In layman’s language (as best as the science can be translated), there are actually two yucca moths. Co-evolution is a process of mutual adaptation in which two species evolve in response to one another. Yucca moths are the only pollinators of Joshua trees, and the yucca moths can reproduce only by laying their eggs in pollinated flowers. Smith postulates that the Joshua tree flowers have evolved over time to limit the number of seeds that can be eaten by the moths, but the moths have evolved to become better at laying their eggs on Joshua trees. The difference in the moths combined with the difference in the flowers may be the explanation for the evolution of the two types of Joshua trees.

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upon what makes us feel comfortable within the tribe we associate with. The shortcomings of not listening to science do have consequences. The author states that it is very important and makes the following statement in the article - “Being right does matter—and the science tribe has a long track record of getting things right in the end. Modern society is built on things it got right.”

I hope you take the time to read this article.

To locate article, search for “Why do so many reasonable people doubt science?” Then select article in National Geographic Magazine written by Achenbach (the link would not work).

Master Gardener Graduation
The Master Gardener Graduation this year was a great event. It is wonderful to see the program flourishing with many new Master Gardeners joining the ranks. I had the opportunity to give a short talk as part of the program and I chose to talk about some of the history of the program including information on the early days at Washington State University. The link below is to an article written by WSU Extension faculty about the history of the program in their state. Some of you may find it interesting.


THOUGHTS AND IDEAS
TOM DE GOMEZ
Regional Director
Coconino and Mohave Counties

GMO
This will be my last installment on what I will write on GMO’s. The following article (see the web link below) was written by a science writer and was passed on to Extension faculty by Dr. Jeff Silvertooth our director. This article is not unique but one of many that has been written as of late in an attempt to encourage people to listen to science. The article expresses the wisdom in believing in well executed science versus following the crowd or tribe we most closely identify with (see the article for what is meant by “crowd” and “tribe”).

Since Extension is based on good science, Dr. Silvertooth and others are concerned that we (myself included) as the “public” base some of our decisions upon what makes us feel comfortable within the tribe we associate with. The shortcomings of not listening to science do have consequences. The author states that it is very important and makes the following statement in the article - “Being right does matter—and the science tribe has a long track record of getting things right in the end. Modern society is built on things it got right.”

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We ended the Spring quarter in Mohave County on a very high note with the addition of 12 newly Certified Master Gardeners. This was celebrated with a luncheon on May 27 at the Canyon 66 Event Center in Kingman. 60 Master Gardeners, new Associates and guests attended the event.

Tom DeGomez, our Regional Director, was the Keynote speaker with an inspirational talk about the inception of the Master Gardeners. He ended leading us all (well some of us), singing the “Garden Song” by John Denver. Our guest speaker was Randy Chartrand, Manager of Star Nursery in Kingman.

After completing the 2014 Master Gardener class series, the following Associates had to complete a minimum of 50 hours of volunteer service and 12 hours of continuing education which they well exceeded.

<table>
<thead>
<tr>
<th>Location</th>
<th>Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullhead City</td>
<td>Karen DeYoung</td>
</tr>
<tr>
<td>Lake Havasu City</td>
<td>Jerry Cornell, Gail Shaw, Sylvia Spiegel, Jamie Zimmerman</td>
</tr>
<tr>
<td>Kingman</td>
<td>Fred Bianes, Mickey Chace, Marina Diamond-Heart, Cindy Edwards, Lynn Kannianen, Martha Sperry</td>
</tr>
</tbody>
</table>

We also welcomed 15 new Associates who just completed the 2015 Master Gardener class series. They have already completed their orientation and have designated veteran Master Gardeners to mentor them in their first year. We look forward to their Graduation gala in 2016!

It is very exciting to start our new fiscal year with new volunteers, new ideas and new challenges. As always, I welcome and encourage your comments and feedback. My ‘door’ is always open!

