



Mohave County Master Gardener Program

101 E. Beale Street, Suite A, Kingman AZ 86401-5808 • 928-753-3788 • Fax: 928-753-1665
Email: mohavemg@gmail.com <https://extension.arizona.edu/mohave-master-gardener>

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Featured Article

by

Bill Stillmann, Bullhead City Master Gardener Emeritus

In our usual Master Gardener pruning presentations to the public, we seldom talk in-depth about the safety aspects of pruning. We discuss looking overhead for power lines or watching out for what might be in the tree (possibly a hornet's nest or bees). We suggest looking below to make sure you don't drop a limb onto someone or something, but rarely do we talk about the proper use of the pruning equipment or equipment care, which can be a common source of injury.

The pruning and trimming of trees is not like trimming/sculpting hedges or training a shrub. Trees are much more challenging to trim, and their branches frequently pose a hazard to those who attempt to trim or remove them. From the single palm tree reaching for the sky, or the large mesquite spreading out to the limits of your yard, the trimming process, to be accomplished safely, requires different procedures for each.

Pruning safety starts with the user of the equipment, and the knowledge the person should possess prior to using equipment to trim or prune any type of plant materials. Equipment is not limited to power tools, since manual pruning equipment and common daily use equipment can be dangerous as well.

Using a motor driven device in your pruning quest? Read the manual! This sounds very basic, however

manuals contain information to help guide the operator through the use of the equipment in a safe manner. The manufacturer's manual will likely contain technical specifications, maintenance requirements, and do's and don'ts in the operation and maintenance of their equipment.



Always read the owners manual before operating any motorized device!

Chain saws, motorized pole saws, and reciprocating saws are not toys. Power saws are fast and convenient however, when used incorrectly, they can maim or even be deadly. Mechanical saws also pose a danger to the user.

We have all seen cartoons and photographs of someone sawing off the tree branch while sitting on the downward side of the branch. It seems obvious when you look at this situation however, keeping yourself out of trouble while pruning a tree sometimes is not so obvious at all. An example might be to never cut a branch while standing below it.

Power equipment can be dangerous. Chain saws are, by far, one of the most dangerous pieces of power equipment you can use. Chain saw injuries account for more than 36,000 emergency room visits each year. Chain saw kickback leads to an uncontrolled reaction.



The following list offers some additional guidelines pertaining to pruning safety.

Personal protective equipment: Wear and use the proper protective gear. Gloves are obvious, but you should also wear a helmet, eye protection, facial mask, boots (no open toed shoes), thick pants, and maybe even leg chaps. Eye protection used should be OSHA approved safety glasses complete with side shields. Eye protection should always include side shields. Don't wear loose clothing or jewelry. Ear protection should be worn if using any noise emitting power equipment.

Gasoline powered saws: Use only approved containers to transport and to fuel your equipment. Use a funnel or flexible hose to fill. Allow the equipment to cool sufficiently before filling. Never fill a hot saw, or a saw which is running.

Chain Saws: Inspect the chain for proper tension (adjusted to manufacturer's instruction); making sure the chain is sharp, and the chain oil reservoir is full and operational. Insure the chain brake is operational. Before starting the chain saw, check chain tension, controls, and handles to make sure they function properly and as designed. Never use a chain saw with a dull chain. Do not drop start a chain saw. Start the saw on the ground or another area for support with the chain brake engaged. Do not start the saw if spilled gasoline is present or in the proximity of the stored container of gas. While carrying the saw, shut off the saw, or engage the chain brake. Look for hazards such as nails or other objects in the chain's path. Keep both hands on the saw's handle, and maintain a secure footing. Watch out for decaying branches in the fall zone. Again, be cautious of saw kickback. Don't cut with the saw tip. Additional chain saw Safety information can be viewed at OSHA site:
<https://www.osha.gov/Publications/3269-10N-05-english-06-27-2007.html>

Powered Pole Pruners/Saws: These are designed for one purpose, to cut and prune overhead tree limbs. Do not stand under the limb you are removing. Inspect your work place for any obstacles. Do not use a pole pruner/saw if it is windy or in the dark. Maintain an exclusion work zone. Don't operate a pole pruner/saw if there are any bystanders in the area. Pole saws are designed to be used vertically, and are hard to control if used in or near the horizontal position. Inspect the condition of the trees you want to prune or cut. Dead or dying branches or limbs with wood rot pose a bigger hazard since they are unpredictable while pruning. Keep a firm footing, and use both hands while operating the pole pruners/saw.

Pruning palm trees: Watch out for the skirt. In Phoenix, Las Vegas, and Southern California cities, each year mostly novice tree trimmers fall prey to the palm skirt, pinning them backwards into the tree, cutting off their oxygen supply, and being suffocated by the skirt itself. It is common for the untrained tree worker to climb up the palm tree and get under the dead fronds in order to cut or pull them loose. Once this attempt at removal begins, it can trigger the adjoining fronds above and below the work area to collapse onto the unsuspecting worker. In a California incident, thermal imaging had to be used to locate the tree trimmer hidden inside the skirt before the rescuers using an aerial ladder truck could reach him.



Workers who perform palm tree trimming should be trained and certified by the Tree Care Industry Association (TCIA) or the International Society of Arboriculture (ISA). Workers who are not certified should be supervised by someone who is. Palm tree trimming should be done following proper procedures using aerial bucket trucks or by using proper climbing procedures which place them above the fronds.

