Hello Master Gardeners!

I won't belabor long on what's been happening in my garden. Suffice it to say that August has not been a great month. Stink bugs absolutely ravaged my tomatoes and anything else they could stick their proboscises in. My plan for thwarting the Mexican bean beetle by planting late summer beans hasn't worked. The bean beetles waited me out. I didn't see many adults and confidently ignored my beans, checking for egg masses from time to time. Suddenly the plants were overwhelmed with icky, yellow larva that turned the leaves brown at an alarming rate. I've spent hours squishing bean beetle larva. It's only satisfying for the first 15 minutes and then it becomes truly demoralizing. The stink bugs joined the bean party sucking on the new tender beans. Ah well, there's always next year.

No new word on my honey bees. It is fall inspection time and prep for winter. I'll keep my fingers crossed that they survive the winter. We plan to put bales of straw around the hives to provide wind protection. While I think they've made lots of honey to carry them through the lean winter months, I'll continue to feed them sugar syrup all winter.

We had a great September meeting - lots of old friends and new interns gathered. Eleanor Cone and Bill Tharpe of Harford County Soil Conservation talked about the stream restoration project at Eleanor and August's that has been underway for the last year. It was amazing to see what had been done and to hear about all of the background planning involved in the project. Great work!

The new intern class has begun. They meet Tuesday and Wednesday afternoons from one to four. I encourage you to drop by the class to meet the new group and welcome them to the joys of being a Master Gardener. You can also earn education hours by attending the classes. See the schedule of speakers listed in this newsletter and decide which classes you'd like to attend.

There are a couple of administrative notes about our November and December meetings. Due to a commitment for many MG's participating in the APG Health & Wellness Fair on Thursday November 7, we have changed the monthly meeting date. The new date is Wednesday, November 6 at 10:00 AM. The December meeting is our holiday celebration dinner at Liriodendron mansion. Bring a pot luck dish, your significant other and enjoy a fun night. Mary Driver will coordinate the planning and table decorations. Watch for her requests for assistance and let's all give her a hand to make a great holiday gathering.

Joan Parris-2009
Additional helpers are needed to help set up, take-down and sign-in attendees. Contact Mary Driver.

**STINGING CATERILLARS OUT IN SUMMER AND FALL**

Most people are used to the idea that wasps and bees can sting and rarely think about caterpillars which also sting. In the case of Lepidoptera, it is not the adult stage that causes the painful sting action but the larval stages. The pain inflicted on humans is not from an ovipositor (stinger) like a bee or wasp but rather through the hairs on the body of the caterpillar.

Stinging caterpillars bear specialized netting or urticaceous setae or spines. These structures are hollow and contain toxins from poison-gland cells to which they are joined. The caterpillars use these hairs as defensive structures for protection against predators. The sting of the caterpillar inflicted on humans is not from a deliberate attack, but the result of casual contact with toxin bearing setae or spines. When brushed against, these structures break away, releasing toxins. In some cases, broken setae may penetrate the skin. The toxins spill out on the skin surface causing inflammation.

Reactions to caterpillars vary from person to person but a sting is a sting. In some cases the contact causes itching, or burning sensations. Some people develop dermatitis, rash, lesions, or pustules, inflammation, swelling, and numbness at or around the area of contact. In extreme cases a person can have a reaction with fever, nausea and intense pain. The type of reaction depends on the individual person’s susceptibility and on the species of caterpillar, the degree of contact, and type of toxin. Reactions may be especially severe for individuals with allergies or sensitive skin. Tough skinned people may consider stinging caterpillars a mild nuisance at best.

**Saddleback Caterpillar (Sibine stimulea)**

The saddleback caterpillar, *Sibine stimulea*, is one of the brightest colored stinging caterpillars found in the USA. Its distribution is throughout the east coast of the United States. The larvae can be found feeding on several herbaceous annual and perennial plants such as Astilbe, obedient plant, dahlia, canna and phlox, to name a few.

Saddleback larvae are very distinct in coloration. They are brown with a pronounced bright lime-green saddle covering the center of the body. The caterpillar has hair-like spines that connect to poison glands. Four very prominent projections with spines are found on the anterior and posterior of the caterpillar. Wearing
gloves you can pick up the caterpillar and examine it closely. Viewing the bottom of the caterpillar you will notice that it has a slug-like ventral side (bottom).

