Mohave County Master Gardener Program

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Featured Article by Bill Stillman, Master Gardener, Emeritus

HORTICULTURE HOTLINE

Client calls are one of the many ways that Master Gardeners (MGs) share their expertise with the public. First, a request is made through the Mohave County Extension office for horticulture assistance. Once logged, the request is emailed to the area hotline coordinator. The area coordinator then sends the requested information to one of our MGs. Normally a Plant Specimen Diagnosis and Management Recommendation Form (aka-hotline request) originated by the office is attached. The email, along with the attached form, usually has the requestor's (client) name, their address, phone number, the reason for the request for help, and other information pertinent to the request. Sometimes the information included with the request sounds simple to resolve, sometimes it does not.

The MG's first response should be to contact the client via email or telephone, whichever is most comfortable. The Master Gardener identifies themselves by name and as being a Master Gardener, from the University of Arizona, Mohave County Extension Office. Once the formalities are completed, it is customary to ask about the client's request for help. It is very important to listen to the client and not express your opinion until you have heard all of the client's concerns. Ask if the client suspects what is causing the problem(s). Sometimes just the client's view of the problem will help you formulate your questions and come

up with a solution over your communication. Other times it is not possible since a multitude of problems might exist or the information you are getting from the client does not compare with the information provided.

Questions asked during the initial interview should include what the call was for. If the call is for a failing plant(s), ask the client to describe in detail what is wrong, when it started, and is it a problem in only one portion of or throughout the plant? Then ask irrigation questions such as kind of equipment used to irrigate (hose, bubblers, flood, or drip), the frequency (how often), and the run time (how long does the water run). Soil questions include the soil's ability to drain once watered, and the type of soil (sandy, rock and sand, caliché, other)? Have any chemicals been used, including fertilizers, insecticides, herbicides, fungicides, others? Has there been any recent activity in the area? You have to be careful with this question since some clients will suspect their neighbor, and you can't get involved in a possible dispute of this kind.

If an on-site visit is called for, as a policy we always have at least two people on each visit (sometimes more). The on-site visit is scheduled and, to be courteous to the client, punctuality is expected. Each Master Gardener should wear their identification badge and greet the client upon arrival.

During the actual on-site visit, review your initial communication with the client. I normally have a soil probe with me and my cell phone available for photographs. If the diagnosis is suspected beforehand provide handout information pertaining to the suspected problem. Keep in mind some clients believe they are doing things correctly so, tactfully, suggest any changes or improvements! For example, on more than one occasion, watering with one drip emitter, three times a day is the way the client has been irrigating for years. With a new plant you might suggest they change it to an as needed basis, showing the client how to use a soil probe





to determine the amount of water applied during each application and how often to apply it. This is a very hard sell to some, however showing how to use a soil probe, and running his irrigation system can be very persuasive in showing the client another (improved!) way of doing things.

Sooty Canker fungus (*Hendersonula toruloides*) is another problem we are commonly faced with, particularly around the Bullhead City area. Mulberry trees and citrus trees are likely candidates for sooty canker. When I show up at the client's house I sometimes see heavily pruned trees along with the presence of sooty canker on the sun side of the trees. Again here, you have to listen to the client and ask when and why the trees were pruned. I have been told on more than one occasion a person with a pickup truck and a ladder knocked on the client's door and offered to prune his trees at a bargain rate. The person doing the pruning most likely did not disinfect his pruning equipment and, most of the time, over-pruned the tree exposing it to sun scald and allowing the sooty canker to take hold.

