What’s Growing On...
The latest news from the Marais des Cygnes Extension Master Gardeners

JANUARY 2020 | 104 S. Brayman St., Paola, KS 66071 | 913-294-4306 | www.maraisdescygnegs.ksu.edu

CALENDAR

JANUARY 18
New & Cool Plants, 10 am, Andrew Fox, Owner of Arnold’s, Anita B. Gorman Discovery Ctr., 4750 Troost

JANUARY 21
MdC EMG History Project meeting, 9:30 am, Paola Extension Office

JANUARY 25
KS Day, 9 to 1, Paola Middle School

JANUARY 28
Awards Banquet, Town Square, 6 pm.

JANUARY 29
Champion Trees of the Overland Park Arboretum, 1 pm, at the Arboretum

FEBRUARY 15
Garden to Grill, 10 am, Judith Fertig, Cookbook Author, Discovery Center

FEBRUARY 13
Brainstorming meeting at the Jackson Hotel, Paola, 9:30 am. Bring your ideas for recruiting new members and promoting the involvement of current EMGs.

FEBRUARY 18
Extend the Growing Season, 6:30 pm, Paola Extension Office

FEBRUARY 29
Symposium, Light House Presbyterian Church, 8:30 am to 3:30 pm. Registrations must be in the Paola office by FEBRUARY 15.

MdC EMG History Project Meeting

COME ONE, COME ALL to a planning meeting Tuesday, January 21 at 9:30 am at the Paola Extension Office.

Our GOAL is to create a BOOK on the history of our (EMG) master gardener program to document and share our legacy. We hope to complete this project by the end of this year for our upcoming 25th anniversary.

We need help in sorting through and organizing old files, gathering data and writing/editing articles. Lots of things to do. Judy has agreed to help with her expertise in layout, etc.

Patti Armstrong (pictured), emeritus EMG and founding member of our organization, is spearheading this ambitious project.

Anyone with past records or pictures, please bring them into the Paola Extension Office and place in the file cabinet in the office by the front door soon. If you want your contributions returned to you, please note such, including your contact information.

Spread the word! Hope to see you Tuesday.

Extend the Growing Season with a High Tunnel

MdC EMG and jack-of-all-trades Vickie Vetter-Scruggs will present a program on high tunnels on February 18 at 6:30, Paola Extension Office. Vickie will explain what a high tunnel is and describe her own trials and tribulations, joys and excitement as she has reaped the benefits of her high tunnel. Bring your questions—Vickie has the answers.

An EMG since 2008, Vicki has been a high-tunnel grower since 2018. She grows herbs, vegetables and flowers and is a nature and animal lover. A hobby farmHer (google it) and herbalist, she owns Orange Moon Apothecary and farm, and makes safe and earth-friendly herbal skin care products.

Follow the Marais des Cygnes EMGs on Facebook at www.facebook.com/mdcemg
Not an Extension Master Gardener? Interested in becoming one? Information is online at www.maraisdescygnes.ksu.edu or call the Paola extension office, 913-294-4306
Fireflies: Another Reason to Leave the Leaves

By Lenora Larson

Introduction: Insects are a part of every gardener's life. Each month you'll meet a common insect with advice on whether you should eradicate, tolerate or embrace this six-legged visitor. Please send Lenora your insect requests!

Do you have childhood memories of fireflies twinkling in the summer evening's sky? If you were raised east of a line from Wisconsin to Texas you probably caught lightning bugs to put in mason jars, and hopefully released them the next morning. Of course, the common name is misleading because these magical creatures are not flies or bugs. Like Ladybugs, they are beetles with chewing mouth parts and hardened top wings that protect the membranous inner flight wings.

Is It Alchemy?
Scientists long puzzled over the firefly's biologically produced cold light, which has no accompanying release of heat or infrared and ultraviolet emissions. Finally, in 1982, the metabolic pathway was explained by researchers at Purdue University as the interaction of oxygen and adenosine triphosphate on the chemical luciferin in the presence of the enzyme luciferase. Many marine species of fish, cephalopods, jellies and bacteria as well as species of fungus and fireflies produce luciferin. These organisms use bioluminescence for defense, for hunting, as a distress call, or to attract the opposite sex.

Love's Signal
World-wide there are over 2,000 species of fireflies with considerable variation in appearance, behavior and light patterns. However, our 150 native species are remarkably similar, so courting beetles use their flashing lights to find the right mate. Each species has its own pattern of light display, with differing duration, timing, repetition and geography so that they don't waste time responding to incompatible species. It's a “Call and Response” as males fly over grassy areas flashing their sexual identity. The flightless female remains in the weeds and when she sees the right light sequence, she flashes back an invitation for a conjugal visit. In late summer the female lays about 500 eggs in damp leaf litter. The eggs hatch in a month and the bioluminescent larvae live for two years, overwintering in leaf litter. These “glow worms” are considered beneficial insects since they eat small insects, snails, slugs, and earthworms. Glow worms pupate the second spring and emerge as adults after twelve days. Like adult butterflies, adult fireflies drink nectar and only live about two weeks.