**WATER – USE IT WISELY**

Spread the Word

Are you writing an article or do you need tips for a newsletter, a blog or a school paper? Water – Use It Wisely is overflowing with great water-saving tips, ideas and tools to share. Feel free to share their 100+ tips, information from their section on Arizona Desert landscape care, the link to their home water challenge, or a listing of their Arizona landscape classes and more. When suitable, provide credit as Source: wateruseitwisely.com.
Happy Summer Gardening from the Master Gardeners of Lake Havasu City

The triple digit temperatures are upon us here in the low desert as I write this. I personally, am resolved to accomplishing any gardening tasks in the morning hours, while the temperature is tolerable. Summertime gardening here in Lake Havasu is not for the faint of heart.

This is the time of year that the city has slowed down a bit, since the winter visitors have returned to their summer homes in their respective states. We will again welcome them starting in September, when the early arrivals begin to trickle into town.

The last few months have been fairly busy at our Home Garden Day at the Library. I have met a lot of people that have retired and relocated to this area and are anxious to learn about what they can or cannot in many cases, grow in our environment. It is always a pleasure to provide the correct horticulture information to these newly arrived members of the community.

Congratulations to the new Master Gardeners that have committed themselves to our group here in Lake Havasu City. Welcome Jerry, Gail, Sylvia and Jamie. Currently, there has been no interest in new associates joining our group. That could change however.

On May the 30th, four of us from Lake Havasu City were able to join other Master Gardeners from Kingman and Bullhead City in an informative tour of UNCE Community Gardens and The Springs Preserve in Las Vegas.

Afterward, Gail Shaw, Lois Frazier and I visited the Ethel M. Chocolate Factory Gardens in Henderson.

In closing, have a Great Summer!

Past Month’s Events

- **February 14** – Debbie Cleveland hosted a *Rose Pruning Workshop* at her house. Over thirty rose enthusiasts and Master Gardeners attended this event.
- **Feb 27, 28 and March 1** - *Tri State Home and Garden Show* held at the Edgewater convention center. The Kingman, Bullhead City and Lake Havasu Master Gardeners all staffed the booth and put on varied presentations for the public.
- **March 21-22** - *BHC H & G Show*. Several Master Gardeners from Kingman assisted the Bullhead City Master Gardeners with a booth to answer questions and concerns of Bullhead City residents.
- **April 11** - *Venomous Critters Workshop* at Library. In collaboration with the Arizona Game and Fish Department and the Mohave County library, Denise Neath acted as lead for this lecture/workshop which was attended by over fifty members of the public and Master Gardeners.
- **April 11** - *Girls Camp with the Soroptimists* where Linda Reddick gave gardening instructions for over one hundred young girls.
- **April 17-19** - *Mohave County Home & Garden Expo* booth was hosted by Mohave County Master Gardeners. Over 400 residents stopped by the booth to say hello or ask gardening questions. The Kingman area Master Gardeners held three workshops: *Creative Ways of providing nutrients for houseplants*–Mickey Chace, *Composting*–Vince Beatty and Ron Tanner, and *Fertilizing techniques* – Gail Elliot. Sue West was the lead for this event.
- **April 22** - *Houseplants, Cacti, and Succulents* workshop at White Cliffs. Sandy Hampson gave a talk with a slide show on various cacti and succulents found in the Kingman and surrounding areas.
- **April 25** – *Arbor Day Tree Planting* Celebration at Monsoon Park in partnership with the Cerbat
Garden Club. Vince Beatty, Ron Tanner and Fred Bienes participated in this annual event which celebrates National Arbor day by demonstrating proper tree planting methods.

May 13 - Planting to Attract Birds workshop. This workshop was held at White Cliffs Senior living center. In partnership with White Cliffs and the Kingman Master Gardeners, Eric Moore, owner of Jay’s Bird Barn in Prescott, AZ held an entertaining and lively workshop and slide show of methods and means to attract birds to the home garden. Denise Neath was the lead.

May 13 - Container gardening presentation at St John’s Methodist church in Kingman. A demonstration and talk was given by Vince Beatty with an assist from Sandy Hampson on how to grow herbs and vegetables in homemade containers.