Here is an example of one on-site visit:

The telephone conversation with the client did not resolve the problem. His mesquite tree was dying and one other had already died. The dead portions of the tree were on the shady side and received little afternoon sun. The client purchased the home less than a year ago and all seemed well. Previously the home had been in foreclosure and was purchased then sold as a flip house to the client. An on-site visit was made and, after some discussion, it was still unclear what actually took out one mesquite and was damaging the other. Severe pruning had taken place on the surviving tree. According to the homeowner, it was done to remove borers and dead branches. There were no signs of borers. The surviving tree was dying on the north-east side. Using the soil probe determined the soil moisture was acceptable for this tree. Irrigation was by bubblers every two weeks. There was fresh gravel spread throughout the yard. Additionally, the yard was well maintained and lacking any weeds. One thing the client did mention was there was a photograph on Google Earth showing both the dead tree and the living tree flourishing. Based on the Google Earth photograph of the premises prior to the homeowner taking possession, I suspect a chemical control agent such as ground clear (chemical agent used to kill off all vegetation it comes in contact with) was used as a weed control. This could explain the small mesquite tree dying and the existing tree being in dire straights. Another possibility would be root damage from some sort of heavy equipment or excavation (fresh gravel). If the client had not mentioned the Google Earth photograph, the tree dying incident might have remained a mystery.

Lake Havasu City Master Gardeners

Dan Alberts, Coordinator Sharon Gomez, Co-coordinator

Greetings from the Lake Havasu City Master Gardeners. Summer is upon us once again and we are preparing to welcome it. In the low desert this means extreme heat, and watering efficiently is the key to plant survival. I have adjusted my irrigation controllers and have checked all of my drip heads to achieve the desirable GPH that I know my plantings will need to survive. Deep watering is done on a regular basis on all of my trees, especially citrus. As has been stated in the past, most of the plant problems that we have seen at our Home Garden Days pertain to improper irrigation.

As the heat ramps up, summer is a time of slowing down with many of our activities as Master Gardeners, with the exception of Home Garden Day and our hotline calls which run year round. At the last Home Garden Day, we were very busy with over 25 clients in attendance. This is a great testament to Lake Havasu City Master Gardeners' importance in the community.

As you may recall, the Lake Havasu City Master Gardeners were instrumental in helping to establish The Les Galt Community Garden, located on Moyo Drive near downtown Lake Havasu City. I'm happy to report that the garden is now fully enclosed, with the last of the fencing installed. Check out their "Lake Havasu Community Garden" page on Facebook for more information, including some pictures of their spring harvest. I will update as more progress is made.

In closing, enjoy the summer and stay hydrated!





Amy's Corner

Amy Nickel Instructional Specialist, Sr.

Spring was harvest season for the Master Gardener Program, as the fruits of our Urban Home Horticulture Class came to bear with 15 out of 20 original students successfully completing the program and attending orientation to become Associate Master Gardeners. All three areas will be adding new associates including 10 from Bullhead City, four from Kingman, and one from Lake Havasu City. Please keep these individuals in mind if you are looking for assistance with any official Master Gardener activities, as they will be anxious to meet their 50 volunteer and 12 education hour requirements over the next year in order to become Certified Master Gardeners.

Our annual recognition luncheon was held in the beautiful Bridgeview Room at the Riverside Resort, overlooking the Colorado River. A special thanks to Bullhead City Coordinator, Debbie Miller, for all her help in planning this year's gathering. In addition to our recent UHHC graduates receiving their certificates, we had four associates from Lake Havasu City receive their official Master Gardener badges, as well as nine veterans receive pins for volunteer hours totaling 14,500! We also added one new Emeritus Master Gardener, Debbie Cleveland to our rolls. Debbie Cleveland of Kingman is our newest member to achieve 10 years of service with a minimum of 850 volunteer hours. See the complete list of recognitions below.

As we all know, summer in the desert is a time for reflection and planning, as gardening can become limited in such extremes. Likewise, with the Master Gardener Program, the summer months are proving to be an excellent time to evaluate and re-organize in hopes of a more streamlined program when things ramp up in fall. Be on the lookout for changes to our website, as we work to make it a more user friendly resource for both our Master Gardeners and the public. As always, your input is welcome!

