Friends of the Arboretum,

For tree enthusiasts, nothing is sadder than to witness a stand of dying hemlocks. The Hemlock trees (Tsuga species) regionally, are blighted with Hemlock Woolly Adelgids, or HWA. If cottony masses are noticed on the undersides of hemlock branches, it means the adelgids are sucking sap and injecting toxic saliva, infecting needles resulting in decline and possible tree death. Once-grand stands of Hemlocks in older Appalachian forests now stand lifeless.

It is surmised the HWA arrived with Japanese Hemlocks planted in Richmond in the early 1900s, and HWA populations reached detection levels in the 1950s and decimation impact over the last 10-12 years.

Possible good news is that a predator beetle, Woolly Adelgid Lady Beetles (Sasajicyumnus tsugae), has been discovered to counter the HWA infestation and millions have been released from Massachusetts to Georgia with reported positive results. Dr. Scott Salom, Entomologist with Virginia Tech, has been conducting studies on HWA control and will help the Arboretum with our HWA infestation with a fall release of one of two other predator beetles, Laricobius negrinus (from British Columbia), and L. osakensis (from Japan). They are both tooth-necked fungus beetles (Derodontids). Striking a balance between predators and pest species is key.

As we bid summer, good-bye we give kudos to our summer part-time-staff, Patrick, Garrett, John, Jesse, Jen, Anna & John, who maintained our grounds including the new fountain area and the re-created Monarch Waystation garden. Many areas in need of attention have had competitive invasive plants cleared and desirable plants pruned. Several of our diligent summer staff who are still with us after the semester start, are making improvements by composting and adding topsoil as needed for fall planting. A huge thank you to all including to full-time staff Mike & Lisa for supervising!
What’s Moving and Shaking

Birds migrate too! Fall migration bird watching is enhanced by checking out the arboretum birding blog to see profiles and pictures of the Birds of the Arboretum: http://www.jmu.edu/arboretum/apps/birds/

Seeds migrate via many ways, including with the help of children who participate with seed harvesting at Children’s Harvest Festival, October 19th, to support riparian plantings with the Potomac Conservancy and Virginia Forestry Department.

Take a run or enjoy leisurely walks! Reserve a carriage ride to enjoy fall tree color leaf-peeping!

The Photography Contest continues online at the arboretum website and blog monthly!

Occasionally something else migrates that is not appreciated! Ew! Dog Poo!

Visitors have pooh-poohed about doggie poo on arboretum trails. Canine enthusiasts visiting the arboretum can help arboretum managers maintain clean water quality for aquatic life in the streams and ponds. Thoughtful pooh owners help other walkers and joggers enjoy the arboretum trails without misstep incidents. Since the arboretum is supported with revenue from paid events, pooh owners who keep pooches on trails, leashed and who pick up after their pooh help the arboretum host successful public and private events on the lawns. Please read the arboretum pooh policy on the arboretum website using this link: (Pardon our pooh punning) http://www.jmu.edu/arboretum/help-keep-the-arboretum-beautiful.shtml before a next pooh visit.
Nectar, Nectar, Needed Everywhere.....

Wherever there are flowers you will find nectar-feeding insects. The relationship between plants and nectar feeders is crucial to sustaining all life. Humans also need nectar-feeding insects to pollinate our food crops. Insects make up 75% of the animal kingdom and are the foundation of the food chain, playing an invaluable role in the health of birds and mammals that feed on them. Insects are a preferred source of protein for animals, especially for birds feeding their young. Even hummingbirds feed on insects and feast on fruit flies, those prolific fruit-eaters that seem to appear out of thin air. Many animals like reptiles, amphibians, and mammals such as moles, squirrels, coyotes and bears feed on insects. Bears alone feed on moth larvae, beetles, termites, worms, ants, bees, grubs, yellow jackets, and caterpillars.

Planting many flowering shrubs, trees, and perennial wildflowers is an easy way to support nectar-feeding insects. These insects include a much more diverse variety than the moths and caterpillars who so visibly grace our flowers in the summer. Other nectar feeders include bees, ants, wasps (including the tiny parasitic wasps that feed on our garden pests), flies, beetles, and mosquitoes. Yes, the male mosquitoes have to eat something other than blood, thankfully!