May 30 - Visit to UNCE and Las Vegas Spring Preserves. Several Master Gardeners from Mohave County visited the University of Nevada Cooperative Extension Office for a guided tour of the facility and grounds by instructor M.L. Robinson. From there the Master Gardeners drove to the Las Vegas Springs Preserves, where they interacted with other Master Gardeners from Clark County NV to learn more about different plants, plant care and maintenance of a variety of plants that are native to the area. This event was coordinated by Denise Neath.

June 1, 2, and 3 - at Stetson Winery – Train the Trainer Grape vine trimming. Over a three day period Don Stetson, owner of Stetson Winery trained Master Gardeners on proper grape vine thinning, trimming and pruning techniques. This ‘Train the Trainer’ activity was coordinated by Stetson Winery and Denise Neath.

June 10 - ‘Busy as a Bee’ workshop at White Cliffs. Johnny Hoeft from ‘Johnny Bee Good’ Bee removal service gave a rousing presentation at White Cliffs Senior Living on all things about bees. There was a talk and slide show that was geared toward the home gardener. Questions about safety around bees, ‘killer bees’, swarms, and proper clothing and apparatus were addressed. Marina Diamond-Heart was the lead for this event.

June 15 - Plant Identification Exercise at White Cliffs. Working with Michelle Turner, Activities Director, Master Gardeners Linda Reddick, Cindy Toepfer, Cindy Edwards, and Ron Tanner gave a talk to residents at White Senior living on the various types of plants and fruit trees at the facility.

Upcoming Events

July 22 - 2 pm- 3:30 Ask the Master Gardener

Possible August workshops include - Fall garden seed selection, square foot gardening and A, B, Cs of gardening: Asparagus, Berries, and Cantaloupe (unusual crops)

Sept 17, 18, 19, 20, 2015 - Mohave County Fair. An informational booth will be hosted by the Mohave County Master Gardeners. The Master Gardeners will also participate in giving instructions to plant trees at the Unisource Tree Give-away which will be held during the fair until all trees are gone.

Community Garden

The DIG it Kingman Community Garden is just about up and running. The garden is located on the corner of Harrison Street and Lillie Ave. Irrigation lines have been installed and garden beds constructed. The garden, which is one acre, is now fenced and secure. On June 13, a pumpkin and watermelon patch was started. Master Gardeners were on hand to instruct the public on how to mound, grow and care for the pumpkins and melons. I would like to extend a special note of thanks to Project lead, Mike Roundy, who has worked tirelessly to construct the garden, lay the irrigation lines and put up the fencing. Hats off to Mike! Other members of the Garden Steering committee to be commended are Councilwoman Jen Miles, Tom Carter, Travin Pennington, Jim Winso and of course our Master Gardeners, Denise Neath, Sue West. There have been many other Master Gardeners and Associates who have assisted in this dream that has now just about become a reality. The Steering Committee will start to lease the garden beds very soon. Stop by and take a look when you get a chance. And of course we can always use a helping hand with the finishing touches. Master Gardeners are

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encouraged to help with gardening education as we move further along.

NOTE OF THANKS TO BILL STILLMAN, COORDINATOR BULLHEAD CITY AREA MASTER GARDENERS

You may have heard that Bill Stillman, who has been the Coordinator for the Bullhead City Area Master Gardeners for many years, is turning the reins over to Debbie Miller.

I want to personally thank Bill for the help and advice he has given me since I became Coordinator for our Kingman Area group. I could always depend on Bill’s critiques. I am sure that Debbie will do a great job too. Of course, she will be assisted by my good friend Leroy Jackson in her newly assumed duties. They will be fine. Bill will still be an active Master Gardener and I’m sure he will be there whenever we need him.

Thanks Bill!!

Once again, the Kingman Area Master Gardeners would like to extend our thanks to Mohave Community College (MCC), Kingman Regional Medical Center (KRMC), the Mohave County Library in Kingman, and White Cliffs Senior Living Center for the use of their facilities in holding our workshops and demonstrations. A special note of thanks to White Cliffs Senior Living Community Relations Director, Cecelia Clouser, for all her work in partnering with us to hold our workshops at that state of the art facility. I encourage you all to visit White Cliffs when you get a chance. Our events are also noticed in The Kingman Daily Miner and posted on The GoKingman website and the Powerhouse center. Also, thanks to the many local businesses that allow us to post our informational flyers and give us their support.

flyers and give us their support. Please contact the Extension Office at (928) 753 3788 for more information on upcoming events and workshops, or check your email for announcements if you are already on our email list. If you are not yet on the list, and desire to have your name and email address added, contact the office and ask them to include you.

