UMass Extension Landscape Message #10 - 2011

May 6, 2011

Scouting Information by Region

Regional Notes

Cape Cod Region (Barnstable) – General Conditions: The green wave continues to spread across the Cape as deciduous trees and shrubs leaf out. The weather has been pleasant, with daytime highs in the upper 50s F or low 60s F and night time lows in the upper 40s F. Early perennials such as Bleeding Heart and Lungwort are in bloom along with tulips. Daffodils are almost gone by. **Pests/Problems:** Some foliar feeding from winter moth caterpillars is becoming visible. Nests of eastern tent caterpillar continue to expand and are readily visible at this time. Adult deer ticks continue to be active. Galls of cedar-apple rust are beginning to swell on Eastern red cedar. Black knot should be pruned out of flowering cherries and plums. Many weeds are blooming, including dandelion, creeping veronica and chickweed. Carpenter bees are active and paper wasps are building nests.

Southeast Region (Hanson) – **General Conditions:** Hanson received 0.45 inches of rain this past week and rain is in the forecast. Soils are starting to dry out and more rain would beneficial. Remind clients to water newly planted trees, shrubs and perennials.A few warm days have brought plant development along quite nicely. Lilac and dogwood are coming into bloom and along with the some cool weather, there is a nice overlap of spring flowering plants. Lawns are growing and mowing has begun. Crabapples, Magnolia 'Elizabeth', *Cercis canadensis* (Eastern Redbud), Sugar maple, Flowering Quince, *Pieris* 'Brouwer's Beauty', *Pieris floribunda* (Mountain Pieris), *Pieris japonica*, *Spiraea thunbergii* 'Ogon' , *Epimedium* sp., *Trillium sp., Glaucidium palmatum*, *Brunnera macrophylla*, *Phlox subulata*, *Helleborus niger, H. x hybridus, H. foetidus, Corydalis lutea, Corydalis scouleri*, *Omphalodes verna*, *Scilla sibirica, Primula* sp., Anemones, *Pulmonaria*, *Ajuga*, dwarf bearded Iris, *Sweet woodruff, Polygonatum* sp. (Solomon's Seal), *Saruma henryi, Lunaria, Dicenta eximia*, *Tiarella,* Tulips, Violets, and *Vinca minor* are in full bloom. Norway maple, *Magnolia stellata* (Star Magnolia), *Magnolia* x *loebneri* 'Leonard Messel' (Leonard Messel Magnolia), *Forsythia,* daffodils, and *Corydalis solida* are ending bloom. **Pests/Problems:** Oak tree buds have finally opened and winter moth caterpillars have been found in developing oak leaves. Winter moth caterpillars are in second , third and fourth instar ,depending on location, plant species and plant development, and can be found feeding on a variety of trees and shrubs including maples (Norway, sugar, red and Japanese), beech, oaks, birch, crabapples, apples, blueberries, and other hosts. The caterpillars often web the developing leaves together, making it difficult to see them. It is often mistakenly thought that the buds are not opening due to cool weather, when in fact it is the caterpillars' webbing that is preventing the leaves from opening. Once opened, the leaves are often in tatters. Hemlock woolly adelgid, wasps and hornets, carpenter bees, mason bees, lily leaf beetle adults, black flies, mosquitoes, deer and dog ticks are all active. Household insect "invaders" or nuisance pests like the Western confer seed bug and lady bugs are active. Beneficial insects, like hoverflies, are active. Dog and deer ticks are active, so continue to check for ticks frequently, especially after yard cleanups or walking through tall grass. Vole damage is apparent especially in the perennial border where the question may be asked, "where did my hosta go to?" If hosta clumps look sparse, ragged or diminished, suspect voles.Now is a good time to rip out, prune or shear Massachusetts invasive plants like barberry, autumn olive and burning bush to remove the plants or to reduce potential seed production. Skunks continue dig up lawns and deer continue to browse Hosta, etc. White grubs are feeding in the root zone and birds (grackles, etc.) are frequent visitors. Violets, chickweed, bittercress, and dandelions are in full bloom. It is a good year for violets, bittercress and dandelions. Japanese knotweed has grown about 4 feet since last week! The shiny rust-colored leaves of the new growth on poison ivy are now visible in the landscape.

