unsightly but causes little damage. They can be left alone or knocked out of the tree with a broom, by a hard water spray, or pruning them out and disposing of them in the trash.
- Numerous caterpillars, including leafrollers, orange striped oak worm, green-striped maple worms, oak skeletonizers and sawflies are feeding on various shade trees. No controls are necessary unless feeding is severe. You may also see some large and unusual caterpillars with various colored spines and knobs that have been feeding in trees and are getting ready to pupate. These are mostly giant silk moths and should be left alone.
- Bagworms are very noticeable and feeding on many trees and shrubs. They are usually not a problem on deciduous plants, but should be controlled on evergreens. It is now too late to spray them with a biological control product. Where possible, remove bagworm bags from evergreen trees and shrubs, especially spruces. Throw them into a bag and place in the trash. Do not just drop them to the ground as they will crawl right back up the plant. For severe infestations that cannot be physically removed, apply a labeled insecticide.
- Lace bug feeding can be observed on azalea, hawthorn, rhododendron, serviceberry, oak and sycamore. You'll notice small white or yellow spots on the upper sides of leaves and small black fecal spots will appear on the undersides. They are more of a problem on stressed plants on exposed sunny sites.
- The hemlock woolly adelgid is still very active on hemlocks in many landscapes. Adelgids are aphid-like sucking pests that appear as white, waxy masses. Heavy infestations can debilitate trees, particularly when they are stressed. Ultra-fine horticultural oil is a safe and effective insecticide to use but should not be applied if temperatures are expected to go above 85 -90 degrees F. Do not use on drought-stressed plants or during periods of very high humidity or the plants will experience leaf drop. Thorough coverage of the foliage is essential to achieving good control. A dormant oil spray in November through early March will also help to kill overwintering adults. It is also possible to use a systemic insecticide registered for control of hemlock woolly adelgid. Apply as a drench around the base of the tree. Follow label instructions.
- You may notice the browning of black locust leaves caused by locust leaf miner feeding. This is a perennial pest that does not debilitate the trees. Locust trees put out new growth throughout the growing season and are not adversely affected by the feeding damage.

SEPTEMBER

- Poison ivy leaves will begin to turn red this month. Don't be fooled by their color change, the leaves are still very irritating. Do not handle or shred the leaves and do not burn the vines. To control poison ivy, spray with a systemic herbicide like glyphosate or triclopyr. The herbicide moves from the foliage down to the roots where it disrupts plant growth. Even when dead, handle the vines with care using gloves as the irritant oils can still cause a rash. Throw the gloves away after handling the vines.
- Each year we see early fall coloration of many shade trees and the inner needle drop of white pines. You may notice older leaves dropping from rhododendrons and other evergreen shrubs. This is normal for this time of year.
- Trees and shrubs should only be pruned at this time if they have dead, damaged or hazardous branches. Wait until after all the leaves have dropped for all other corrective and cosmetic pruning. To determine if a limb is still alive look for live green buds and scrape the bark and look for green tissue. When in doubt, or when the pruning job is too dangerous, consider hiring a certified arborist to evaluate your tree. HG 84

Insect

- You may have noticed the browning of black locust tree leaves caused by locust leaf miner feeding. This is a perennial pest that does not kill trees. The damage you see now was caused earlier in the summer. Locust trees put out new growth throughout the growing season.
- The large tents of the fall webworm may be seen at the ends of tree branches. The caterpillars are done feeding but the large nests on the ends of branches are still visible. It is unsightly but causes little damage. They can be removed with a stick or pruned out. Many other kinds of caterpillars are feeding on shade trees. No controls are necessary unless severe defoliation is observed.
- Different kinds of wooly aphids have been observed on crabapple, beech and maple. They look like white cottony masses stuck to the stems. This insect can be controlled with insecticidal soap if the infestation is severe.
- Scale insects can infect many woody plants. You may notice leaves coated with black sooty mold, a fungus that grows on excess plant sap (honeydew) excreted by the scales. Control them with a dormant oil spray in the fall. Cottony Taxus scale can be found now on yews, camellias, holly, euonymous, hydrangea and beautyberry.
- Cottony camellia scale can be found now on camellias, holly, euonymous, hydrangea and beautyberry. You may also notice the honeydew and black sooty mold that results from the scales feeding. Dormant sprays of horticultural oil, applied in late fall, will control this pest.
- You may also notice yellow jackets congregating around trees that have large quantities of honeydew produced by scale or aphid infestations. European hornets are large yellow and brown insects that you may see stripping bark from trees or shrubs to build nests. They are attracted to lights at night.
- Lots of different leaf and stem galls may be observed on shade trees. They appear in many different colors and shapes and are mostly harmless to affected trees. Galls are produced when small wasps, midges and mites feed on leaf tissue. Chemicals produced by them cause the