We know you are in the midst of your growing season and will soon be, if not already, harvesting those home grown veggies. Looks like we’re going to have a hot summer, so be careful when you garden. Don’t get caught in the Monsoon rain and lighting, but most of all, enjoy your summer!

BULLHEAD CITY AREA MASTER GARDENERS
Debbie Miller, BHC Area Coordinator
Leroy Jackson, Co-Coordinator  Karen DeYoung, Secretary

There has been a “change of command” within The Bullhead City Master Gardener organization. After eight long years as Coordinator, Bill Stillman is finally able to relinquish the Coordinator role. Bill expects to be heavily involved with special projects and will continue to share his expertise on all things related to the Horticulture Field. Bill kept the group together through thick and thin. We thank him most sincerely for his wonderful leadership and appreciate his continued involvement. During the June Master Gardener Graduation, Bill was presented with a plaque thanking him for his service. The Bullhead City Master Gardeners added our thanks with cupcakes during our June meeting.

Debbie Miller is assuming the Coordinator position and Leroy Jackson is, thankfully, remaining as Co-Coordinator. Newly certified Master Gardener, Karen DeYoung, will become Secretary for the group. Karen was unable to attend the recent graduation luncheon, but the group celebrated her new status in May.

The Bullhead City Master Gardener group has doubled its size with the addition of eight wonderful new Associates from our recent Horticulture classes. Many of them are experienced gardeners, either here in the tri-state area or in their former home states. We welcome them most heartily!

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Home Garden Days will be on hiatus until September. Normally, attendance starts dropping off in March and April when our winter visitor’s leave for summer months and our Master Gardeners take off the months of July and August as well. Home Garden Days are held on the second Thursday of the month, from 10 am until noon. We will have a change of venue starting this September, moving from the Mohave County Annex building to the Bullhead City Area County Library.

To our surprise, 25 people attend our June 11 Home Garden Days session. We had many new faces as well as some our more familiar full-time residents attending this workshop. During this June Home Garden Day event we had lively discussions on many different topics from irrigation, citrus issues, vegetable gardens, plant identifications and more. It was a “soup to nuts” session with all in attendance participating. One new helpful hint passed on by a participant was putting tinsel (as in Christmas tree decoration!) on pomegranates to scare away birds. One of our new Associates insists it works for her and keeps the birds from getting to the fruit the moment it ripens.

Our Library presentations have had a mixed response this spring. Special thanks to Carol Stockwell for her great job sending emails to past event participants publicizing our upcoming programs each month. Our May presentation on “Summer Plant Survival” had a record number with over 40 people in attendance. Our April audience for “Planting Summer Vegetables” was much smaller, and we do not do a program in June. We will resume the Library presentations on September 17 with a workshop on “Cool Season Plants”.

The library presentations are held on the third Thursday of every month from 2 to 4 p.m. (except December, June, July and August). Our presentations include PowerPoint narrations and/or hands-on demonstrations for each of the workshop. Additionally we appreciate the assistance of the Kingman Master Gardeners for some of the programs as they participate in demonstrating their expertise and for keeping our audience engaged. Collaboration with the Kingman and Havasu groups, whether for workshops or community events, benefits everyone, and we hope we can continue the cross support of all the groups.

Starting October 3rd, the Bullhead City Farmers Market will be held on the 1st Saturday of the month from 9 am until 1 p.m. at the Community Park on Highway 95 in Bullhead City. They continue to solicit vendors and would like more “home gardeners” with excess fruit or vegetables to sell. We will continue to have a table at the event each month to answer questions from the public. We understand the Mohave Valley area farmers are starting a Farmers Market this fall, and we will have a table available providing it doesn’t conflict with other events we’re committed to.