East Region (Boston) – General Conditions: We received 64.5 GDDs this week bringing the total up to 122, more than doubling our total so far this year. Wow! A lot has happened in the last week. We went from almost no leaves on the trees to the majority of trees breaking bud and beginning to leaf out. We went from mostly cherries (*Prunus*), forsythia (*Forsythia*) and magnolias (*Magnolia*) in flower to an array of shrubs and trees, many in full bloom with much more variety of colour in the landscape. Now flowering: *Amelanchier nantucketensis* (Nantucket shadbush), *Asarum* [*A. canadense* (wild ginger) and *A. europaeum* (European wild ginger)], *Caragana franchetiana* (Franchet peashrub), *Cephalotaxus harringtonia* (Japanese plum yew),

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Woody Ornamentals

Landscape Turf

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Cercis canadensis (Eastern redbud), *Chamaedaphne calyculata* (leatherleaf), *Daphne cneorum* 'Ruby Glow' (Rose Daphne), *Elaeagnus* sp. (Russian olive), *Fothergilla major* (large fothergilla), *Ilex rugosa* (prostrate holly), *Kerria japonica* (Japanese kerria), *Leucothoe recurva* (fetterbush), *Poncirus trifoliata* (trifoliate orange), *Rhododendron canadense* (Rhodora), *Sarcococca humilis* (sarcococca), *Spiraea prunifolia* f. *simpliciflora* (bridalwreath spirea), and *Viburnum* [*V. carlesii* (mayflower viburnum) and *V. furcatum* (forked viburnum)] and the *Akebia quinata* (fiveleaf akebia) vine. Just coming into flower: *Exochorda* 'The Bride' (pearlbush), *Rhododendron* [*R. kaempferi* (torch azalea) and *R. vaseyi* (pinkshell azalea)], *Vaccinium* [*V. angustifolium* (lowbush blueberry) and *V. corymbosum* (highbush blueberry)] and *Weigela subsessilis* (weigela). The early lilacs are almost at full bloom, while we wait for warmer temperature to bring the others into bloom. **Pests/Problems:** Hydrangea leaf tier (*Olethreutes ferriferana*) has not wasted any time, just as the hydrangea leaves (*Hydrangea arborescens* – smooth hydrangea) have emerged; the caterpillars have already tied the leaves and are feeding are the terminal buds. Most winter annuals and many Brassicaceae/mustards (too many to name) are in full bloom, along with *Alliaria petiolata* (garlic mustard), *Glechoma hederacea* (ground ivy), *Lamium amplexicaule* (henbit deadnettle), *L. purpureum* (purple deadnettle) and *Ranunculus ficaria* (lesser celandine). *Chelidonium majus* (greater celandine), *Rumex* sp. (dock and sorrel) and *Urtica dioca* (stinging nettle) continue to grow. *Cynanchum* sp. (swallowwort) is just poking up above the ground as *Fallopia* sp. (knotweed) is becoming visible in the landscape. Winter moth is active. Tents of the Eastern tent caterpillars (*Malacosoma americanum*) are becoming noticeable. A newly born bunny litter has been found, but a fox has also been spotted on the grounds.