swelling and deformation of leaf tissue. They are generally harmless and control is not necessary.

- Bagworm infestations are heavy at this time on evergreens, especially spruces. The caterpillars inside the bags will soon pupate. After pupating into adults the flightless females will lay eggs inside the brown bags hanging from trees. The males can fly and look for females. Remove the bags where possible to prevent the overwintering eggs from hatching in the spring. If they cannot be removed by hand and are numerous, consider applying Bt next year between mid-June to mid-July. It is too late for biological control this year. Only apply a registered insecticide if they are still feeding.
- Spruce spider mites will become active again on evergreen trees as the weather cools down. Monitor for this pest by tapping branches while holding a piece of white paper underneath. Look for moving specks, these will be the tiny mites. They can be controlled with ultra-fine horticultural oil. Spraying oil on Colorado Blue spruce will make them turn green. This color loss is harmless and the new growth next year will be the normal blue.

Disease

- Powdery mildew is the common name for the disease and symptoms caused by a closely related group of fungi. It affects most shade trees such as oak, sycamore and tulip poplar as well as, crepe myrtle, lilac, euonymus and many other popular plants. These fungi grow on the upper and lower leaf surfaces, young stems, and shoot tips of plants. Affected plants turn white or light blue-gray. The optimum conditions for powdery mildew development are warm days followed by cool, humid nights. Dry daytime weather allows spores to spread to other plants on air currents. Next year, powdery mildew can be prevented or reduced next year by spraying a summer rate of horticultural oil on the foliage before or as soon as mildew appears.
- Rose diseases will continue to be a problem through most of the fall. Continue spraying black spot susceptible roses with a labeled fungicide. Powdery mildew is another common disease that is active through fall. It affects leaves but will also attack flower buds which can cause petal distortion next spring.

OCTOBER

- The dryness and heat of the summer had an effect on many trees in our area in landscapes and in the wild. Prolonged heat and drought will cause premature fall leaf drop with many tree species, and their leaves may turn brown with no fall coloration.
- It is generally not necessary to fertilize established trees and shrubs. If you do, wait to fertilize until late October or early November. Early fertilization may produce a flush of late, weak growth that will not harden off properly, predisposing it to winter injury.
- Mulches should be applied only 2-3 inches deep and kept away from tree trunks. Mature trees do not benefit from being mulched. They should only be mulched to keep lawn mowers and string trimmers away from trunks.
- Now is a good time to plant trees. However, dogwood, tulip poplar, pin oak and evergreens should not be dug up and moved (transplanted) in the fall; these species will usually fail to establish a root system in the fall. Be sure to keep all newly planted or transplanted trees and shrubs watered during dry periods this fall. If you plan to plant new trees this fall select slow growing species and avoid fast-growing trees such as Bradford pear, silver maple and

Lombardy poplar, which tend to produce weak branches that break or split in storms. If you buy container grown trees be sure to spread the roots out in the planting hole. With balled and burlap stock cut the twine around the ball and cut away the nylon or burlap wrapping. Do not spread the roots of balled and burlapped trees and shrubs.