The Femme Fatale Fireflies
Unlike most adult fireflies, female Photuris fireflies do eat, and their favorite food is the smaller male Photinis firefly. When male Photinus fireflies are flashing, the Photuris femme fatale mimics the Photinus female's unique responsive flash. The poor male thinks that he just got lucky and dives into the weeds for a love tryst and is promptly eaten. These wingless femme fatales also sneak up and raid spiders' webs of their carefully wrapped prey!

The Approaching Extinction
Unfortunately, fireflies are rapidly declining world-wide despite having few predators because they contain the toxic lucibufagin. Extinction looms because of human activities that destroy or poison their habitats. Agricultural and urban development is eliminating the wetlands and long grass that adults need. Removal of trees and/or leaf litter removes overwintering sites for larvae. The massive insecticide and herbicide spraying used by modern agriculture also kills, and populations are further reduced by artificial lighting that prevents courting fireflies from seeing each other's signals.

Fireflies are beautiful beneficial insects and easily identified by non-experts. They have become beloved charismatic icons, symbols of the campaign by scientists and gardeners to Leave the Leaves. Thus, they have joined the Monarch Butterfly and Honey Bee as conservation ambassadors for our planet. ✿
# 2020 Marais des Cygnes EMG Advanced Training Calendar

*Please note: More trainings will be added throughout the year as they are scheduled.*

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Time</th>
<th># Hrs</th>
<th>Topic</th>
<th>Speaker</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>18</td>
<td>10:00am</td>
<td>1</td>
<td>New &amp; Cool Plants</td>
<td>Andrew Fox, Owner, Arnold’s</td>
<td>Anita B. Gorman Discovery Center, 4750 Troost, KCMO</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>7:00pm</td>
<td>1.5</td>
<td>Pruning Evergreens*</td>
<td>Dennis Patton, JOCO Ext. Hort Agent</td>
<td>JOCO Ext. Office, 11811 S. Sunset Dr., Olathe</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>1:00pm</td>
<td>1</td>
<td>Champion Trees of the OP Arboretum</td>
<td>Jim Earnest, Educator @ OP Arb</td>
<td>OP Arboretum, 8909 W. 179th</td>
</tr>
<tr>
<td>Feb.</td>
<td>15</td>
<td>10:00am</td>
<td>2</td>
<td>Garden to Grill</td>
<td>Judith Fertig, Cookbook Author</td>
<td>Anita B. Gorman Discovery Center, 4750 Troost, KCMO</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>7:00pm</td>
<td>1.5</td>
<td>Growing Fruit at Home*</td>
<td>Nancy Chapman, JOCO EMG</td>
<td>JOCO Ext. Office, 11811 S. Sunset Dr., Olathe</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>6:30pm</td>
<td>1</td>
<td>Your Greenhouse/Cold Frame</td>
<td>Vicki Vetter-Scruggs, MdC EMG</td>
<td>Paola Ext. Office</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>9:00am</td>
<td>5</td>
<td>Gardening by Design SYMPOSIUM*</td>
<td>Keynote: Timothy Moloney</td>
<td>The Lighthouse Church, 1402 E. 303rd St., Paola</td>
</tr>
<tr>
<td>Mar.</td>
<td>6</td>
<td>6:30pm</td>
<td>1</td>
<td>Grow Your Own Way KC Garden SYMPOSIUM*</td>
<td>Arthur; Branhagan McCullough; Epping</td>
<td>Rockhurst University, by Gardeners Connect</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>8:30am</td>
<td>5</td>
<td>How to Start a Vegetable Garden*</td>
<td>Jennifer Stefanchik, JOCO EMG</td>
<td>JOCO Ext. Office, 11811 S. Sunset Dr., Olathe</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>7:00pm</td>
<td>1.5</td>
<td>Native Landscaping, etc. SEMINAR (SYMPOSIUM)*</td>
<td>Keynote: Dave Tylka; Various Speakers</td>
<td>Rockhurst University, by GKCMG</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>9:00am</td>
<td>6</td>
<td>Raising Vegetables in Large Containers</td>
<td>Mike Brown, MdC EMG</td>
<td>LaCygne Library, 209 N. Broadway</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>10:00am</td>
<td>2</td>
<td>Cut-Flower Gardening</td>
<td>Lynn Byczinski, Garden Author</td>
<td>Anita B. Gorman Discovery Center, 4750 Troost, KCMO</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>7:00pm</td>
<td>1.5</td>
<td>Inviting Pollinators to the Garden*</td>
<td>Mae Christenson, JOCO EMG</td>
<td>JOCO Ext. Office, 11811 S. Sunset Dr., Olathe</td>
</tr>
<tr>
<td>Apr.</td>
<td>20</td>
<td>7:00pm</td>
<td>1.5</td>
<td>Landscaping for Birds*</td>
<td>Colleen Winter, JOCO EMG</td>
<td>JOCO Ext. Office, 11811 S. Sunset Dr., Olathe</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>6:30pm</td>
<td>1.5</td>
<td>Gardening for Pollinators</td>
<td>Lenora Larson, MdC EMG</td>
<td>Paola Ext. Office</td>
</tr>
<tr>
<td>May</td>
<td>26</td>
<td>6:30pm</td>
<td>1</td>
<td>Water Gardens</td>
<td>Karen Fiske, Water Garden Club</td>
<td>Paola Ext. Office</td>
</tr>
<tr>
<td>June</td>
<td>9</td>
<td>6:30pm</td>
<td>1</td>
<td>Flora and Fauna of the Kansas Prairie</td>
<td>Courtney Masterson, KU Teacher</td>
<td>Paola Ext. Office</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>9:00am</td>
<td>3 (1 AT)</td>
<td>Making Garden Art Workshop*</td>
<td>Myrna Minnis, Artist</td>
<td>Home of Myrna Minnis,</td>
</tr>
<tr>
<td>Aug.</td>
<td>13</td>
<td>10:00am</td>
<td>1</td>
<td>Small Garden Tour</td>
<td>EMGs of Miami County</td>
<td>Miami County</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>6:30pm</td>
<td>1.5</td>
<td>How to Kill Your Plants</td>
<td>Lenora Larson, MdC EMG</td>
<td>Paola Ext. Office</td>
</tr>
<tr>
<td>Sept.</td>
<td>10</td>
<td>10:00am</td>
<td>3 (1 AT)</td>
<td>Organic Gardening Practices</td>
<td>Nancy Chapman, JOCO EMG</td>
<td>Paola Ext. Office</td>
</tr>
<tr>
<td>Oct.</td>
<td>13</td>
<td>6:30pm</td>
<td>0.5</td>
<td>Plant ID/Taxonomy (Part of 4th Q mtg)</td>
<td>Laraine Crawford, MdC EMG</td>
<td>Paola Ext. Office</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>6:30pm</td>
<td>1.5</td>
<td>Drought Tolerant Perennials</td>
<td>Judy Sharp, JOCO EMG</td>
<td>Paola Ext. Office</td>
</tr>
</tbody>
</table>