Metro West (Acton) – General Conditions: Despite waking to a frost on Monday morning, May 2nd, there is a lot of color out in the landscape right now. Fortunately it was a light one! Trees in bloom include *Amelanchier* spp. (Shadbush, Serviceberry), *Cercis canadensis* (Redbud), *Magnolia* 'Ivory Chalice', *M.* x *loebneri* 'Leonard Messel'and *M.* 'Yellow Lantern', *Malus* spp. (Apple, Crabapple), *Prunus serotina* (Black Cherry) and *Pyrus* spp. (Pear). Shrubs in bloom include *Chaenomeles speciosa* (Common Flowering Quince), *Fothergilla gardenii* (Dwarf Fothergilla), *F.major* (Large Fothergilla), *Rhododendron* 'Black Satin', *R.* 'Pink Diamond', *R. schlippenbachii* (Royal Azalea), *Spiraea thunbergii (Thunberg Spirea), Vaccinium angustifolium* (Lowbush Blueberry)and *Viburnum* x *burkwoodii* (Burkwood Viburnum). Perennials and spring ephemerals in bloom include: *Arisaema triphyllum* (Jack-in-the-Pulpit), *Asarum canadense* (Canada Wild Ginger), *Aurinia saxatilis* (Basket of Gold), *Bergenia cordifolia* (Pig Squeak), *Caltha palustris* (Marsh Marigold), *Chionodoxa luciliae* (Glory of the Snow), *Claytonia virginica* (Virginia Spring Beauty), *Crocus* spp. (Crocus), *Dicentra canadensis (Squirrel Corn), D. cucullaria* (Dutchman's Breeches), *D. spectabilis* (Old Fashioned Bleeding Heart), *Epimedium* x *versicolor* 'Sulphureum' (Barrenwort), *Helleborous niger* (Christmas Rose), *Hyacinthus* sp. (Hyacinth), *Linaria annua* (Money Plant), *Mertensia virginica* (Virginia Bluebells), *Muscari* sp. (Grape Hyacinth), *Myosotis sylvatica* (Forget-me-not), *Narcissus* spp. (Daffodil), *Phlox subulata* (Moss Phlox), *Primula* spp. (Primrose), *Scilla siberica* (Siberian Squill), *Stylophorum diphyllum* (Wood Poppy), *Tiarella cordifolia* (Foam Flower), *Trillium erectum* (Red Flowering Trillium), *T. grandiflorum* (White Trillium), *T. luteum* (Yellow Wakerobin), *Tulipa* sp. (Tulips), *Uvularia sessilifolia* (Bellflower), *Vinca minor* (Periwinkle), *Viola* spp. (Violets) and *Waldsteinia ternata* (Barren Strawberry). A single vine was seen in bloom this week and that was *Aristolochia durior* (Dutchman's Pipe). The grass is greening up, and the mowing crews are out making that first cut on lawns. **Pests/Problems:** Caterpillars are actively feeding on the foliage of *Prunus* (Cherry) and *Malus* (Apple, Crabapple). Ticks, mosquitos and black flies are all feeding and active. Many weeds are in flower including one of the nastiest of all, *Alliaria petiolata* (Garlic Mustard), *Glechoma hederacea* (Ground Ivy), *Lamium purpureum* (Purple Dead Nettle), *Ranunculus ficaria* (Fig Buttercup), *Senecio vulgaris* (Common Groundsel), *Stellaria media* (Common Chickweed) and *Taraxacum sp.* (Dandelion). Emerging everywhere, in abandoned lots, along the road side and along streams and wet areas is another nasty weed, *Polygonum cuspidatum (*Japanese Knotweed). *Toxicodendron radicans* (Poison Ivy) is beginning to leaf out so it is fairly easy to detect its shiny red leaves of three.

Central Region (Boylston) – General Conditions: Warmer temperatures, both night and day, have brought more plants into bloom. Plants now in full bloom are Spicebush (*Lindera benzoin*), Bottlebrush (*Fothergilla gardenii*), *Spiraea thunbergii* 'Ogon', Yellowroot (*Xanthorhiza simplicissima*), *Helleborus*, Bleeding Hearts (*Dicentra spectabilis*), Dutchman's Breeches (*D. cuccularia*), Spring Beauty (*Claytonia virginica*), Lungworts (*Pulmonaria rubra* and *P. angustifolia*), *Mukdenia rossii*, Virginia Bluebells (*Mertensia virginica*), *Trillium erectum* and *T. grandiflorum*, Marsh Marigold (*Caltha palustris*) Periwinkle (*Vinca minor*), Barrenworts (*Epimedium* sp.), Pigsqueak (*Bergenia* sp.), Moss Phlox (*Phlox subulata*), Barren Strawberry (*Waldstenia ternata*), Hybrid Tulips (*Tulipa* cvs.), Daffodils (*Narcissus* cvs.), Grape Hyacinth (*Muscari armeniacum*), and Hyacinth (*Hyacinthus orientalis*) among others. **Pests/Problems:** Black flies and ticks.