Recognition Luncheon













2017-18 Mohave County Master Gardener Recognitions

UHHC Graduates

Jack Achttien (BHC)

Ed Betts (BHC)

Sue Betts (BHC)

Barbara Burns (BHC)

Mary Cervantes Garrison (KGM)

Susan Crews (KGM)

Gail Garcia (BHC)

Gloria Howard (BHC)

Roy Hayes (KGM)

Naomi Jack (BHC)

Jennifer Keller (BHC)

Meredith Langlois (KGM)

Rebecca Leisle (KGM)

Debra Smith (LHC)

Sue White (BHC)

Graduating Associates

Dan Henry (LHC) Tammy Henry (LHC) Annie Childress (LHC) Jori Schulz (LHC)

250 Hours

Sally Stevens (BHC) Maria Waitas (BHC)

500 Hours

Carol Bruch (LHC) Bob Clotworthy (KGM) Dennis Lesowsky (BHC)

2500 Hours

Gail Key (LHC) Beatty (KGM) Bill Stillman (BHC)

5000 Hours

Linda Reddick (KGM)

Emeritus

Debbra Cleveland (KGM)







The things we find in our gardens & yards!

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Bullhead City Master Gardeners

Debbi Miller, Coordinator Leroy Jackson, Co-coordinator Bonnie Muir, Secretary Bill Stillman, Scribe

The Bullhead City area Master Gardeners wrapped up one of the busiest years ever at our last Home Garden Day in June, and we are looking forward to a restful July and August before starting all over again in September. This year our entire group of 13 dedicated volunteers donated over 1200 hours to the community, and this month we welcomed our 10 amazing new Associates, all of whom bring enthusiasm, experience and new ideas. They will be a great addition to our group!

Our monthly Library programs were the cornerstone of our activities this year, with eight programs reaching an audience of over 438 local residents. Angela O'Callaghan, Social Horticulturist from University of Nevada Cooperative Extension was our only guest speaker this year, and her program in May was a standout. Our own members, notably Bill Stillman, Dennis Lesowsky, Leroy Jackson and Sally Stevens, presented a variety of programs during the year, and the entire group was "on stage" in November when we did a special holiday program on making Christmas decorations from natural materials. Every single person in our group has contributed mightily this year, despite illnesses, "real" jobs and other important demands on their time, and we are very grateful to each of them.

Home Garden Days, both in Bullhead City and Laughlin, continue to draw crowds as well. Over 160 people came with their questions about gardening in the desert. We hold those sessions every month except July and August, and we always have a few new faces, many of whom turn into "regulars". Some of our new Associates were people we first met at a Home Garden Day event.







Other activities this quarter included assisting with the Kingman Master Gardener booth at the Home and Garden Show which was held at the Mohave County Fairgrounds the third weekend in April. Plans are also underway to assist our Kingman colleagues at the Mohave County Fair in September. In return, they help us with our Cool Shade duties in November, and Home Show in March. We always enjoy the opportunities to work alongside our Kingman and Lake Havasu counterparts!



We had several members monitoring the Horticulture Classes through April 19th and, even though they were held on the same day as our Library programs, we managed to staff each activity—again with special thanks to Bill, Leroy and Dennis. With the Horticulture class ending at 1 p.m. and the Library Presentation set-up starting at 1:15, our new Associates got some good practice setting up chairs and tables for our third-Thursday programs as we all ran from the Community College to the Bullhead City Library to get ready for our 2 p.m. start. Some of the audience members started





cont'd Bullhead City Master Gardeners

arriving just as we did, but many pitched right in to help with the setup of the room making it a true community effort.



We were happy to host the Recognition Luncheon at the Riverside Hotel this year, and appreciate everything Amy and Andrew did to facilitate this endeavor. The room was particularly scenic, and the Riverside staff was a pleasure to work with.