*Requires fee and registration*
Gardening by Design
5th Annual Spring Gardening Symposium in Paola
‘The Color-filled Garden’

February 29, 2020
9:00 am – 3:30 pm
Check-in: 8:30 am

The Lighthouse Church
1402 E. 303rd St., Paola, KS 66071
(Park and enter on west side)
Paola map at www.maraisdescygnes.ksu.edu

This event is open to all, but pre-registration is required and must be in the Paola office by February 15—space is limited! The $40 registration fee includes a boxed lunch, snacks, and all printed reference materials.

Name: __________________________________
Email: __________________________________
City/State: ______________________________
Telephone: ______________________________

Make your $40 check payable to the MdC Extension Master Gardeners and mail with this form (or you may access a printable form at www.maraisdescygnes.ksu.edu) to:

K-State Research and Extension
Marais des Cygnes District–Paola Office
104 S. Brayman, Paola, KS 66071

MdC EMGs receive 5 hours advanced training credit. Other EMGs: ask your County Agent if AT credit is approved. For more information call 913-294-4306.

Timothy Moloney
Professor of Landscape Design, UM–Columbia
365 Days of Amazing Color

Susan Mertz
Powell Gardens
Director of Horticulture
Colorful Low-Maintenance Gardens

Ania Wiatr
Bluestem Garden
Consulting owner. Formerly Senior Gardener at Powell Gardens
Designing with Colorful Native Plants

Lenora Larson
MdC EMG, butterfly expert and gardener extraordinaire
Eye Candy: Color Theory for the Gardener and Beyond Impatiens: The Colorful Shade Garden
Paola Plant Sale

9 am to 5 pm
Thursday, Friday & Saturday
April 30, May 1 & 2

Pollinator Plants • Butterfly Host Plants
Native Plants • Annuals • Perennials • Tropicals
Edible Woody Perennials • Succulents • Veggies
Hanging Baskets • Combination Planters

808 Baptiste Drive, Paola, KS 66071
Take the Baptiste Drive exit off Hwy. 169 and turn west. The sale is in the Family Center parking lot.

Sponsored by
K-STATE Research and Extension | Master Gardener
Marais des Cygnes District