Pioneer Valley Region (Amherst) - General Conditions: The temperatures have been milder with rainfall tapering off. Lawns continue to be green and lush. Crocuses have faded but the hyacinths, daffodils, and tulips are more than making up for them. Actually, there are an abundance of flowering trees and shrubs blooming profusely around the campus now, too. **Pests/Problems**: If cool rainy weather accompanies the developing leaf and shoot growth, this provides optimal conditions for leaf spot and shoot blight fungal and bacterial infections to begin. Consider applications of fungicides and/or bactericides to minimize the impact of these diseases on susceptible high value plants.

Berkshire Region (Great Barrington) - General Conditions: Moist soils combined with mild temperatures to promote rapid development of turfgrass and ornamental species. Sugar and Norway maples are in full bloom as are *Vinca minor*, hybrid hellebores, and *Pulmonari.* **Pests/Problems:** Carpenter bees, wasps and hornets, deer and dog ticks, Deer and rabbit browsing continues to be a problem in managed landscapes. Damage caused by voles this past winter continues to be discovered as home owners get out to do their spring clean-up. Older varieties of forsythia can be detected by the sparse bloom in upper portions of plants while lower branches – those protected by deep snow – have profuse blossoms. Newer, hardier cultivars do not show such differences in bloom. Among the many weeds in bloom now is

garlic mustard, a particularly prolific seeder. It is important to rid the landscape of this biennial weed before it sets seeds.

Environmental Data

The following growing-degree-day (GDD) and precipitation data was collected for an approximately one-week period, April 28 through May 4, 2011. Soil temperature and phenological indicators were observed on or about May 4, 2011. Total accumulated GDDs represent the heating units above a 50° F baseline temperature collected via our instruments for the 2011 calendar year. This information is intended for use as a guide for monitoring the developmental stages of pests in your location and planning management strategies accordingly.

Region/Location	**2011 GROWING DEGREE DAYS**		**Soil Temp** *(°F at 4" depth)*	**Precipitation** *(1-Week Gain)*
	1-Week Gain	*Total accumulation for 2011*		
Cape Cod	57	118	60°	0.50"
Southeast	61	133	60°	0.45"
East	64.5	122	52°	0.04"
Metro West	69	119.5	59°	0.05"
Central	65	107	54°	0.07"
Pioneer Valley	63	126	54°	0.23"
Berkshires	76	138	57°	0.36"
AVERAGE	65	123	56°	0.24"
n/a = information not available				

Phenology

Phenological indicators are a visual tool for correlating plant development with pest development. The following are indicator plants and the stages of bloom observed for this reporting period:

Indicator Plants - Stages of Flowering (begin, b/full, full, f/end, end)							
PLANT NAME (Botanic/Common)	**CAPE**	**SOUTH EAST**	**EAST**	**METRO W.**	**CENT.**	**P.V.**	**BERK.**
Aesculus hippocastanum (Common Horsechestnut)	*	*	*	*	*	*	*
Syringa vulgaris (Common Lilac)	*	b/full	*	*	begin	begin	*
Rhododendron spp. (Early Azaleas)	*	full	begin	begin	full	begin	begin
Cornus florida (Flowering Dogwood) – bracts	begin	b/full	begin	*	*	b/full	*
Malus spp. (Crabapple)	begin	b/full	b/full	begin	begin	b/full	brgin
Cercis canadensis (Redbud)	begin	full	b/full	begin	begin	b/full	*
Viburnum spp. (Early Fragrant Viburnums)	begin	full	b/full	begin	*	b/full	*
Amelanchier spp. (Shadbush, Serviceberry)	begin	full	full	full	full	full	full
Pyrus calleryana (Callery Pear)	b/full	full	full	full	full	full	full
Chaenomeles speciosa (Common Floweringquince)	full	full	full	full	begin	full	full
Magnolia soulangiana (Saucer Magnolia)	f/end	f/end	f/end	f/end	full	f/end	full
Prunus serrulata (Japanese Flowering Cherry)	f/end	f/end	end	end	full	full	full
Rhododendron 'P. J. M.'	f/end	full	end	f/end	full	full	full
Forsythia x *intermedia* (Border Forsythia)	f/end	f/end	end	f/end	full	full	full
Rhododendron mucronulatum (Korean Rhododendron)	f/end	end	end	f/end	full	f/end	full
***** = *no activity to report/information not available*							

