CALENDAR

AUGUST 22
The Healing Garden, Kauffman Conference Center, 6:30 pm

AUGUST 27
Clean-up Day at Lakemary Ranch, 9–11 am. WE NEED YOUR HELP!

SEPTEMBER 5
Thursday, September 5, 10 am.
Private EMG Garden Tour in Linn County. Bring a sack lunch. Meet at Cathy Stainbrook’s home, 12454 W. 1900 Road, LaCygne, KS 66040, and then caravan to the other gardens. Directions are on page 2.

SEPTEMBER 24
Colorful Foliage for All Seasons, Paola Extension Office, 6:30 pm

Board meetings are the second Tuesday of each month, 9:30 am, Extension Office, Paola.

Newsletter deadline is noon on the following Thursday.

In the Gardens

Extension Office volunteers, under the leadership of Sue Burns and Debbie Kitchell, planted gourds on the trellis this year, and are they ever doing great! Good thing that trellis is a sturdy one.

According to Sue, “We have pulled way too many Redbud seedlings from the gardens the last few weeks,” but added that the Elephant Ears are loving the weather and doing unusually well.

Volunteers welcome on Tuesdays at 9 am. (Courthouse workdays: Wednesday, 10 am; Trial Garden workdays: Thursdays at 8 am.)

Follow the Marais des Cygnes EMGs on Facebook at www.facebook.com/mdcemg
Private EMG Tour of Linn County Gardens

Five MdC EMGs who live in Linn County will have their gardens on display for their fellow EMGs’ viewing pleasure. Those EMGs are Sondra DelaCruz, Doris McElreath, Rena Tedrow, Janette Bennett and Cathy Stainbrook. Each garden has something different to offer, from water features, container gardening, butterfly gardens, hoop house, lasagna garden and something about straw bales??

The tour of these gardens is on Thursday, September 5th, starting at 10:00 a.m. Make plans to car pool as we will tour as a group to each garden. Bring a sack lunch and we will stop along the way to eat!—Cathy Stainbrook

Directions for those who don’t Google Map:
Starting point address—12454 W. 1900 Rd., LaCygne (Cathy Stainbrook’s house)
Take Hedge Lane south to 152 Hwy. (PVHS is located on the corner)
Go south a mile, the highway will curve back west and you will turn south on the next road, which is Lamb Rd.
Go south 2 miles to 1900 Rd. and turn west ½ mile. House is located on the north side.

OR:
Take 7 Hwy south.
From the intersection of 7 Hwy. and 152 Hwy. keep going south for 2 miles, then turn east on 1900 Rd. for 1½ miles. House is located on the north side.

NOTE: Cathy says her home is about 30 minutes from Paola.
A Long Road: The History of the Tomato

By Betsy Hasselquist

What is better than a homegrown tomato???
And easy to grow!

Tomatoes are believed to have originated in South America (probably Peru) around 500 B.C. or so. The Aztecs cultivated and integrated the tomato into their diet/cuisine. We think of the tomato as an annual, but it’s actually a perennial within its wild state of its southern origins. It’s still found wild in the Andes. Later, native people in South and Central America integrated tomatoes into their fare. Some considered them an aphrodisiac and some parts of the plants were used as hallucinogens. Tomatoes are in the nightshade family.

The tomato is one of the most loved “vegetables” in the world, used in innumerable ways, although it has a rather dubious history. Many millions of pounds are consumed each year.

In 1522, Spanish explorers returned from the New World, introducing tomatoes which thrived in the Mediterranean climate. Southern Europe embraced the tomato, but not so much, further north.

The British grew tomatoes for their decorative beauty, but believed them poisonous, particularly the wealthy.

The rich people used pewter plates which have a high lead content and foods high in acid content, like tomatoes, could cause the lead to leach into the food and lead to lead poisoning, even death. The poor used wooden plates, so they didn’t have those issues and embraced tomatoes as a food source.

Tomatoes arrived in Asia in the early 1800s and by the mid-1800s were widely used in countries such as Syria, Iran and China.

Tomatoes began to be accepted as a food source in America in the 1800s, imported by European immigrants. Some colonists had thought the acidity of tomatoes was poisonous.

Actually, except for the fruit, all other parts of the tomato plant are poisonous.

Until the late 1800s, the tomato was classified as a fruit in order to avoid taxation, but the Supreme Court later ruled it as a vegetable so it could be taxed.

Ketchup came along in 1876, adapted from the Chinese and was popular long before eating tomato salads. It’s believed today that 97% of U.S. households serve ketchup.