We continue to average only 3-4 Hotline calls per month and citrus problems/questions, saguaros and palm trees have been the subject of most of them. We did answer calls from Palm Gardens, NV, and Beaver Dam, AZ in May, but those did not require home visits, fortunately! We had to look at maps to find both places—they’re not near Bullhead City. This fall as snowbirds return and discover problems that occurred over the summer, the hotline calls increase.

Upcoming events - We look forward to assisting the Kingman Master Gardeners at the Mohave County Fair and the Unisource tree giveaway this September. The Kingman MG’s return the favor in November when our local electric company distributes their trees in Bullhead City on November 14th. We will present a “Planting Your Desert Tree” workshop in October in preparation for the giveaway.

Thanks to the Lake Havasu Master Gardeners who shared their display board and photographs of desert plants with us to use at the Mohave Valley Contractors Show in March. We liked it so much we have acquired our own board and will be busily taking photographs of desert plants to attach to our board at future events.
HIDDEN DANGERS IN THE HOME GARDEN

By Ron Tanner, Kingman Area Master Gardener

Have you ever been working out in the yard and later discovered a huge red swelling on your foot, leg, or ankle? Well believe it or not, that is not so unusual. We love our gardens and yards as a place of refuge, solace and comfort, but oftentimes we do not consider that there may be hidden dangers lurking. You may not have considered that many injuries, disease and illness are brought in from our precious gardens. Of course, this is not meant to discourage home gardening, but to make note that we must always be aware of our surroundings and the things contained therein.

- **Plants:** There are several plants that may be in your yard or garden that are potentially harmful to your children, such as: Rhododendron, Lily of the Valley, Hydrangea, Poet’s Narcissus, Foxglove, Oleander, Purple Nightshade, Mistletoe, Larkspur, Poinsettia, Mountain Laurel and Water Hemlock. Though some these plants may not flourish in our area, you might take care when young children or pets are around them, wherever they may be found.

- **Try fighting with a prickly pear.** I bet you lose every time. The spines can cause infection to your fingers if not completely removed. We all love roses, but rose thorns don’t love our hands. I nearly lost a finger once by developing an infection from a thorn only partially removed.

- **Insects and pests:** Have you ever attempted to weed your garden or pick veggies that are camouflaged or hidden by large leaves or plant foliage and suddenly discovered you have disturbed a Black Widow spider hiding near the base of the plant or under a rock? Just the other day, I was picking a beautiful zucchini and noticed I was literally inches away from a gigantic spider. Luckily for me I had on heavy gloves and did not touch the creature. One good rule of thumb is to never put your unprotected hand or fingers in any place that you cannot see under or around.

- **Garden Tools, Power and otherwise:** Have you ever been cut by a sharp gardening knife while not paying attention to detail? **Pay attention, don’t get distracted.** Weed eaters are known to kick up rocks and debris that can injure us. Eyes, legs, hands, etc. can all be damaged by flying objects. **Wear protective severely.** clothing and equipment (eye, ear, head, hand, foot)

- **Loud noise from lawn mowers, chain saws, leaf blowers, can damage our hearing.**

- **Wear protective ear pieces.**

- **Long Hot Afternoons:** Exposure to heat and bright sun for long periods can cause skin and heat related problems. Dress adequately, and...
Drink plenty of water. It is always a good practice to keep a cool thermos handy when you’re in the garden and may be exposed to temperature extremes. Take regular breaks in shade or cooler areas when temperatures are extreme.

- **Overexertion**: Something we may not think about is the overexertion in the garden. That almost sounds like an oxymoron. But if we are not in the best physical shape, gardening can take an immediate toll on our bodies, not to mention the next day. Improper lifting and twisting while raking or shoveling will keep your chiropractor happy. Be careful and use proper technique.

**Exposure to chemicals and “Organic” products**: Of course, we all know the dangers of harsh chemicals and pesticides (we encourage the use of Integrated Pest Management practices). But were you aware that bone meal, considered organic, is not healthy to breathe, especially if you have respiratory problems? Wear, at minimum, a dust particle mask when handling it. The same thing can be said of diatomaceous earth. Always be careful when using any garden pest product. Be mindful to follow the safety instructions on the package label. When using crushed eggshells in your garden for added calcium, be sure to clean the shells first to lessen the chance of spreading salmonella to your plants and vegetables.