- CAPE COD REGION - Roberta Clark, UMass Extension Horticulturist for Barnstable County, Barnstable.

- SOUTHEAST REGION - Deborah Swanson, UMass Extension Horticulturist for Plymouth County - Retired, Hanson.
- EAST REGION - Kit Ganshaw & Sue Pfeiffer, Horticulturists, reporting from the Arnold Arboretum, Jamaica Plain.
- METRO WEST REGION – Julie Coop, Horticulturist, reporting from Acton.
- CENTRAL REGION - Joann Vieira, Superintendent of Horticulture, Tower Hill Botanic Garden, Boylston.
- PIONEER VALLEY REGION - Dan Gillman, Plant Pathologist, UMass Extension Plant Diagnostic Lab, UMass, Amherst.
- BERKSHIRE REGION - Ron Kujawski, Horticultural Consultant, reporting from Great Barrington.

Woody Ornamentals

Insects

Temperatures have remained mostly on the cooler side, especially at night, while many days have been overcast during this last week. Leaf emergence continues but slowly.

Hemlock Woolly Adelgid (HWA) - Infested trees with live HWA can be treated with a summer rate horticultural oil spray once weather conditions are conducive for such sprays. Also, systemic imidacloprid can also be effective but uptake by the plant and translocation to the growing points where HWA feeds can take anywhere from weeks to months given the size of the tree and delivery method (soil-applied vs. trunk injection). Wait until mid-late May for any systemic imidacloprid applications.

Elongate Hemlock Scale (aka: Fiorinia Scale) has become more prevalent in MA in recent years and is commonly found attacking hemlocks that are also under assault by hemlock woolly adelgid. This very small, elongate and light brown scale is found on the undersides of needles and can be difficult to see even when occurring in large numbers. Inspect for both pests on Eastern (Canada) hemlock. Systemic imidacloprid is not very effective for this scale nor are oil sprays. This scale is atypical given that it produces crawlers (first instar stage that is the easiest to manage for most scale species) throughout the growing season where other species have 1-2 crawler stages per year. Dinotefuran (Safari™), another neonictinoid like imidacloprid, has systemic uses and does have this scale specifically listed on the label. Safari™ in MA is a restricted-use insecticide given its high water solubility.

Winter Moth (WM) caterpillars remain feeding on host plant foliage. Oaks began bud-break in much of the state over this past week and WM larvae have been found associated with those buds and foliage in eastern MA. Some areas of Rhode Island have reported as many as 12 caterpillars per bud in some plants within the past 2 weeks. Overall, winter moth is expected to occur in scattered areas at outbreak numbers this year in eastern MA. Once buds have expanded sufficiently a spray with *Bacillus thuringiensis* (Kurstaki) **or** one that contains Spinosad as the active ingredient should provide the desired levels of control. Pyrethroids also work well at this time but tend to be much harsher on beneficial insects and non-target organisms.

Gypsy Moth counts appear to be low once again in MA. Hatch occurs between 90-100 GDD, which is historically May 7th in Amherst, MA. The (now) naturally occurring entomopathogenic fungus *Entomophaga maimaiga* is the controlling factor for this once very serious exotic invader in MA. *Amelanchier* (e.g. shadbush, serviceberry, etc.) has begun to bloom in the warmer regions of the state and this is a phenological indicator for gypsy moth egg hatch. (egg hatch = 90-100 GDD). B.t.k **or** Spinosad products work very well for this caterpillar at this time.