Saddleback caterpillars feed on a number of weeds, cultivated herbaceous perennial species as well as trees and shrubs. Reports indicate them feeding on tropical plants placed outside for the summer. Feeding damage is generally insignificant but not the sting! Painfully unforgettable is the best description of the sting. You are most likely to encounter them August through early October.

**Hag Moth Caterpillar (Phobetron pithecium)**
The hag moth larva looks like a dried, hairy leaf - a hairy leaf that can cause a stinging sensation in humans. The full-grown caterpillar is brown, hairy, and about half an inch long. Along the side of the body there are nine pairs of fleshy lateral lobes (long and sometimes twisted) with hidden urticating setae. It gets its common name from the disheveled lobes which are said to resemble hair-like locks of a hag. Generally a solitary feeder, this caterpillar can be found feeding on foliage of several trees including apple, ash, birch, dogwood, hickory, oak, and willow from July into fall.

**Stinging Flannel Moths**
Flannel moth caterpillars, like slug caterpillars; look differently than the typical lepidopterous larvae. Instead of having 5 or less than 5 pairs of prolegs like other caterpillars, this family has seven pairs of prolegs. Flannel moth caterpillars have fine long, silky hairs that conceal venomous setae which can cause serious skin irritations. They do not have any large and threatening horns-like projections. Flannel moth larvae feed on a variety of trees and shrubs. Young larvae feed gregariously; older larvae are often found feeding singly. Usually, they are not found in high enough numbers to cause significant damage. Two species of flannel moths, the puss caterpillar and white flannel moth, are found in Maryland.

**Puss Caterpillar (Megalopyge opercularis)**
The puss caterpillar looks like a very shaggy dog or Mozart – a look which is not your typical looking caterpillar. The puss caterpillar (the adult is called southern flannel moth) is one of the most bothersome stinging caterpillars. Contact may produce severe reactions with severe burning of the skin. Some people report severe pain. The hairs can cause reddened flesh and inflammation. Some people develop lesions and swellings on the skin exposed to the caterpillars. People making contact with the caterpillars report pain that persists from one to several hours. In some instances, such as a Kent Island incident in 2008, medical attention is required. The larva is urticating in all instars. Newly molted skins retain stinging capabilities.

The tufts of hair (which can be grayish to light to dark brown) hide venomous setae. These hairs form a roof-like peak over the back of the body and taper rearward to form what looks a lot like a tail. There are small patches of white on each side of the body. Larvae grow to be about one inch long, but because of the thick tufts of hair, can appear much larger. Puss caterpillars feed on foliage of a variety of broadleaf trees and shrubs. In Kent County they most frequently are reported feeding on American holly. Some other common tree hosts are apple, elm, hackberry, maple, oak, pecan, and sycamore. Only one generation occurs in Maryland. Larvae are present August through September.
Lo Moth Caterpillar (*Automeris io*)
This caterpillar is a generalist feeder and can be found on many herbaceous perennials and woody plants in the landscape. Reported tree hosts include apple, black locust, cherry, dogwood, elm, hackberry, hickory, maple, oak, sycamore, and willow. Larvae grow to be two to three inches long. The head and body are yellowish green. The thoracic legs and prolegs are very distinctly red. Caterpillars have distinct white and reddish lines along each side of the body. The raised tubercles are very ornate with a whorl of green branched spines. One generation occurs in Maryland each season. Larvae are present August through October.

Just be Aware and Cautious
Being educated on what these stinging caterpillars look like and avoiding contact with bare skin is all you really need to do for these stinging caterpillars. A customer who has a bad encounter with a stinging caterpillar may want you to spray to wipe out these stinging devils but suggest restraint and just avoid contact.

University of Kentucky Department of Entomology suggests that no really effective home first aid treatments for caterpillar stings are available. Adhesive tape or transparent tape may be used to pull out some of the broken spines from the sting area. Washing thoroughly with soap and water may help remove some of the irritating venom. Prompt application of an ice pack or baking soda may help to reduce pain and prevent swelling. Antihistaminic drugs, often administered for bee and wasp stings, are reportedly ineffective. See a physician if severe reactions occur. Very young, aged or persons in poor health are more likely to suffer severe reaction symptoms.