It is important that we as gardeners keep growing many forms of native and cultivated flowering plants, that provide food for the many types of insects that visit our gardens, and provide "corridors of green" for the insects that migrate. Of the insects listed above, over 20 species of moths and butterflies migrate to complete their lifecycle. Some of these species that you may be familiar with besides the Monarch already highlighted in this newsletter are:

- **Red Admiral** ~ flies south in the fall
- **Painted Lady** ~ the most widely distributed butterfly in the world that flies to Mexico in the winter
- **Common Buckeye** ~ flies to Florida and Mexico in the winter and some overwinter with the Monarchs
- **American Lady** ~ flies to the American Southwest and Mexico in the winter

While the list of trees, shrubs, and perennials that can provide great food and nectar for insects is extensive, just search online for inclusive lists of plants known to provide nectar in abundance. These include many hardwood trees (which flower in the spring), **Buddleia & Clethra** shrubs, milkweeds (**Asclepias**), **Joe-pye weeds** (**Eupatorium**), **Bergamots** (**Monarda**), **Goldenrods** (**Solidago**), Asters, and most herbs. The simple act of planting a garden feeds insects, and in turns feeds a neighborhood of creatures in our surrounding forests, fields, and green spaces.
Wouldn’t it be wonderful to be able to do as Monarchs do in the closing days of summer! Imagine if for people in a four-generation cycle, every fourth generation experienced a life expectancy a thousand years longer than the first three generations! Comparatively, while Monarchs that emerged in the spring and early summer live only a few weeks, amazingly, the final generation before annual fall migration lives up to eight months!

Not only must end-of-summer Monarchs fly south to overwinter in warmer climes, they have to (literally) hang out for the winter in Mexico or the American Southwest, usually without eating, and then make the trip back in the spring to lay first-generation eggs. Simply stated, Monarchs need to eat their way south and again eat their way north, or they would not survive migration. Gardeners planting butterfly nectar plants in home and commercial gardens, and communities with urban preserves like the EJC Arboretum are vital in the Monarch migration process.

Each successive generation in the Monarch species annual cycle, lays its eggs further north than where they emerged. Monarchs only lay their eggs on Milkweeds, plants some people think of as roadside weeds... big mistake! Many milkweeds are fragrant, have beautiful flowers, and require little care once established as well as some being the only nursery plant for Monarchs. These and other butterfly-supporting plants are available for purchase at annual EJC Arboretum plant sales!

At last, Monarchs arrive in the Shenandoah Valley each year to pollinate, beautify gardens, and enrich outdoor life. Learn about Monarchs in the arboretum’s annual butterfly workshops in the spring and fall.

In Harrisonburg, fall is a time of migration for more than Monarchs. Birds like redstarts, black-throated green warblers, yellow-throated and solitary vireos also migrate. Migrating birds use the EJC Arboretum for a resting and feeding stop. Also, Interstate-81 reveals... people migrate too! Vehicles on I-81 with plates from northern tier states and Canada heading to Florida attest humans get into the fall southbound action as well. Many seasonal “human migrants” stop for a mid-point overnight hotel stay and a walk in the EJC Arboretum before resuming their “migration”!

The stuff of everyday life “migrates” in the fall as furniture that graced backyards and decks is stored away till spring in garages and sheds. And tropical and exotic plants that can’t survive Zone 6 winters are mulched under or moved inside and stored in greenhouses, basements, and crawlspaces until spring planting time returns. Enjoy fall for its beautiful colors, cooling temperatures, slowing pace, and for the fun of all kinds of migrations!
2013 UPCOMING EVENTS

For more information or to make reservations for events, go to the EJC Arboretum website (www.jmu.edu/arboretum) or contact us at 540-568-3194.

Also, a complete listing of all events scheduled for the next 12 months can be found at the website Annual Calendar of Events.