Fall Cankerworm does not appear to have any strong footholds in MA at this time but it is not uncommon for small and isolated pockets of this native caterpillar to exist. Its favored host plant range is extensive but oaks and maples are common hosts. It can appear mixed in with winter moth populations and be easily confused with that pest but it has 2 ½ pairs of abdominal legs (prolegs) where winter moth has only 2 pairs. It also hatches a couple of weeks later than winter moth.

Eastern Tent Caterpillar has hatched and is starting to form silken webs in the crotches of branches of *Malus* and *Prunus* species. When occurring in large numbers, they are capable of defoliating their host plant. No large populations of this native caterpillar are expecting in MA this year. Small infestations can be physically removed from the tree on cool nights when all of the young caterpillars are huddled in the still small silken webs. *Bacillus thuringiensis* (Kurstaki) can be quite effective for the younger caterpillars. Spinosad products work very well for caterpillars of all ages.

European Pine Sawfly (caterpillar) is now appearing on such host plants as mugo pine, among others. This dark caterpillar with black marking feed in clusters on the host plant. Small infestations can be pruned away and destroyed. Look now for the yellow blocky spots lined up along needles, which indicates the presence of eggs within the needles. In small infestations, infested needles can be pruned out and destroyed prior to the eggs hatching. When caterpillars are small, insecticidal soap sprays are quite effective. Spinosad products work very well on sawfly larvae of all ages.

Balsam Twig Aphid is active. Inspect the newest needles of firs, especially Balsam and Fraser, for the tiny green aphids, which are known as ‘stem mothers’. These will be feeding for the next 1-2 weeks and then they will produce offspring that feed on the newly emerging foliage for this season. It is this large population of aphids that causes the newly emerging foliage to become twisted with needles stuck together with the very sticky honeydew produced by this aphid. The damage is purely aesthetic but can make specimen trees unattractive while rendering host trees in Christmas tree plantations un-saleable. If this pest is found in significant numbers now, treat with a horticultural oil spray at the summer rate. Certain pyrethroids are also labeled for this aphid pest.

Hemlock Eriophyid Mite feeds openly on the upper surfaces of the host plant. Signs of infestation is usually chlorosis of the needles. Inspect closely for the barely visible peg-shaped and pale yellow mites on

the needle surfaces. If necessary, treat with a horticultural oil spray at the summer-use rate.

Boxwood Psyllid is active and its piercing-sucking feeding is causing new foliage to become cupped. By the time cupping is noticed, it is too late to treat. Foliage will not become yellowed or die but severe cupping of leaves can lead to severe aesthetic value loss. Systemic imidacloprid might be helpful to reduce the numbers of this pest for next year.

Snowball Aphid has been active on numerous viburnums, such as: Korean Spicebush, Mapleleaf, Cranberry bush, etc. Like the Boxwood psyllid, the only damage caused is curling of the foliage, which can be unacceptable when occurring in large numbers. Treatments are the same as with Boxwood psyllid.

Lily Leaf Beetle adults are active. Asiatic lily foliage is now appearing and these bright red adult beetles are beginning to cause notching of the foliage. Mating will not occur until sometime in May and then small rows of eggs will begin to appear on the foliage undersides. Inspect soon for the beetles. If treatments are necessary a chemical pesticide, such as a pyrethroid, organo-phosphate, or carbamate, is usually required to obtain desired levels of control. The larvae, which won't appear for a while, are easily treated with a product that contains Spinosad (e.g. Conserve SC™).

Viburnum Leaf Beetle - Inspect newly emerging foliage for what may appear as spotting. Inspect more closely to see the tiny pale-yellow larvae skeletonizing the leaves. Treat with a product that contains Spinosad. This pest has the potential to consume all of the foliage of the host plant within 4-5 weeks of larval feeding. This pest is commonly moved on nursery plants from other states that have had this pest for a number of years; inspect, carefully, any new plants arriving for installation.