Stanton Gill, (retired) Extension Specialist in IPM, Central MD

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**MASTER GARDENER TRAINING CLASS - SPEAKER LIST**

Wednesday, Oct. 2 -- **Woody Plants**
Steve Allgeier, Carroll Co. Extension ~ 1-3 pm

Tuesday, Oct. 8 -- **Wheel Creek Watershed Update**
Michele Dobson ~ 1-2:30 pm

Wednesday, Oct. 9 -- **Compost**
Justin Garrity ~ 1-2:30 pm

Tuesday, Oct. 15 -- **Pesticides and Common Household Insect Pests**
Martin Pollitt ~ 1-2:30 pm

Wednesday, Oct. 16 -- **Defining Critical Areas in the Watershed**
Bryan Lightner ~ 1-2 pm

**Intern Demonstrations** -- Wednesday’s Oct. 23 & 30

Tuesday, Oct. 29 -- **Invasive Insect First Detector Training**
Bob Tatman, MDA Pest Manager
2013 GARDEN WOES

This was the summer of my garden discontent
The miserable stinkbugs seemed intent
on devouring everything in sight.
Though tomatoes were their greatest delight,
Chard, kale and beans provided a meal
and eggplant and peppers were a special deal.
They devoured cucumbers
in frightening numbers.
Their garden cousins the harlequin bugs
proved to be almost equal thugs.
They moved from horseradish leaves and roots
To all my fall seedlings' struggling new shoots.
I have vacuumed, drowned, squished and cursed them,
My hours in the garden spent in death and mayhem.
But I will forget all these trials in the garden next spring
As I hopefully plant to see what the year will bring.

Joan Parris (apologies to the real MG poets)

LIRIODENDRON IN OCTOBER

It’s autumn at Liriodendron's Larry Franz Wildflower Walk. We don't have many flowers in bloom right now, but we make up for it in seed pods, seeds, berries and foliage. The plants that are still in bloom are Azure Monkshood (Aconitum carmichaelii) and the Obedient Plant (Physostegia virginiana). The Obedient Plant is described as being a tame member of the mint family. It is an easy, vigorous, native plant, attractive to hummingbirds and butterflies. The showy rose purple flowers display themselves atop of the closely flowered spike.

We enjoyed the single pink flowers of the Japanese Pink Woodland Peony (Paeonia obovata) in late May. Now the show is equal or better! Star-shaped pods split open to reveal shiny black seeds on red stalks. This plant really shines with two interesting features, both flowers and seed pods, plus it is deer resistant!

The Inland Sea Oats or Wild Oats (Chasmanthium latifolium) is a native grass described as a threatened species in its northern range (PA), but not in our garden! It reseeds freely and is often referred to as the "thug" in our garden.

Linda Baker-2005
FORCING SPRING BULBS

Jeanine Smetana-2004

It is fall and hopefully you have purchased beautiful new bulbs to make the 2014 spring even more beautiful. Maybe like some of us you over-buy and have leftover bulbs? Here is an idea: forcing them indoors at staggered dates so you can have beautiful blooms indoors all winter long! Check out these helpful hints.

Preparation

Fill three-quarters of a suitable container with soil-less potting mix. Crocuses, for example, only need a pot about 3 inches deep. Tulips require a deeper container. Plant bulbs closely together but not touching, spacing considerations that apply to planting bulbs in the garden do not apply with bulbs being forced. If planting tulips, place the bulbs with the "flat" side facing the edge of the container. Place additional media around the bulbs after arranging. Do not fill the container to the surface since the tops of tulip, crocus and narcissus bulbs do not need to be covered. Water the bulbs thoroughly.

Chill time

All of the spring-blooming bulbs, with the exception of paperwhite narcissus, must have a cold period of about three months to initiate bloom. You can supply this cold period in a variety of ways. Potted bulbs can be stored in an unheated garage, cellar or refrigerator. If you don’t have time to pot them right now, for storage chill the bulbs in a refrigerator. First place them in a bag with a little peat moss. When you remove them from storage, pot them up and continue the chill period as shown in the table below.