We completed our last school gardening session at Fox Creek Junior High in April, and hope to continue working with the science teacher who ran the program at Fox Creek, as she moves to a new school this fall and begins to establish a garden there. Many of us are interested in getting involved in school gardening, but are challenged by curriculum planning for a younger audience. We were excited to meet Mohave County Cooperative Extension Program Coordinator, Bree Daugherty, on a recent site visit at Topock Elementary. Bree oversees the Supplemental Nutritional Assistance Program Education (SNAP-Ed Program) for Mohave County, and has access to state approved gardening curriculum designed for schools. We are looking forward to a partnership with her to help Topock re-

establish their school garden, and to possibly extend that partnership to other Bullhead City area schools who are interested in starting gardens.

We were invited by the Bullhead City Parks and Recreation Department to participate in their effort to establish a community garden in Bullhead City. Bill, Debbie and Dennis have represented the Master Gardeners at the three meetings held to date. Pending approval of the City Council, construction will start this summer, with garden plots available in early fall. Most of the construction elements will be donated by local businesses and our responsibility will be to educate those people who wish to have planting beds at the garden. We will put together a program teaching the basics of growing plants- primarily food crops-in the desert, and will assist in formulating the policies pertaining to weed control, what pesticides may be used (if any), and the types of crops which will do best in this climate. The garden will be located at Rotary Park and the City will provide the water with the plot owners installing their own irrigation system. Many details are yet to be worked out, but our input has been valuable thus far, and we will undoubtedly spend part of our summer scripting the program to teach novice gardeners enough to ensure their success, from soil prep, to planting, to irrigation, and more.

On a special note, we have had wonderful cooperation and assistance from the Mohave Daily News this year in publicizing our Library programs, including a front page article prior to Angela O'Callaghan's presentation in May. Simply writing press releases and getting to know some of the staff has reaped great rewards, and we are extremely grateful to them for all they have done. Although it doesn't happen overnight, getting to know your local editorial staff is well worth the effort, and eventually becomes a win-win for everyone. They are able to fill up a few inches of space with good local information, and we get the word out that the Master Gardener program exists and that we are available to help.





Kingman Master Gardeners

Linda L Reddick, Coordinator

Wow, is it summer? What happen to spring? Hot then cold, windy then cloudy, who knew what to plant when? I do know, no matter what the weather has been, many of the Master Gardeners have already successfully planted their gardens.

April was an exciting month with the Mohave County Home & Garden Show. What a success for our Master Gardeners, from both Kingman and Bullhead City. The booth decorations were informative and decorative, allowing us to meet, greet, and answer questions for approximately 327 of people; young and old, male and female. Thank you Bullhead City Master Gardeners for your assistance, and thank you Kingman Master Gardeners for a job well done. We followed that event with the Arbor Day Tree Planting. Attendance was a little sparse, but nonetheless we planted seven trees with the assistance of some of the participants.

Cathy Bryan's workshop on Bonsai was terrific. The art of Bonsai is very intriguing and time consuming, but Cathy's ability to illustrate and explain how to create a masterpiece was first class.

Welcome aboard graduates of the 2018 Urban Home Horticulture Class. We had an excellent showing at

the banquet held at the Riverside Hotel and Resort in Laughlin. Along with passing out the graduation certificates, pins were presented to several Master Gardeners for accomplishments in volunteer hours. Debbra Cleveland was recognized and awarded Emeritus status. Way to go Debbie! I am thrilled to have associate master gardeners Susan Crews, Mary Cervantes-Garrison, Roy Hayes and Meredith Langlois join the Kingman Master Gardeners. Congratulations to all!

During the month of June, the Elks Lodge invited us to participate in their Home & Garden show to benefit the Veterans home in Kingman. June 23 we are looking forward to a workshop "Irrigation Simplified". Expenditures were voted upon for the Mohave County Fair and the contract has been submitted. There are also workshops planned for July, "How to Enter the Fair" and in August, "Fall Planting." Good job everyone for the advanced planning.

