Events & Activities

MG Association Meeting, NO MEETING IN OCTOBER.

Alta Vista Gardening Club, Prescott, fourth Tuesday of the month, 12:30pm. Call 928-458-9508 for information.

Prescott Area Gourd Society, third Tuesday of the month, 6:30 pm, at the Smoki Museum.

Prescott Orchid Society, 3rd Sunday of the month, 2pm at the Prescott Library, (928) 717-0623

Prescott Area Iris Society call 928-445-8132 for date and place information.

Mountain View Garden Club, Prescott Valley, Dewey area, 2nd Friday of month, 1:30pm, call 775-4993

Native Plant Society Meetings - Prescott. 2nd Thursday of the month, 6:30pm. Attending the talk qualifies as Continuing Education. Non-members are welcome. Highlands Center for Natural History, 1375 S. Walker Rd. (928-776-9550).

The Verde Thumbs Garden Club, Cottonwood 2nd Tuesday, 6:30 pm at The Seventh Day Adventist Church. (928) 634-7172

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EEEeeuuuuw: Grubs…in your compost!!

Well maybe not so bad after all but I'll get to that part later. You may have found grubs while turning your compost. They are the fat white c-shaped worms that are the larval stage of scarab beetles. While the Egyptians may have venerated scarabs, gardeners have a much more love-hate relationship going on.

In Arizona the members of the scarab family we might run into include June beetle (also known as fig beetle), masked chafers, bumble flower beetles and dung beetles.

I'm sure everyone has seen June beetles (Cotinis mutabilis), those gorgeous iridescent green beetles that love the fruit on our trees. They are beautiful until you see them eating your first peach crop in five years. The others are less familiar. The question is: should you leave the larvae in your compost pile or not?

Dung beetles (Canthon spp.) are what their name indicates; they are eaters of poop. I read that in Texas they are responsible for burying 80% of the cattle dung produced in the state. Texas has lots of cattle so we should be grateful for them. Different species of dung beetles seem to prefer different species of dung, but you can look that up if you are interested. So you may not like the larvae but the beetles make our world a much better and safer place!

Masked chafers (Cyclocephala spp.) are sometimes referred to as June beetles, also, but they are smaller and reddish brown in color. These feed on turfgrass (bad), weeds (good), vegetables and ornamental plants (bad). If only we could have weed-specific beetles. Wouldn't that be great? They are found when tilling the soil or digging in your garden.

Bumble flower beetles (Euporia inda) acquired their name because they emit a loud buzzing noise similar to a bumblebee. These beetles are yellow-brown or cinnamon colored with irregular black dots. They also are hairy behind the head and on the underside of the body. Picking them up isn’t always advisable as they emit a defensive chemical that has a pungent chlorine-like odor. The larvae feed on or near...
fermenting and/or decomposing organic matter.

**Pop Quiz time: Which beetle larvae would you want in your compost pile?**
If you answered June beetles because you think they are beautiful, you get a point for your artistic sensibilities, but fail the quiz. The correct answer is the bumble flower beetle larvae. These grubs provide a service by breaking down cellulose and converting it to nutrients that you want in your compost. The flip side is that the adults do feed on fruit but do not seem to be the problem that June beetles can be.

**Pop Quiz #2: Do we have Japanese beetles in Arizona?**
Points if you answered No. While many beetles are mistakenly called Japanese beetles, they have not made it to Arizona yet. One was possibly found in Tucson but it was never confirmed. Know your beetles—don’t jump to conclusions.

So back to the question of grubs in your compost. Some grubs can be good so you need to do your homework and identify the larvae that is in your compost. The grubs can be identified as to species, so get to know them. It may be grubby (hah!) work to begin with but with a little experience you will get to know the ones you want to keep and the ones you don’t. Get a hand lens and check out the last abdominal segment. Flip the grub onto its back and look for the arrangement of spines and hairs. They form a distinctive pattern that will allow you to identify the species. Ohio State University has a publication that can help to identify grubs at www.oardc.ohio-state.edu/atru/research/grubs.pdf or is available through Ohio State University Cooperative Extension.

**Pop Quiz #3: Should you treat your compost pile to kill grubs?**
Points for No and Yes. You are using the compost in your garden so I’m thinking you probably don’t want to use any pesticides. What’s the use of making your compost if you are going to lace it with pesticides? Yes, if you use chickens, let them loose, they love grubs. Just because they aren’t cute doesn’t mean they are bad.

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**Storing Pumpkins and Squash**

So has it been a good year for squash this year? Do you have a pile of them sitting around? If they are winter squash you can store them to use later on. (Summer squash like zucchini, patty pan and crooknecks will not store.) What you are looking for is any squash with a hard rind. If any of them have woody stems, cut the stem, DO NOT break it off. Leaving the stem on prolongs the lifespan of stored squash. If you can, leave a three to four inch stem on pumpkin especially. Typically pumpkins don’t last in storage as long as other squash. Be gentle, any injuries, bruises, cuts in the rind will cause the squash to spoil quickly. Don’t pile the squash; you should have room to lay the squash out so none touch each other.