Another simple method involves chilling the pots under natural cold conditions outdoors. Dig a trench or pit in the vegetable or flower garden approximately as deep as the containers. Place pots in the trench or pit and cover with loose, dried leaves or straw. Keep the medium barely moist. Cover the mound with plastic, and anchor it with soil, bricks or rocks. The leaves act as a temperature buffer. Bulbs will receive the cold temperatures they need but will not freeze. While it is not absolutely necessary to cover the pots with plastic, it will make it easier to remove the pots after completion of the cold period. Check them regularly.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Weeks of Cold</th>
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<tbody>
<tr>
<td>Crocus</td>
<td>12 - 15</td>
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<tr>
<td>Daffodil</td>
<td>15</td>
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<tr>
<td>Glory of the snow</td>
<td>15</td>
</tr>
<tr>
<td>Grape Hyacinth</td>
<td>14-15</td>
</tr>
<tr>
<td>Hyacinth</td>
<td>11-14</td>
</tr>
<tr>
<td>Paperwhite narcissus</td>
<td>none</td>
</tr>
<tr>
<td>Tulip</td>
<td>15-17</td>
</tr>
</tbody>
</table>

Avoid storing bulbs or corms near ripening fruit or vegetables because they give off ethylene gas which can damage the corms.
Forcing

After the bulbs have chilled the proper number of weeks and shoots have started growing, bring the pots out of cold storage and place in a slightly warmer (50°F/10°C) location with low light intensity. Water the pots thoroughly. Keep them here until active growth is visible. Take care not to over-water.

Once active growth begins, you can move the pots to a warmer location that receives more light. Turn the pots every day to promote even growth. Forcing bulbs slowly is more desirable than placing them directly in a bright, warm location. The number of weeks it takes before the plants actually bloom depends on the environmental factors in the home, but the average is two to three weeks. When in full bloom, keep the plants in a bright location out of direct sun to prolong the bloom.

A quick transition from chilling to warm temperatures can sometimes "blast" the buds, which means everything moves too fast and the bulbs do not bloom. If the bulbs are kept at warmer indoor temperatures, flowers will not last as long as outdoor flowers. Forcing several containers of bulbs on a staggered schedule extends the indoor display.

Forcing Hyacinths in Water

Hyacinths can be forced by simply placing the hyacinth bulb in a glass with a narrow neck, tip pointing up. Fill the glass with water, as close as possible to the bottom of the bulb without touching it. If the water is too low, the roots may dry out. If too high, the bulb may rot. Place the glass in a dark area that has a temperature between 40 and 55 degrees, like a garage or basement. The bulb needs to be kept in this area while the roots develop. Check the bulb regularly to make sure the water level stays just below the bulb. Once the roots have grown a few inches, a shoot will appear from the tip of the bulb. When the shoot is about 2 inches high, bring the container to a warm room (60-70 degrees) that receives indirect sunlight. When the shoot becomes a little taller and greener, place it in full sunlight. Once the hyacinth blooms, keep it away from direct heat and sun to prolong the bloom period.

Forcing Paperwhites

Paperwhites are the original “Just Add Water” plant. While these bulbs can be planted in soil, more commonly they are grown in pots or dishes with a little water and some stones or marbles to anchor them in place. Little plastic dishes and bags of polished stones from the Dollar Store work great. A 3-4 inch deep container is suitable but it should not have drainage holes. Spread an inch or two of stones, marbles or gravel along the bottom of the container. Position your paper white bulbs, pointed end up, on top of the stone layer. Go ahead and squeeze them in; the tight fit will help keep them from toppling over. Add more stones to fill in any gaps and cover the bulb shoulders. The pointed tips should still be showing. Add water so it just reaches the base of the bulbs. Allowing the bottom of the bulb to sit in water will stimulate growth.
Covering the entire bulb with water could cause rot. Keep the bulbs in a cool, dark location and check them daily to see if they need more water. When you see roots developing, move the container into bright, but indirect light. The brighter the better, but try not to let them get too warm or they’ll grow leggy. Once the plants flower, they will last longer if moved to a cool spot with indirect or diffused light.