And then there’s pizza. Who doesn’t like pizza?!? Pizza was invented in the late 1800s in Italy. The story goes that a restaurateur made pizza for Queen Margherita from three ingredients representing the Italian flag, thus the Margherita pizza: red-tomatoes, white-mozzarella cheese and green-basil. Yum.

Campbell Soup began producing condensed tomato soup in 1897 ensuring the tomato’s place in American cuisine.

In the 1920s, “a hot tomato” was slang for an attractive woman.

The tomato is the state vegetable of New Jersey and both the state vegetable and state fruit in Arkansas.

Fruit or Vegetable—that is the question: Tomatoes are REALLY a fruit, the edible plant part being the mature ovary of a flowering plant. Tomatoes are botanically fruits of the vine as are cucumbers, squash, peppers, beans, peas, the fleshy material covering the seeds.

Knowledge is knowing a tomato is a fruit. Wisdom is not putting it in a fruit salad.

Betsy’s garden. Tomatoes grow well in Kansas but are off to a slow start this year.
August: Grasshoppers AKA Locusts

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!

Grasshoppers are listed among the Biblical plagues and rightly so. A grasshopper eats at least half of its body weight every day and consumes almost every type of plant, especially grasses. Grasshoppers are the #1 herbivore in pastures and prairies, i.e., they consume more vegetation than all the cattle, horses and bison combined! Up to 25% of crops are routinely lost to grasshopper damage. However, grasshoppers are also considered beneficial as a primary food source for many other animals. In Africa and Asia, even humans eat grasshoppers because they are delicious (taste like chicken!) with 20% protein content. And their feces act as fertilizer, recycling nutrients back into the soil.

Life Cycle

Unlike the four stages of life experienced by ants, bees, beetles, butterflies, flies, etc., grasshoppers practice incomplete metamorphosis with only three stages: egg, nymph and adult. They skip the pupal stage so there is not the dramatic transformation of a worm-like creature into a glamorous sexually active winged adult. In fall the much larger female inserts her ovipositor into the soil and lays 30 to 50 eggs per sausage-shaped egg case. Invariably some of these layings happen in my potted plants that I bring indoors for the winter. Come February or March, suddenly a herd of miniature grasshoppers hatches out, immediately hungry. These baby grasshoppers look like wingless miniature copies of their parents and even I will admit that they are really cute. At this stage, they are susceptible to insecticides, unlike the adults whose waxy cuticle (skin) protects them from chemical death.

The Attack of the Locusts!

Ordinarily, grasshoppers are solitary critters and highly territorial. Whenever you kill a grasshopper, it is quickly replaced by another as they compete for prime feeding areas. However, when the weather is hot and dry, food sources become scarce and this prompts a change in behavior. No longer solitary, they congregate in huge flying swarms and set out together to find food. These swarms may have over 40 million individuals that are referred to as “locusts” because of their devastating behavior.

The Killing Field

Usually I resist killing insects, but grasshoppers are always criminals to this passionate gardener. And it’s not easy to kill the rapacious adults. As previously mentioned, young nymphs are susceptible to insecticides, but not the adults. Consequently, synthetic chemical sprays are not effective as a control unless used when nymphs are emerging. Organic agents such as neem and pyrethrins can help if sprayed on plants that the grasshoppers are feeding on. For several years, I used the Nolo Bait, made from wheat bran coated with a grasshopper-specific-fungi, but I never experienced a drop in grasshopper populations. Biological controls such as parasitoid wasps and flies, and the Argiope garden spiders reduce populations to a minor extent, but birds are the most efficient grasshopper predators. A flock of free-roaming chickens, guineas or ducks may essentially solve the problem. Mowing a 6-foot buffer strip around your garden can also help by reducing cover for grasshoppers, which are then picked off by birds.

Grasshoppers are among the oldest living creatures on the planet, pre-dating dinosaurs by 50 million years. They have survived numerous natural disasters and mass extinctions. Entomologists joke that they’ll be keeping company with the similarly indomitable cockroach long after humans have become extinct, probably via self-destruction.

✿

A mating pair of the beautiful chartreuse and purple Bird Grasshoppers, which are very common in our area. The adult females are about 4” long.

A Bird Grasshopper Nymph lacks the wings and genitalia of the impressive adult.

Our most common grasshopper is the yellowish-beige Differential, recognizable by the black chevrons on its legs.
Most of us are familiar with coneflower plants, as they are commonly known. Some of this information will be familiar to fellow gardeners, but I thought it would be fun to visit anyway. They are blooming as I write this, and are spectacular to view in the gardens.