*FPEC is the Frances Plecker Education Center, found on the grounds of the Edith J. Carrier Arboretum at 780 University Boulevard, Harrisonburg, VA

Overflow & event parking:
Weekends at the JMU Convocation Center Lot F (enter from University Blvd.) and Convo Lot G (enter from Driver Drive) and Lot R-5 (enter from University Blvd.). Weekdays permit is required. A parking lot map is available online at http://web.jmu.edu/parking/parkingmap.pdf.

The EJC Arboretum was voted the "Best Place to Relax" and "Best Place to Propose" in the annual reader survey by the Harrisonburg Daily News-Record.

September 27 & 28, 2013, Fall Plant and Bulb Sale, Friday and Saturday 9 a.m. – 3 p.m. at the Frances Plecker Education Center, shop Virginia native wildflowers and cultivar perennials, shrubs and trees, at just the right time for fall planting.

October 4 & 5, 2013, Fall Bulb Sale, Friday and Saturday at the Frances Plecker Education Center, 9:00 a.m. – 3:00 p.m. and Saturday Oct 5 on Godwin Field, 10:00 a.m. until 1:30 p.m. Purchase the 2013 JMU colors annual bulb collection of beautiful and rare bulbs, or buy from a selection of spring blooming bulbs to plant in home or business landscapes. Sale is closed Sunday but continues the remainder of the week, Monday – Friday, October 7 to 11 at the Frances Plecker Education Center, 8:00 a.m. to 4:30 p.m. or until bulb inventory is liquidated.

October 4, 2013, Private Greenhouse Close-out Shopping Appointments Coincides with date of Fall Bulb Sale, Friday only, with an Arboretum Green House Manager. Call (540) 568-3194 to reserve a half-hour appointment to shop the growing season closeout plant, shrub, tree inventory at the arboretum greenhouse.

October 19, 2013, Children’s Harvest Festival, Saturday, 1:00 – 5:00 p.m., at the Frances Plecker Ed Center, a free festival with dance exhibitions and lessons, crafts and sidewalk chalk art, singers, musical instrument performance and demonstrations, story time with Gus Bus, trails tours, snacks, harvesting trees’ seeds collection trail activity, and much more. Horse drawn wagon rides are available for the whole family with ticket purchase.

October 26, 2013, Fall Color Carriage Rides, Saturday 11:00am-2:00pm. Leaf-peeping at its best! Enjoy a horse-drawn carriage in the beauty of the autumn leaf colors. Advance Reservations recommended.

November 2, 2013, Fall Annual Remarkable Trees Tour, See the Remarkable Trees of the region traveling with the Director as guide. Enjoy a Zip Line Tree Canopy Tour at Nelson Rocks, or to view a tree canopy from towering rock faces choose the Via Ferrata Tour. Advance registration needed!
November 5, 6, 7, 2013, Fall Children’s Art Workshop, After School 4:00-6:00 pm in the FPEC, children will study and create botanical drawings of leaves, their forms and colors, and berries found within the arboretum, as well as plant I.D. $35 charge includes materials.

November 18 - December 4, 2013, Festive Holiday Plants and Evergreens Décor on-line Sale, bring the beauty of fresh blooming holiday plants and the scent of evergreens into your home for the holidays. The EJC Arboretum offers locally grown, high-quality plants. Order pick up December 5 & 6 in the FPEC, 8:30-5:00pm.

December 11, 2013, Annual Festive Greens Workshop, Wednesday, noon to 1:30pm., create a versatile holiday décor piece that will beautify any home or business with style and fragrance, under the guidance of a floral expert, Abby Long from Blakemore’s Florist. Free varies depending on supplies ordered when registering. Register at jmu.edu/arboretum. Register early, sells out every year! Held in the FPEC. For more details or to register, visit the arboretum website 30 days in advance of this program.

December 14, 2013, Moonlight Holiday Carriage Rides, Saturday, 2:00-8:00pm., reserve to enjoy a horse drawn holiday carriage moonlight or daytime ride. Harrisonburg’s favorite horses harnessed in jingle bells for this festive celebration. For the cost of a movie ticket, create a holiday or graduation memory of a lifetime! Carriages leave on a 20-minute schedule for an approximate one-mile ride. For more details or to reserve call the arboretum office weekdays business hours after November 14.