A common problem with paperwhites and other indoor forced bulbs, is that they become quite tall and top heavy. Researchers in the Flowerbulb Research Program at Cornell University have come up with an unusual solution to this top heavy problem: Alcohol. When paperwhite bulbs are grown in a dilute solution of alcohol, the plants reach a height of 1/3 to 1/2 their normally expected growth - but the flowers remain normal size and last just as long. Why they thought of giving their paperwhites a nip, I don’t know. But it appears that the resulting water stress on the plants is just enough to stunt their growth, but not interfere otherwise.

How to Stunt Paperwhites with Alcohol

Pot your paperwhites in stones and water, as you normally would. Once the roots begin growing and the green shoot on top reaches about 1-2”, pour off the existing water. Replace the water with a alcohol solution described below. Continue to use the alcohol solution for future watering. You should see results in a few days.

How to Make the Alcohol Watering Solution

The alcohol content needs to be less than 10%, or your plants will overdose and severe growth problems will occur. You will have to do some math to get the different concentrations of alcohol down to the proper concentration. You can use rubbing alcohol or any hard liquor (vodka, tequila, whiskey). Don’t use wine or beer because they are too high in sugar. Check the bottle for the percentage alcohol. To convert your booze to 5% alcohol, just divide the percentage alcohol by 5 and then subtract 1. That will tell you how many parts water to mix with your 1 part alcohol. Ex: 40 divided by 5 = 8: 8 minus 1 = 7... 7 parts water to 1 part alcohol. Many types of liquors are only labeled as "proof", not percentage of alcohol. Don’t confuse the two. To determine what percentage alcohol you have, divide the proof in half, for example 86 proof bourbon is 43% alcohol.

After-bloom care of all forced bulbs

Forcing is hard on bulbs. The easiest after-bloom care is pitching them on the compost pile. But, if you wish to recycle these bulbs for the garden, after-bloom care is critical. The key to success is keeping the foliage actively growing as long as possible. Bulbs will need to be fertilized with a water-soluble fertilizer. Follow label directions. After the foliage has died back naturally, the bulbs can be planted directly in the garden or stored for later planting. If they do not perform well in the garden, do not be disappointed. Forced bulbs are most useful for indoor enjoyment. Do not try to force the same bulbs the next season.

I can tell you tales of the groundhog who ate my vegetable garden and the fox that seems to have caught the groundhog, but my exciting story this summer is about Coopers Hawks.

My neighborhood of 45 homes is about a mile from the Extension Office. This summer we noticed hawks watching our birdfeeders. And feathers! We sometimes found piles of feathers here and there. Squawks and squeals seemed to daily get louder and at all hours of the day. Intrigued we started watching our trees more carefully only to find a large Coopers Hawk and 4 "teenager-sized" hawks. They were very vocal and could get quite loud. They would watch me as I was watching them! We found the hawk nest in our tall tree!

I told people about my Coopers Hawks, but people began to doubt my story when I said one hawk took a bath in the birdbath. People say that hawks don't bathe in birdbaths! This was a small, low, cement birdbath outside the kitchen window, nearly against the house. Look at what I snapped with my camera as I took pictures through the glass and screen. I had proof! Coopers Hawks take baths just like the little birds!

Autumn is coming and my Coopers Hawks have dispersed to find their own hunting spaces (and other birdfeeders). Surprisingly, I think we had more birds at our birdfeeders than usual all summer.
NEWSLETTER DUE DATES

Submit articles to Elaine Dodd @ edodd3@yahoo.com
Articles can be submitted at any time, but time sensitive articles are due:
  October 5, November 9, December 7

REMINDEERS

1. The next MG meeting is at 7:00 PM on October 3, 2013.
2. The November meeting has been changed to Wednesday, November 6th at 10 AM.
3. Planning Meeting at the Extension Office is 10:00 AM on October 31. Everyone is welcome.

J oyce Browning, Urban Horticulturist,
Master Gardener Coordinator, Harford County Office

MARYLAND MASTER GARDENER MISSION STATEMENT

The Maryland Master Gardener mission is to support the University of Maryland Extension by educating Maryland residents about safe, effective and sustainable horticultural practices that build healthy gardens, landscapes and communities.

The University of Maryland, College of Agriculture and Natural Resources programs are open to all and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry or national origin, marital status, genetic information, political affiliation, or gender identity and expression.