Get them protected before the cold weather hits. These are not cold weather plants and once the temperatures go below 50 degrees for a week or if they are left in during prolonged rainy periods (not a lot of chance for any of that here but you never know) they will quickly spoil even if they are protected afterwards. It’s best if they are picked and put somewhere where they will have warm dry temperatures for several days to allow any cuts to heal up.

Store as close to 50 degrees as you can and it’s best if you can keep them between 70 and 80 percent humidity (not much chance of that here) but do the best you can. You want good air circulation, do not stack. Avoid storing on the ground or floor. It is best if they are stored on a shelf.

Acorn squash can typically be kept 5 to 8 weeks, butternuts from 2 to 3 months and Turbans at least three months.

Pay attention to them and get rid of any that are turning soft.
Tortoise Beetle—What the heck???
by Nora Graf

Raise your hand if you have ever heard of a tortoise beetle. Professional entomologists will have to recuse themselves but the rest of you, I bet, don't have a clue. The reason I am talking about the elusive tortoise beetle is that one showed up the other day at the extension office. Someone brought in a tomato plant with galls on the stems, wanting to know what was causing the problem. In searching for an answer, this amazing creature (more like something from the deep sea than a tomato plant, see above) came to light. (It had nothing to do with the galls.)

Now I'm not the greatest fan of insects but I try to be tolerant of their place in the world, only dealing with them when I have to. In spite of that, I marvel at the myriad ways they have evolved to fit into a niche and survive. Like most creatures they have interesting structures and strategies to get through the day. The tortoise beetle is no exception.

These beetles are a subfamily of the leaf beetles. Worldwide there are over 125 different genera. Overall they are quite colorful and metallic looking and some species can change color when disturbed or as they die. Some species have been used in jewelry because of their bright metallic hues. The adults are small beetles between a quarter of an inch to a third of an inch long, somewhat resembling ladybug beetles. From this point they get a bit weird. The shell extends over the body and they have a flat bottom so it looks like they don't have any legs or head, hence the name tortoise. On top of that, the larva are flattened and spiny. They have two very long spines in the rear that catch their excrement and shed skins. They hang this over their backs (think squirrel tails) and they become living piles of dirt and what bird is going to eat a pile of dirt. It's an interesting way of protecting themselves to say the least.

Adults can over-winter under things like bark, leaves, trash etc. Starting in May they will emerge and then lay eggs in June or July where they hatch into larvae. Once grown they pupate on the undersides of leaves. The pupation period is short and they hatch into adults that feed and find a place to hibernate.

Both the adults and larvae feed on leaves. The adults only leave holes not much different in size than themselves while the larvae can chew holes or completely skeletonize a leaf. Young plants can be completely eaten by them. While they really like morning glories and bindweed, they also have an appetite for members of the Mint family and Solanoaceae family, which includes tomatoes, peppers, eggplants, sweet potatoes and potatoes. They are not considered a serious pest but have been to known to cause considerable damage to sweet potatoes in some southern locations. They do not seem to be serious pests in Arizona.
NORA GRAF, NINE NEW EMERITUS’ HONORED AT RECOGNITION PICNIC
You could see forever from the hilltop picnic pavilion at Heritage Park, Prescott where the annual Master Gardener Recognition Picnic was held September 14. The weather was picture-perfect, delicious food plentiful (organized by Dede Erceg and crew); 78 MGs and guests were ready to celebrate.

Loud applause propelled Jeff’s wife, Dorothy Baxter, to come forward to tell a few trademark jokes to get the awards rolling. Cathy Michener (Membership Chair) and Jeff handed out various awards to MGs that had achieved assorted levels of volunteer hours. A total of 51 MGs were recognized.

Nine new Emeritus level MGs were also recognized for their ten year involvement with the Yavapai County Master Gardeners. Mary Barnes, Pam Bowman, Anita Fleming, Connie Loving, Doug McMillan, Missy Sandeen, Paul Schnur, Karen Wagley and Richard Wise theoretically no longer have to volunteer time to be considered active members. Fat chance, as these MGs are among the more active members having already been recognized for over 11,000 volunteer hours.

The final award of the day recognized Nora Graf for reaching 4000 hours. Nora, editor of Yavapai Gardens, also received a letter and President’s Volunteer Service Award certificate from President Obama.
Congratulations and Thanks!
to all the MG’s who crossed milestones this year.