Elections were held and everyone is retaining their positions. I am pleased to have Melissa Palmer re-elected as co-coordinator. Thank you to Cindy Toepfer for her Secretarial services and Education Committee Lead, Cathy Bryan for Workshop Committee Lead, Sandra Hampson for Financial & Acknowledgement Committee Lead, and Shelley Lossing for being the Wind & Weeds Publisher.

STAKING AND PRUNING TOMATOES

by Linda Reddick, Master Gardener Emeritus

Should I stake or prune my tomatoes? Staking or pruning tomatoes limits factors that encourage pathogens by eliminating wet leaves, poor circulation, and rain or water splashed soil. Most diseases require moisture on the leaf to develop and then penetrate the leaf surface causing infection. Keeping the plants foliage away from the soil surface allows air circulation and prevents leaves from getting wet. Removing the leaves that touch the ground also discourages other ground dwelling pests. In addition, keeping the plants within a cage also allows you to spot and identify other pests early.

With regards to staking, take into consideration that most determinate or "bush" variety tomatoes only reach 3 to 4 feet in height while three-fourths of all varieties of indeterminate or "vining" tomatoes reach 5 to 6 feet in

height. Supported plants produce slightly fewer fruits than those left to sprawl, but you can fit twice the number of staked plants into the same space. Tomatoes will ripen earlier because it is easier for sunlight to reach the fruit. Plus, fewer fruits are lost to disease, rot, or pests.

Several support methods can be used including:

- Concrete Reinforcing-wire Cages: Build them 5 feet high and 2 to 3 feet in diameter. Weaving 6 8 foot bamboo poles horizontally through the cage 4 feet off the ground gives additional support to plants heavily laden with fruit.
- Stake and Weave Trellising: This system is good for a large number of plants in a small place. The plants are held up between lengths of twine woven between parallel rows of stakes. Space tomatoes 2 feet apart (instead of the normal 3 feet) in rows.
 - ➤ Drive 6 8 foot tall stakes into place at the end of each row, and after every 2 plants.





- Tie twine to the stake at the end of the row
- Then keeping the twine taut, string it down the row alongside the plants and wrap it once around each pole.
- Working on the other side of the plants this time, continue to the next post and so on to the end of the row.
- When you reach the end, work back in the opposite direction so each plant is growing between the two strings, and the twine weaves from one side to the other on each stake.
- ➤ Weave a new layer for every 8 12 inches of plant growth. Be cautious not to use twine that will stretch under the weight of the fruit.
- <u>Circular Tomato Cages</u>: Can be great for determinate types of tomatoes, but they cannot support the weight of indeterminate varieties because they bend easily and tend to rust after a season or two.
- <u>Square Tomato Cages</u>: Heavy duty, four sided cages providing good stability. Usually 40 inches high and made of galvanized wire so they do not rust. Easily stored as they fold flat.

So now that your plants are staked or caged, what are the advantages and disadvantages of pruning tomatoes? Pruning tomatoes refers to the removal of suckers. Suckers are advantageous stems that grow in the axil of a leaf (the junction between the main stem and branches or leaves). If left alone, suckers will grow into stems and produce fruit. Pruning helps keep indeterminate varieties under control from becoming rangy. Prune suckers when they are 3 inches or smaller. Make your own decision whether to prune or not with the following information.

Pruning Advantages

- 1. Produces larger fruit
- 2. Pruned plants take up less space
- 3. Improved plant health by better air circulation and light penetration.
- 4. Decreases ripening time by the added light penetration.

Pruning Disadvantages

- 1. Less fruit per plant because pruning removes potential fruit clusters.
- 2. Can be time consuming as plants grow quickly requiring weekly pruning.
- 3. You can potentially spread disease from one plant to another.
- 4. If you prune too heavily, you can increase fruit susceptibility to sunburn and cracking.

Now the decisions are up to you. Do you cage or stake? Do you prune, or do you do both?

