



OCTOBER 2014

Fall Newsletter

From The Director

There is good news to share via new projects and programs unfolding in the Arboretum! I have the good fortune of announcing our new artist-in-residence, Lynda Chandler, a published botanical artist, who began working with us this summer and will continue through June 2015. Read the accompanying article on page 3.

JMU recently received a National Fish and Wildlife Foundation (NFWF) grant that provides the funds, with a matching gift from JMU, to complete a stream restoration project of the main waterway through the EJC Arboretum! Now the design that Ecosystem Services is currently working on can be implemented in 2015. This project involves JMU and EMU students, and helps JMU do its part in cleaning up downstream waterways and the Chesapeake Bay by reducing sediment and nutrient pollution currently occurring at a rapid rate due to erosion of our streambeds. A huge thanks to Abe Kaufman and Dale Chestnut with JMU's office of Energy Conservation and Sustainability. See article on page 2.

Additionally, a multitude of Monarch and Eastern Black Swallowtail caterpillars were happily fed this summer by the tropical and swamp milkweeds, and the fennel plants, respectively (*Asclepias curassavica* and *incarnata*, and *Foeniculum vulgare*), growing in our Monarch Waystation near the pond. We've spotted several monarch chrysalises in the garden with their beautiful gold spots sparkling in the waning summer light. Soon the butterflies will hatch and make their long journey to Mexico to overwinter.

The Eastern Black Swallowtail caterpillar feeds on the carrot family (dill, parsley, fennel, carrot, Queen Anne's lace, etc.), and will overwinter here in a chrysalis, emerging next spring as a mimic of the Pipevine Swallowtail. The Pipevine Swallowtail is poisonous to many predators and, though the Eastern Black Swallowtail is not, this mimic swallowtail gains protection by looking like its cousin.

The leaf color has begun here.....happy Autumn to you!

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Throughout 2014!

- First 25 customers at Plant Sales get 25% off purchases
- 25th registrations at paid programs are free
- \$25 donations qualify for membership in Friends of the EJC Arboretum!



Jan Sievers Mahon

The Arboretum Stream to Flow Again

We humans have a slow-to-change-practice of attempting to contain water in streams and conform it to boundaries that are unsuited to what streams do best; to de-intensify and move outward, spreading impact across large areas to minimize losses, allowing change as needed. When left to flow naturally rivers and streams carve courses that change over time creating meanders and floodplains that help to minimize impact on any given area; reducing erosion and slowing the flow. The practice of channelizing the Arboretum stream in order to maximize developable land has reduced the capacity of the stream to dissipate the energy of the water during storm events, and has caused severe erosion of the stream banks and excessive sediment dumping downstream and into the Arboretum pond.

To address this concern the Arboretum has partnered with an environmental assessment and ecological restoration design firm, Ecosystem Services. At the request of JMU, Ecosystem Services applied for and was awarded a grant to provide consulting and design services for the purpose of producing a stream restoration design that will improve the ecological functioning of the existing stream that runs through the Arboretum. Their work includes an assessment focused on determining the extent of stream bank erosion and how best to move the stream channel in order to reduce the excessive erosion and improve the treatment of stormwater.

A second implementation grant was recently awarded by the National Fish and Wildlife Foundation to JMU that will provide the funding to implement this new design in 2015. The newly rechanneled stream will benefit the Arboretum both ecologically and aesthetically, and provide an educational tool for use with JMU & EMU students, and with tours offered to

the public. Additionally, it helps the university to reduce pollutants moving into downstream waterways and to reduce costs associated with removing pond sediment that is accumulating with each deposit after a large rain event.

The practice of ecological restoration applies techniques that incorporate native plant species and emulate natural processes that are effective at improving water quality and improving habitat for aquatic and terrestrial organisms. Changes to the stream channel will allow for floodplain connection, additional streambank plantings, and the addition of adjacent wetlands that will showcase different wetland species. These amenities will provide a new addition to the suite of educational opportunities that currently exist at the Arboretum. Look for changes in the Sycamore Flat area of the Arboretum in early 2015.