Echinacea is the genus and this generic name is derived from the Greek word ekhinos, meaning “hedgehog,” due to the spiny central disk, which is spiky in appearance and feel. Like all members of the daisy or sunflower family, the flowers are a composite inflorescence, with the florets arranged in a prominent cone-shaped head. Thus the common name is derived from the “cone” at the center of the flower head. Ten distinct species have been identified through DNA research. In the wild, they are found in moist to dry prairies and open woodlands only in eastern and central North America. The purple coneflower tends to be the most popular for ornamental use, noted for its very showy flowers.

The purple coneflower, *Echinacea purpurea*, has been used for medicinal purposes by the Plains Indians for years and still is. The Chocta and the Delaware Indians had specific medicinal uses for this plant. Echinacea was identified and described by Lewis and Clark on their 1804-1806 expedition. The purple coneflower was the only native prairie plant popularized by folk doctors as a medicine. They used it extensively for folk remedies. The early settlers used the root as an aid for nearly every type of sickness. They even fed it to cows and horses if they were not eating well.

Echinacea is used today in teas and as an herbal remedy for many ailments. Research has shown some positive outcomes from certain doses. Probably the most noted discovery has been the stimulation of the immune system. It has also shown some anti-inflammatory benefits. This is a whole other subject and avenue to pursue, but there seems to be some clear benefits from this plant, other than its beauty.

Unfortunately, some native species are dwindling from overharvesting and loss of habitat. However, *E. purpurea* is easy to grow and the most widely adapted species for cultivation. It boasts high yields too. Echinacea are easy to propagate by division of crowns or by seed. They tend to easily find new homes by reseeding in the garden! They are not bothered much by herbivores such as insects or deer. Instead, gophers or moles like to eat the roots. There are many species of butterflies which love to feed on the sweet nectar. Then there are the goldfinches which love the seeds and can clear them out in a few days!! It may be tempting to cut the old flower stalks, but it is nice to leave the seeds for the birds to feast on. You can cut back in mid-winter, and you can also stagger your bloom season by pruning some of the plants in June to 30 inches tall.

This is a perennial flower that is worth growing. It requires very little care, it provides food for many insects and birds, and it is an attractive addition to any garden. It is easy to spread the love by sharing your new seedlings or dividing your present clumps and giving them to others to enjoy.

Sources: USDA, Natural Resources Conservation Service, Plant Guide
Websites: American Meadows—How to Grow Echinacea
*Echinacea—Harvesting History*
## 2019 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>
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<tbody>
<tr>
<td>Sept.</td>
<td>5</td>
<td>10:00 am</td>
<td>1</td>
<td>Linn County Garden Tour</td>
<td></td>
<td>Linn County</td>
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<tr>
<td></td>
<td>24</td>
<td>6:30 pm</td>
<td>1</td>
<td>Colorful Foliage for All Seasons</td>
<td>Anne Wildeboor, OP Arboretum</td>
<td>Extension Office, Paola</td>
</tr>
<tr>
<td>Oct.</td>
<td>17</td>
<td>6:30 pm</td>
<td>1.5</td>
<td>Gardening for the Birds and Bats</td>
<td>Theresa and Nik Hiremath</td>
<td>Kauffman Conference Center</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>6:30 pm</td>
<td>1</td>
<td>Soil and Water Quality</td>
<td>Jessica Barnett, JOCO Ext. Ag. Agent</td>
<td>Extension Office, Paola</td>
</tr>
<tr>
<td>Nov.</td>
<td>19</td>
<td>6:30 pm</td>
<td>1</td>
<td>Compost Is the Answer: What Was the Question?</td>
<td>Stan Slaughter</td>
<td>Extension Office, Paola</td>
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</tbody>
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### NEWS & NOTES

- Phyllis Benedict reports that two recent Wednesday work days were canceled because of rain, but the gardens are looking very nice due to much weeding, dead-heading and cutting back of peonies and other spent flowers. Help in the gardens is always welcome on Wednesdays at 10 am.
- Shirley New says tomatoes and peppers from the Trial Garden are being sold at the Osawatomie Farmers Market by Osawatomie High School students. Proceeds will go toward ag student scholarships.
- Interviews are being held with EMG training class applicants for this fall’s program.
- Any active EMG interested in serving on the Advisory Board in 2020, please let Betsy Hasselquist or Katelyn Barthol know.
- Jan Thompson will be organizing another fabulous EMG holiday cookie exchange to be held again in December at the Jackson Hotel in Paola.

**Lenora Larson’s Native Eryngo (Eryngium leavenworthii)**