LEYLAND CYPRESS CANKER DISEASE

by Cindy Toepfer, Kingman Master Gardener

Ken Lain, of Watters Garden Center in Prescott, hosts a gardening program on Prescott Public Radio that airs Saturday and Sundays at 10 am on 90.7 FM in the Kingman area. On Saturday, June 2, he shared that if you have a Leyland Cypress, and branches are turning brown/yellow, it probably has a canker disease that is irreversible, and the tree should be removed. He said Watters Garden Center stopped selling these trees last year.

Canker is a fungus affecting vascular health of the tree. Spores are airborne, and spread easily. Another sign of cancer is sap oozing on trunks and branches. Leyland Cypress generally grows in USDA zones 5-9. I was able to see symptoms of this disease first-hand on Leyland Cypress growing near Rancho Santa Fe in Kingman about 6 years ago.



Like many diseases, canker affects stressed trees caused by poor watering practices common in our area. It is recommended that affected branches should be removed, sanitizing pruning equipment between each cut to prevent spreading. Go to wattersgardencenter. com for more interesting gardening information.





Mohave County Master Gardener Calendar Summer 2018

<u>July</u>

Tues., July 3: LHC Home Garden Day, 11 a.m.-1 p.m.

Lake Havasu City Library, 1770 McCulloch Blvd.

Sat., July 21: KGM Presentation "How to Enter the Fair," 2:00 - 4:00 p.m.

Mohave County Cooperative Extension Office, 101 Beale St., Kingman

Thurs., July 26: KGM Master Gardener Meeting, 6:00 – 8:00 p.m.

Mohave County Cooperative Extension Office, 101 Beale St., Kingman

<u>August</u>

TBD: Kingman Area School Garden Clubs will resume this month,

Contact Linda Reddick for more information

Tues., August 7: LHC Home Garden Day, 11 a.m.-1 p.m.,

Lake Havasu City Library, 1770 McCulloch Blvd.

Sat., August 18: KGM Presentation "Preparing for Fall Planting," Time TBD

Mohave County Cooperative Extension Office, 101 Beale St., Kingman

Thurs., August 24: KGM Master Gardener Meeting, 6:00 – 8:00 p.m.

Mohave County Cooperative Extension Office, 101 Beale St., Kingman

September

TBD: Kingman Area School Garden Clubs
Tues., Sept. 4: LHC Home Garden Day, 11 a.m. - 1 p.m.

Lake Havasu City Library, 1770 McCulloch Blvd.

Tues., Sept. 11: BHC Master Gardener Meeting, 6 p.m. – 8:00 p.m.

Bullhead City Library, 1170 Hancock Rd.

Wed., Sept. 12: Laughlin Home Garden Day, 10 a.m. – Noon

Laughlin Library, 2840 Needles HWY

Thurs., Sept. 13: BHC Home Garden Day, 10 a.m. – Noon

Bullhead City Library, 1170 Hancock Rd.

September 13-16: Mohave County Fair, 10 a.m. - 10 p.m. Thurs-Sat, 10 a.m. - 6 p.m. Sunday

2600 Fairgrounds Blvd., Kingman

Tues., Sept 18: LHC Master Gardener Meeting, 6:30 – 7:45 p.m.

Lake Havasu City Library, 1770 McCulloch

Thurs. Sept 20: BHC Presentation "Starting Your Fall Garden," 2:00 p.m.

Bullhead City Library, 1170 Hancock Rd.

Thurs., Sept. 20: DEADLINE FOR FALL 2018 WIND & WEEDS ARTICLES

Thurs., Sept. 27: KGM Master Gardener Meeting, 6:00 – 8:00 p.m.

Mohave County Cooperative Extension Office, 101 Beale St., Kingman



Summer 2018 Wind & Weeds Assembled by Shelley, Master Gardener

KEY: Bullhead City (BHC) - Lake Havasu City (LHC) - Kingman (KGM) - All