Healthy Stream And Ecosystem Services from Riparian, Floodplain, And Wetland Areas

Water Purification

Water Regulation

Flood Control

Erosion Regulation

Nutrient Buffer

Soil Formation

Water Cycling

Nutrient Cycling

Photosynthesis

Recreation

Arboretum Stream Project in a Nutshell

*Restoration Design process completed Jan. 2015

*Construction planned for late winter/early spring of 2015

*Project duration 3-5 months

*Project will commence upstream and be completed in sections moving downstream

*Riparian plantings happen last and will be predominantly native plants with some non-native specimen selections

*Stream must be monitored for 5 years

Understories

A First-Ever Artist in Residence for the Edith J. Carrier Arboretum

The Edith J. Carrier Arboretum, a woodland sanctuary on the James Madison University campus, is a public urban garden and forested greenspace that preserves native plant species, provides opportunities for research, and promotes knowledge of the botanical and natural world for people of all ages.

“Virginia is in my blood”, states EJC Arboretum Artist In Residence, Lynda Eades Chandler. Born in Charlottesville, she was raised by a mother who loved to garden and a father who was a geologist. “Early exposure to nature set a course for my future,” says Chandler.

After completing a B.S. degree in horticulture from the University of Florida, Chandler went on to become a botanical illustrator. Her illustrations have been on exhibit in the Smithsonian Institution’s Natural History Museum. Her work is cited in numerous publications and two coloring books by Dover Publishing Co.

She and her husband were looking for a warm-season home away from home that had a mild summer climate, that was a college town with young people, and that was close to a public garden. The Chandlers fell in love with Harrisonburg and the EJC Arboretum at JMU.

Chandler derives great joy from studying and drawing plants and sharing her passion with aspiring botanical artists. She wants others to learn to observe and appreciate the incredible diversity in the plant kingdom. In her workshops, students learn something about plant taxonomy (the study of plant families) and morphology (the study of their structures). Chandler enjoys the look on a student’s face when they begin to understand the structure of their specimen and then learn the skills to draw it with confidence. Illustrating plants can be very relaxing in a stressful world.

As Artist in Residence Lynda Chandler wants to accomplish two goals. She hopes to convey an appreciation for the diversity and beauty of plants, and to support James Madison University’s unique botanical resource: the Edith J. Carrier Arboretum. As her Artist In Residency piece, Lynda Chandler plans to focus her attention on illustrating a few species that are of special import to the EJC Arboretum which will be presented sometime in the spring of 2015.

Stay tuned!



Upcoming Events

2014

For more information or to make reservations for events, go to the EJC Arboretum website 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's Calendar of Events.

- **September 26 & 27, 2014, Fall Plant and Bulb Sale** Friday and Saturday 9:00 a.m. - 3:00 p.m., held in the parking area near the FPEC parking lot, shop a huge inventory of Virginia Native wildflowers and cultivar perennials, shrubs and trees, and spring bulbs, at just the right time for fall planting.

- **Until October 31, 2014, Private Greenhouse Close-Out Shopping Appointments** 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.

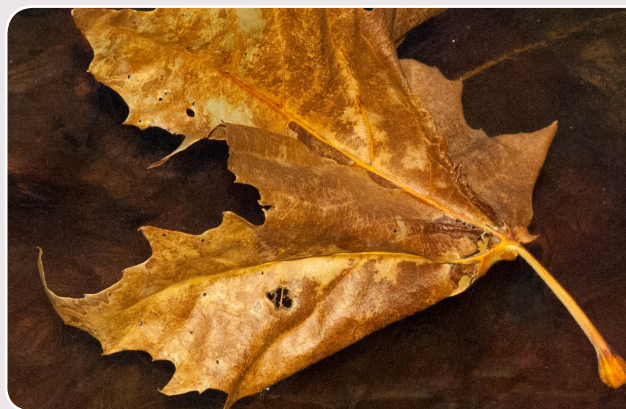
- **October 10 & 11, 2014, Fall Bulb Sale** Friday and Saturday, 9:00 a.m. - 3:00 p.m., in the FPEC, and Saturday only Godwin Field in the morning. 10:00 a.m. - 1:00 p.m. Godwin Field, sale closes with the football game kickoff. Choose the JMU Colors Annual Bulb Collection of beautiful and rare bulbs, or buy from a selection of bulbs to plant in home or business landscapes.