150 Hours
Coon, Toni 09
Deane, Nancy 12
Erceg, Dede 11
Grams, Jane 08
Hilton, Paula 11
Janowski, Lois 11
Jolly, Carole 11
Mullins, Virginia 11
Peterson, Rich 11
Rosenow, Lois 10
Rotta, Pauline 11
Sanzo, Linda 11
Simpson, Lynn 09
Sisley, Kathy 11
Vadnais, Lee 12
Wackerly, Toni 09

250 Hours
Black, David 08
Bostrom, Bev 03
Brook, Susan 09
Marmaduke, Bill 11
Reese, Gwynne 10
Sheehan, Jim 12
Wagley, Karen 03
Williams, Rose 05
Wilson, Deborah 07
Young, Jennifer 08

500 Hours
Fonnet, Hope 11
James, Laura 01
Konzem, Tom 09
Neil, Garry 10
Peterson, Susan 11
Roelofs, Faith 07
Vogel, Faun 11

1000 Hours
Gessner, Bob 09
Loos, Betty 08
Loving, Connie 02
Mannen, Judy 02
Mansoldo, Janet 04
Mazella, Angela 05
McIntyre, Steve 09
Michener, Cathy 05

2000 Hours
Filippino, Art 93

4000 Hours
Graf, Nora 92

Emeritus
Barnes, Mary 03
Bowman, Pam 03
Fleming, Anita 03
Loving, Connie 02
McMillan, Douglas 01
Sandeen, Melissa 03
Schnur, Paul 03
Wagley, Karen 03
Wise, Richard 03
Did you know there are approximately 18 species of termites in Arizona? The good news is that they are all not trying to take your house down. In fact only seven species are considered serious pests. To make things easier, termites are grouped into three main categories, although they have similar lifestyles. The categories are subterranean, damp-wood and dry-wood. Subterranean must stay in contact with moisture in the soil. Damp-wood termites are found in dead wood but it needs to be damp. Dry-wood termites infest dead dry wood.

Overall, termites are social animals like ants. They have different castes that have specialized jobs within the group. Just as in ants, there are soldiers that defend the group, workers that feed and care for the group and reproductive adults that are constantly adding new generations. One other group is seasonal only. Winged adults each year swarm and form new colonies. Each species has a different swarming time, mostly depending on elevation. These are interesting events but don’t panic, less than 1% of the termite swarms goes on to form a new colony.

Termites survive by being able to break down cellulose into nutrients. The termite’s gut contains a variety of bacteria and protozoa that produce enzymes that will digest the wood.

Various species of subterranean termites are found across the United States and are the biggest concern in buildings. There are three species in Arizona that cause damage. A rough estimate is that they cause $2 billion dollars of damage each year. They swarm in the spring, usually after heavy rains. They need to remain in contact with soil for the moisture.

The species Gnathamitermes perplexus are considered true desert termites as they will attack to a variety of desert plants, fences, cow chips and even dead grass and weeds. You may see “drop tubes” or the plaster-like dirt coatings on trees and fence posts. They aren’t considered serious pests and don’t need to be treated unless they are found in a structure. The termites swarm in the summer and you can see tubes over dead grass or on trees, cactus or any wood laying about or sheets of mud on wood fences.

Reticulitermes tibialis is an arid land termite that can be a problem. Found in the desert, they will change from eating native trees and shrubs to houses when development removes the vegetation and the wood in houses replace it.

Heterotermes aureus is the most destructive of the bunch. It likes a variety of different woods including cactus ribs, dead and sometimes living desert plants and any wood provided by humans—telephone poles and houses.

Damp-wood termites prefer dead but damp wood. They do nest in the ground and travel to wood to feed. They are not considered serious pests. The only species in Arizona that is considered a problem is Paraneotermes simplificornis and it is technically not even a dampwood termite. It’s somewhat confusing so I am just going to bypass the classification thing. It really needs moist conditions so attacks moist wood below the ground. It has been know to attack living plants and young citrus trees.

Dry-wood termites, no surprise here, like dead dry wood that doesn’t contact the ground. These termites don’t use tubes to move around so aren’t as noticeable as other species. It takes an inspector who knows what to look for to find evidence of them. A sign to look for is dry, hard fecal pellets that resemble sawdust. There are two species that are considered a problem, Incisitermes minor and Marginitermes hubbardi. They attack sound dry wood and do not require any contact with the soil. Their lives are spent in the wood. One of the characteristics is that they construct “kick holes.” These small holes are used to kick out their fecal pellets from the galleries they create. This characteristic can help to identify termite problems in structures. I. minor is considered one of the most destructive drywood termites in the West.

How do you know if you have termites? There are certain characteristics to look for. Look for the mud tubes on walls, holes in the wood and piles of wings near light sources. If you see any of these things it is time to call out a professional. They can confirm the presence of termites and help work out control options. Check the references of anyone coming to inspect the house. You want someone who is well-trained and can provide you with science-based recommendations.
FROM THE EDITOR: Please send or email articles and announcements to the address below. All articles must be in my hands by the 10th of the month. Short announcements (no more than 2 or 3 lines) will be accepted until the 25th.

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Next Meeting

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