Birch Leafminer are active (around the time that the leaves on the host trees are partially emerged from the buds; "when the leaves are about the size of a dime"). The adult female sawfly wasps are small and dark and can be observed visually on host plant foliage. Eggs are laid within the newly emerging leaves. The use of yellow-sticky cards (1 per tree) works extremely well for monitoring for this sometimes very serious pest. Once the adult sawflies have emerged, the tree can then be treated with a chemical insecticide, such as a pyrethroid, to prevent egg-laying within the foliage.

Emerald Ash Borer - Although not yet found in MA, was found in a roughly 30 mile by 15 mile area in New York State just 25 miles from the western borders of MA and CT last July (2010). Both states are actively preparing now to monitor for this unwanted exotic invader. Traps will be set out throughout Berkshire County (MA) soon to monitor for the adult beetles, which begin to appear in June.

House-invading insects - Those insects that seek shelter in homes, such as: ladybugs, boxelder bugs, western conifer seedbug have been awakening from their winter dormancy and seeking access to the outdoors. Too often, they make a wrong turn and end up in living spaces in homes. It is not uncommon at this time to find these insects (indoors) around windows and doors. None of these create damage inside the home but are unwanted pests. Vacuuming or sweeping them out should be effective. A new pest that falls into this category is the **brown marmorated stink bug** and it has been officially found in MA 5 times within the past 4 years. This exotic pest caused millions of dollars in damage in some of the mid-Atlantic states this past fall in such crops as apples, peaches, corn and others. It is expected that this pest will become established in MA at some point. Please report any findings to MDAR or UMass Extension (Robert Childs: rchilds@psis.umass.edu). A source for information and quality photographs for this pest is:

http://ento.psu.edu/extension/factsheets/brown-marmorated-stink-bug

** No new reports of Brown Marmorated Stink Bug were received this week for MA.*

Reported by Robert Childs, Extension Entomologist, Plant, Soil and Insect Sciences Department, UMass, Amherst.

Diseases

Flowering dogwoods susceptible to **dogwood anthracnose** are vulnerable to infection during rainy springs when immature leaves and twigs are developing. Apply fungicide to protect new growth on high value trees, as the buds break open, again when bracts have fallen, and ~4 weeks later. If this is a persistent problem, consider planting one of the many resistant cultivars of flowering dogwood and Kousa dogwood now available.

Apply fungicides to protect emerging leaves on susceptible apple and crabapple from **apple scab** as the buds turn pink, again around petal fall, and if wet conditions linger, repeat them 1-2 additional times at 7-10 day intervals. In addition, prune trees to increase air circulation and sunlight penetration, which speeds drying of foliage as well as improves spray coverage. There are numerous resistant varieties of apple, crabapple, and mountain ash to grow and simplify apple scab disease management.

When plant surfaces are dry, remove and dispose of infected foliage to reduce **juniper blight** inoculum. Make the cut an inch or so below the boundary between dead and healthy tissue. Begin fungicide control ofjuniper blight caused by *Phomopsis juniperovora* as new growth emerges, and repeat applications if wetness persists. If the problem persists, consider gradually replacing problem junipers with disease-resistant shrubs better adapted to the growing site.

Maximize the effectiveness fungicide treatments in the management of **black spot on rose** by initiating them now as buds swell and repeat applications per label directions into the fall. Minimize duration of foliar wetness to further suppress black spot infections, by irrigating early in the day so foliage dries rapidly as day warms as well as growing plants in areas with good air circulation and sunlight. If the problem persists, gradually replace susceptible varieties of roses with those resistant to black spot to reduce infections and buildup of inoculum, as well as the need for fungicide treatments.