- **October 12, 2014, Fall Color Carriage Rides**, Sunday 2:00 - 5:00 p.m., enjoy a horse-drawn carriage ride through the autumn colors of the EJC Arboretum.

- **October 13, 15, 17, 2014, Fall Children's Art Workshop**, After School 4:30 - 6:00 p.m., 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, or \$30 for returning students not needing a sketchbook.

- **October 18, 2014, Children's Harvest Festival** Saturday 1 - 5 p.m., with dance exhibitions and lessons, crafts, singers, musical instrument performance and demonstrations, story time, trails tours, snacks, seed collecting trail activity and much more offered at this free fall children's festival. Horse drawn wagon rides are available for the whole family with ticket purchase.

- **October 22 & 29, 2014, Bonsai Workshop** Wednesdays 12:00 noon - 1:00 p.m. each session, Arboretum Grounds Manager and Bonsai Master, Mike Hott, attend in the FPEC to create a "wee-tree" to enjoy at home or office. \$40 fee covers all materials inclusive to create a Bonsai tree.



- **November 17-December 5, 2014, Festive Holiday Plants and Evergreens Decor on-line Sale**, Bring the beauty of fresh blooming holiday plants into your home for the Holidays. The EJC Arboretum offers locally grown, high-quality plants. Visit www.jmu.edu/arboretum. Order pick up in the FPEC, weekdays after Dec. 9, 8:30 a.m. - 5:00 p.m.

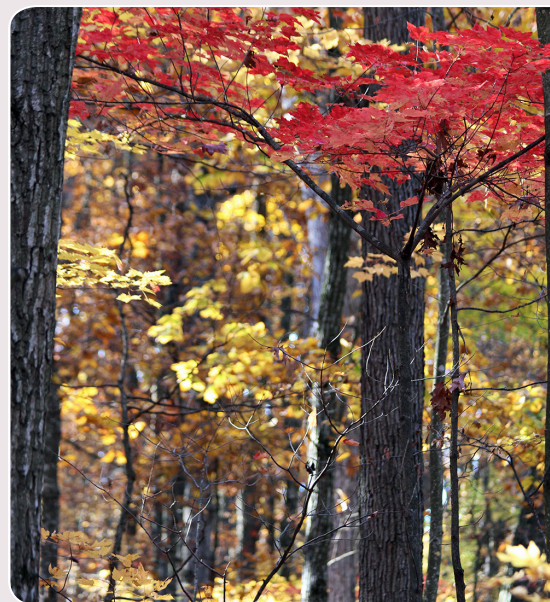
Upcoming Events

2014

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- **December 10, 2014, Annual Festive Greens Workshop**, Noon to 1:30 p.m., Create a versatile holiday décor piece that will beautify any holiday home or business with style and fragrance, under the guidance of a floral expert, Abby Long from Blakemore's Florist. Fee varies depending on supplies ordered when registering. Register at jmu.edu/arboretum. Held in the FPEC.

- **December 13, 2014, Moonlight Holiday and Winter Commencement Carriage Rides**
5:00 - 8:00 p.m., reserve to enjoy a horse drawn holiday carriage moonlight or daytime ride. Horse teams are harnessed in jingle bells for this festive Holiday celebration. For the cost of a movie ticket, create a holiday memory of a lifetime! Browse arboretum website, late fall for information when posted. Carriages leave the FPEC on a 20 minute schedule.



**FPEC is the Frances Plecker Education Center, found on the grounds of the Edith J. Carrier Arboretum at 780 University Boulevard, Harrisonburg, VA 22807*



The EJC Arboretum staff joins family and friends honoring and remembering Dr. Norlyn Bodkin, founding Director, in appreciation for his work of creating and preserving the beloved gardens of native flowers, now left behind for all generations to come.

"The pain passes, but the beauty remains."

Pierre Auguste Renoir.

A memorial gathering, open to all who wish to attend, will be held 2:00 pm, Saturday, October 25, 2014. Automatic rain date is October 26, Sunday, same time, same location. Parking without a permit in lots Convo F & G, R-5 found on the JMU website or arboretum website map pages.