All things considered, home gardening is one of the better things we can do to improve our physical and mental well-being, but we must never garden with reckless abandon. Take time to observe your surroundings, properly prepare, and then have fun. You’ll reap all the rewards and benefits of this most enjoyable activity.

**FLOWER OF THE QUARTER**

By Marjorie Martinovic, Kingman Area Master Gardener

“The garden that is finished is dead.” H. E. Bates

**Agave/ century plant**

**Description**
Cold-hardy Agave are statuesque succulents that thrive in hot sun and poor soils where they receive little water. Urban legend said that Agave would take 100 years to bloom, before promptly dying. We now know that the century plant’s life cycle is about a quarter of that time. One gorgeous bloom, followed by death is a process known as semelparity. These plants are not kid safe because of their fierce spines. Plant them away from walkways and entrances. Warning! The juice from many species of agave can cause acute contact dermatitis. It will produce reddening and blistering lasting up to two weeks.

**Facts**:
- **USDA Growing Zone**: 3-9
- **Regions**: Western and Hot desert
- **Color**: White
- **Bloom Time**: Early to late summer
- **Sun**: Full sun  
- **Rain**: Less than 10 in.
- **Soil**: Average, clay, sandy, low fertility, well-drained  
- **Moisture**: Xeric
- **Height**: 12 in. +  
- **Width**: 10 in. +
- **Attracts**: Hummingbirds
- **Resists**: Deer, rabbits

**OPINIONS**

"This is such a symbol of the desert, of AZ. I love these plants.” Sally

""So iconic of our area! So easy to grow!” Jo
Lake Havasu City
2015 Graduates

Don Bergen
LHC Emeritus
25 years

Vince Beatty
KGM Emeritus
20 years

Gail Key
LHC Emeritus and
8 years Area Coordinator

Ron Tanner, KGM Area Coordinator
Sue West, W&W Editor 5 years

Leroy Jackson and Debbie Miller
BHC

Bill Stillman
BHC
8 years Area Coordinator

Karen DeYoung
BHC
2015 Graduate

Kingman Area Master Gardener
Graduates of 2015
WORKSHOP: GRAPE PRUNING at VALLE VISTA

BEFORE PRUNING →→

INSTRUCTIONAL DEMONSTRATION

VISITATION TO
UNIVERSITY OF NEVADA DEMONSTRATION GARDEN AND THEN TO SPRINGS PRESERVE

←←AFTER PRUNING

WIND & WEEDS  SUMMER, 2015  PAGE 11
CALENDAR OF EVENTS
UNIVERSITY OF ARIZONA, MOHAVE COUNTY MASTER GARDENERS
SUMMER, 2015

JULY
7th  LHC    11:00am-1:00pm HOME GARDEN DAYS, LHC Library
15th KGM    6:30pm – 8:00pm ASK THE MASTER GARDENER; MCEO
22nd KGM    2 pm- 3:30pm ASK THE MASTER GARDENER: White Cliffs
23rd KGM    6:00pm-8:00pm MCEO, KGM Monthly Meeting

AUGUST
4th  LHC    11:00am-1:00pm HOME GARDEN DAYS, LHC Library
22nd (tentative) KGM    FALL GARDENING – details being finalized
27th KGM    6:00-8:00 MCEO, KGM Monthly Meeting

SEPTEMBER
1st  LHC    11:00am-1:00pm HOME GARDEN DAYS, LHC Library
8th  BHC    6:00 pm-7:30 pm BHC Monthly Meeting
10th BHC    10am-12pm HOME GARDEN DAYS, Bullhead Area Library
15th LHC    6:30– 8:00 LHC Monthly Meeting, LHC Library
17th BHC    2:00-4:00 pm FALL PLANTING, Bullhead Area Library
**17th – 20th ALL** MOHAVE COUNTY FAIR**
18th                        WIND & WEEDS ARTICLES DUE
24th KGM    6:00-8:00 MCEO, KGM Monthly Meeting