Gymnosporangium rust infections seldom cause severe damage to host plants, but their brilliant colors bring attention to them when the rust fungus fruiting structures form on the foliage, fruit, and shoots. If desired, begin fungicide sprays at this time to protect leaves, green shoots, and fruit of apple and crabapple as well as serviceberry, hawthorn, mountain ash, quince, flowering quince, and pear from infections. The fruiting structures are now beginning to appear on the alternate hosts of eastern red cedar (really a juniper) and Rocky mountain juniper, as well as the occasional Chinese, common, creeping, and savin juniper. Specifically, **cedar-apple rust** galls are visible on eastern red cedar as eruptions of orange, gelatinous masses protruding from pea- to golf ball-sized galls. These fruiting structures release spores that infect apple and crab apple leaves at this time of the year during cool, rainy periods. Likewise, fruiting structures of **quince rust** are visible as red-orange "cracks" in the bark and small gelatinous masses on the foliage of infected branches on several of these junipers.

Plant Problem Diagnostic Lab Woody Plant Report: The following are some of the interesting woody plant disease/abiotic disorder samples received at the UMass Extension Plant Diagnostic Lab in Amherst during the period from April 18 through April 22, 2011:

- **American elder** - scattered dead/dying branches and suckering from branch crotches affecting a significant amount a mature shrub; the fungus *Nectria cinnabarina* was a secondary colonizer of wet bark lesions likely caused by winter injuries, insect feeding damage, or similar bruises
- **Japanese umbrella-pine** - late winter/early spring an ~12 year old tree initially developed yellowing needles and then ~10% of twigs/branches turned brown; no needle disease, but *Phomopsis* grew out of browned twig and branch tissues
- **Boxwood** - shrubs in established hedge exhibit pale green-yellowed foliage with leaf stippling and some brown spotting; no leaf spot disease detected/damage caused by combination of winter sun/wind and boxwood mite feeding

Reported by Dan Gillman, Plant Pathologist, UMass Extension Plant Diagnostic Lab, Amherst.

Weeds

Winter annual weeds continue to grow and flower in landscape beds and hardscapes. Winter annual weeds can be treated now with a non-selective herbicide before they produce seeds. Non-selective herbicide options include glyphosate (Roundup Pro™ or equivalent) and glufosinate (Finale™). For those of you who might want to go the organic/non-chemical route, options include those products that contain one or more of the following ingredients: acetic acid, citric acid, clove oil or d-limonene. Remember these organic/non-chemical products do not translocate and will not control established perennial weeds but will control young winter annual weeds. All applications should be spot/directed spray applications. It is still a little early for preemergence herbicide applications in ornamental beds. Mulching of landscape beds can continue as long as winter annual weeds are not becoming too large. Freshly mulched landscape beds will not require a preemergence herbicide application because the fresh mulch should supply adequate weed control in the short term. Preemergence herbicide applications should be considered on mulch areas that have not been freshly mulched. Remember preemergence herbicides should be applied on top of landscape mulches not underneath them. Quackgrass, a perennial grass that spreads by rhizomes, has emerged in my landscape beds. See information in above section on winter annual weeds for control material options. The use of those materials listed as organic/non-chemical options are not appropriate for the control of quackgrass and other perennial weeds with vegetative reproductive means. Treat garlic mustard (*Alliaria petiolata*) now. Applications at this time of year will control second year plants before they go to seed as well as first year seedlings.

Reported by Randall Prostak, Weed Specialist, UMass Extension Landscape, Nursery and Urban Forestry Program, Amherst.

Landscape Turf

Weeds

Preemergence herbicide applications for crabgrass and annual grassy weed control should be completed by now. Any remaining preemergence applications should be with dithiopyr products and preferably those that are a sprayable formulation. Dithiopyr has very early postemergence activity on crabgrass and can provide good crabgrass control in situations where one might be a little late with a preemergence applications. Start to monitor for germination of crabgrass, examine thin turf areas and turf edges near hardscapes. Treating winter annual broadleaf weeds now should only be considered if you think that their removal will significantly increase the establishment of fall-seeded turf areas, otherwise let them die on their own.

Reported by Randall Prostak, Weed Specialist, UMass Extension Landscape, Nursery and Urban Forestry Program, Amherst.