- Never carry a tree by its trunk, this can damage the roots. Instead always carry them by their root ball or by the container.
- Tree and shrub branches should be pruned at this time only if they are dead or damaged. Wait until after all the leaves have dropped for all other corrective and cosmetic pruning.
- Flower buds are forming or are already formed on spring flowering shrubs. To prevent reducing next year's bloom, don't prune spring flowering shrubs until after they bloom next spring.
- You may notice older leaves dropping from rhododendrons and other evergreen shrubs. This is normal for this time of year.
- Poison ivy leaves turn red in the fall. Cut poison ivy plants down to the ground or spray with glyphosate or "Brush-B-Gon" herbicide. Another possibility is to cut the vines to the ground and paint the cut surfaces with Round-Up or Brush-B Gon as soon as the cut is made. Follow the label instructions. Remember, do not handle the hairy poison ivy vines wrapped around trees. Always wear protective clothing and gloves, and note that even once the vines are dead, the irritant oil in roots and vines can still produce a rash. . It actually is not necessary to remove the vines from the tree trunk.

Insects

- By now, bagworm larvae have pupated inside the bags. Remove and dispose of bags hanging from trees and shrubs. There is no spray that is effective now. Mid-June through mid-July is the ideal time to control larvae with the organic insecticide *Bacillus thuringiensis*.
- Spruce spider mites are active on evergreen trees in the fall. Monitor for this pest by tapping branches while holding a piece of white paper underneath. Look for moving specks. They can be controlled with ultra-fine horticultural oil. Do not spray on blue spruce. Oil removes the wax that makes blue spruce blue.
- The hemlock woolly adelgid is active on hemlocks. A similar pest is present on larch trees. Adelgids are aphid-like sucking pests that appear as small, white, waxy, cottony-looking masses. Heavy infestations can debilitate trees, particularly when they are stressed. Ultra-fine horticultural oil is a safe and effective insecticide to use but should not be applied when temperatures are below 40° F. Do not apply if humidity is high. Thorough coverage of the foliage is essential to achieving good control. A dormant oil spray in February or March will also help to kill over-wintering adults. A drench of imidacloprid around the base of the tree is very effective. Follow label directions for rates and timing – this will give several years of control.

Disease

- Even though it is fall, black spot on roses continues to be a problem. Continue to apply a labeled fungicide through the fall until all the leaves have dropped. Clean up all fallen leaves.
- Powdery mildew is a common late summer and early fall leaf disease of dogwood, lilac and other landscape plants. Affected leaves turn white and droop. No fungicide sprays will be effective now. However, next year you can apply a labeled fungicide, or use a horticultural oil labeled for powdery mildew control and follow the label for interval of applications. Try to

select resistant cultivars when planting new landscape plants.

- In the cooler sometimes wetter weather of October harmless toadstools and other mushrooms may be plentiful around tree root systems. However, destructive wood rotting organisms produce conks, which resemble fleshy, shelf-like structures, on tree trunks. Affected trees may be suffering from extensive wood decay and should be inspected for trunk soundness by a licensed arborist.

NOVEMBER

- Nursery stock trees and shrubs can be planted until the ground freezes. Carefully examine trees and shrubs prior to purchase to assess quality. Carefully remove container stock plants to examine root systems. Avoid shrubs with dead roots; dead roots are brown instead of white, or those that are tightly circling the stem or trunk. These can girdle the trunk later. If you buy container grown plants be sure to spread the roots out in the planting hole. (Cut down the sides to encourage new root growth.) With balled and burlap stock cut the twine around the ball and cut away the nylon or burlap wrapping.
- It is too late to transplant trees or shrubs. Be sure to keep all plants well watered during dry periods this fall, especially those that are newly planted or transplanted. Avoid planting problem trees such as silver maple, Bradford pear and Norway maple.
- Fall is also a good time to fertilize trees, especially if they have not been fertilized in 3-4 years and seem to be growing slowly. Broadcast 1 to 1.5 lbs. of nitrogen per 1,000 sq. ft. The granular fertilizer should be applied under the tree's canopy and extend 8-10 ft. out from the canopy. Use a low phosphorus fertilizer. It is rarely necessary to fertilize a mature tree. Newly planted and very young trees and shrubs benefit the most from tree fertilization. Trees and shrubs can be fertilized as long as the ground is not frozen. Trees that are surrounded by lawn do not need fertilization. Follow lawn fertilizer recommendations.
- Trees and shrubs can be pruned now. Because the leaves are coming off of deciduous plants you can more easily see the structure of branches and determine what pruning needs to be done. Begin pruning by removing all dead, diseased branches and making any necessary cosmetic cuts. Wait until your shrubs are dormant for all other corrective and cosmetic pruning. Flower buds are forming or are already formed on spring flowering shrubs. Unless it is absolutely necessary avoid pruning spring flowering shrubs until after the bloom period if you do not want to sacrifice next spring's bloom.
- Mulch should be applied only 2-3 inches deep around ornamental plants and kept away from shrub and tree trunks. Excessively deep mulch makes a favorable site for voles to tunnel and feed on shrub stems over winter. You may notice interior older leaves yellowing and dropping from rhododendrons and other evergreen shrubs. This is normal for this time of year.
- Continue to watch out for poison ivy. Do not handle the hairy poison ivy vines wrapped around trees. This is a good time to sever poison ivy vines at ground level and paint the cut end with a full-strength herbicide labeled for brush killing that contains triclopyr. Be careful not to bring firewood into the house with poison ivy vines attached.

Insect pests

- Hemlocks that look like they are coated with spray-on snow flocking are likely infested with an

nsect called the wooley adelgid. This is a relative of the aphid and mealy bug and can be very destructive. They should be sprayed with horticultural oil anytime between now and March provided the temperatures will be above freezing for 24 hours after application. Heavy infestations cause considerable damage or kill trees. They can be treated with a registered systemic insecticide. Adelgids are particularly attracted to trees that are fertilized with too much nitrogen.

- Shade trees and shrubs that have had scale problems can be sprayed with horticultural oil after leaves drop. Again note, the temperature must remain above freezing for 24 hours after spraying oil. Follow label instructions.
 - Continue to remove bagworm bags from trees and shrubs. It's important to dispose of them in the trash, do not leave them on the ground. If you simply throw the bags on the ground, the eggs inside them will still hatch next year.
 - The egg masses of the Eastern tent caterpillar should also be pruned out. They resemble shiny, black styrofoam and can be seen on the ends of wild cherry and crabapple trees.
 - Spruce spider mites are active again on evergreen trees. Monitor for this pest by tapping branches while holding a piece of white paper underneath. Look for moving specks. They can be controlled with ultra-fine horticultural oil. Follow label instructions.
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DECEMBER

- Trees and shrubs can be pruned now. Remove dead or diseased branches and make any necessary cosmetic cuts. Remove broken branches and make pruning cuts back to healthy wood. Extensive pruning of spring flowering plants such as azaleas, rhododendrons, and dogwoods will reduce the amount of blooms in the spring. If you do not desire to reduce flowering, wait until after they bloom next spring to prune them.
- Evergreens such as hollies, boxwoods, and pines can also be moderately pruned this month. The trimmings can be used for Holiday decorating.
- In a "normal" year in our region we do not get much ice or snow in December but if we do, try to prevent it from building up on gutters and eaves above shrubs. Heavy snow and ice loads can break branches. Using an upward motion, gently sweep snow loads off of shrubs to prevent breakage. Sweep snow and ice off shrubs with an upward motion.
- It is still a good time to mulch your landscape if you haven't done so already. Mulch should be applied only 2-3 inches deep around ornamental plants and kept away from shrub and tree trunks. Voles are active all year. Round and deep mulch makes a favorable habitat for voles. If the mulch is next to woody plant trunks, the voles will feed on and damage bark and wood.
- Trees and shrubs can be fertilized as long as the ground is not frozen. It is rarely necessary to fertilize a mature tree. Newly planted and very young trees benefit the most from tree fertilization. Woody plant roots continue to grow in early winter and can benefit from the added nutrients. Its important to protect our watershed by not over using fertilizers. If your landscape plants are growing well and are already at the size wanted, there is no need to fertilize them every year.
- Although it is the beginning of winter, newly planted trees and shrubs need water on a regular basis if it is dry. This is especially important for broadleaf evergreen plants such as

rhododendrons and azaleas that become “winter-burned” from a combination of frozen soil and a lack of available moisture in the root zone.

- Nursery stock trees and shrubs can be safely planted until the ground freezes. Always carefully examine trees prior to purchase to assess quality. Remove container stock plants to examine root systems. Avoid trees with dead roots or those that are circling the trunk.
- It is too late to transplant trees or shrubs from one location to another in the landscape. Most will not get established enough to survive the weather.