Manual Equipment: Pruning with a manual pole saw or pruner can be dangerous as well. Again, never stand under what you are cutting and watch out for the possibility of power lines, a ricochet branch, or insect activity.

Ladder safety: Ladder safety should be followed at all times. It is not recommended for the homeowner to prune any plant materials while using a ladder. Ladders on unpaved materials are very susceptible to tipping over due to an unstable base. Overreaching will also cause the ladder to tip. (FYI: The correct angle for a ladder is 75 degrees following the 4 to 1 rule. For every four feet of height you have to climb, move the base one foot outwards.) Ladder safety would include inspecting the ladder for defects, and using the appropriate ladder for use in the area to be pruned. Never use a step ladder, and never use a defective ladder. Use only OSHA approved ladders with the weight capacity and length needed. Always tie off the ladder securely (not to the limb you are pruning). Insure the feet of the ladder are firmly and evenly positioned, and the ladder rails are not tilted. For more on ladder safety visit OSHA: <https://www.osha.gov/Publications/OSHA3660.pdf>

If you have to climb into any type of tree for pruning or use a ladder, it is strongly suggested you hire a professional who has been properly trained in the field of Tree Trimming. Just because you own a chain saw does not make you a professional arborist or tree trimmer!

Hiring a Contractor: If you decide to hire someone to prune your tree, remember to hire a licensed and insured contractor who specializes in tree trimming. Anyone with a pick-up truck, ladder, and chain saw can call themselves a tree trimmer, but without a license and insurance you can be liable for any damages they causes, or any injuries they (or someone else) might suffer as a result of their actions

while on your property. In some states, the pruning of a tree 15 feet in height or greater must be performed by an individual who possesses, at a minimum, a valid state contractor's license. In California, the D-49 license is the designated classification for Tree Service Contractors under the California Code of Regulations, Division 8 Title 16, Article 3.

Grounds maintenance workers, including tree trimmers, have a fatality rate more than three times the average worker in the U.S. (according to the U.S. Bureau of Labor Statistics). The International Society of Arboriculture promotes voluntary standards like those outlined below, but unfortunately not all contractors use them.

United States Department of Labor; Waste/Debris Removal and Reduction Tree Trimming
<https://www.osha.gov/SLTC/etools/hurricane/tree-trimming.html>

United States Department of Labor; Occupational Safety and Health Administration Tree Care Industry
<https://www.osha.gov/SLTC/treecare/standards.html>

Tree Trimming Safety for the Landscaping and Horticultural Services Industry
https://www.osha.gov/dte/grant_materials/fy09/sh-19503-09/tree_trimming_manual.pdf

This article is not meant to be an all-inclusive list or guide pertaining to pruning safety, but it may help ward off disasters inherent in hiring someone like Santa's Landscape and Pruning Company!



Amy's Corner

It's hard to believe that this January marks one year since I became Instructional Specialist for the Mohave County Master Gardener Program! This position has truly been a dream job for me on so many levels, and I am excited to continue working to improve our program throughout 2019 and beyond.

Arguably, one of the most important aspects of the Master Gardener Program, is the annual Urban Home Horticulture Course, which serves as the initial training ground for those interested in becoming Master Gardeners. Since the class now rotates between each of the three major cities in Mohave County, the host city always seems to pick up the most new associates. This year, Kingman stands to benefit with classes being held at the Cooperative Extension Office. However, with our convenient location right off I-40, I anticipate that we will get some students from Lake Havasu and Bullhead City as well, which is a good thing, because if someone is dedicated enough to commute to class once a week, they will most likely follow through with their volunteer commitments as a Master Gardener Associate!

Speaking of volunteer commitments . . . we are now mid-way through the year, and it is a good time to take stock of where you are at with your hours. Remember, Associates need to complete 50 volunteer hours/12 continuing education hours by May 31st

to be promoted to Certified Master Gardener status. Once certified, Master Gardeners must complete 35 volunteer hours/12 continuing education hours each year to remain in good standing. If you are not at least half way to your requirements at this point, please consider how you can get caught up between now and May. Attending monthly business meetings is the best way to stay abreast of volunteer opportunities. If you are unable to make a meeting for any reason, please reach out to your Area Coordinator to find out what you may have missed.

Several Master Gardeners and Associates have expressed interest in auditing some of the Urban Home Horticulture Classes. This is a possibility, if there is room in the class after considering our registered students. If space is an issue, priority will go to active members in good standing (on track to meet their volunteer requirements), as well as those who plan to serve as class assistants. Once we know final class numbers in early January, I will be sending out more information about how to participate.

In the meantime, I am looking forward to a busy winter, and productive New Year working with each of you!

Amy Nickel
Instructional Specialist, Sr.



Bullhead City Master Gardeners

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

Happy holidays from the Bullhead City area Master Gardeners! The chill in the air has us back in our gardens, and back to helping our area residents with the horticultural challenges the hot dry summer presented.

Our regular programming resumed in September with our twice monthly Library activities on the second and third Thursdays of the month. Our casual Home Garden Day was followed by a more formal Library Program, “Starting Your Fall Garden”. The Home Garden Days always cover a broad range of topics, and often are attended by people new to the area who wonder why the gardening techniques they perfected in Minnesota, California or elsewhere are not working here in the Mojave Desert! Like all of us who are “transplants”, the learning curve is steep, and we (and others in the audience) love to help them out with the problem areas.

We always try and feature several of our Master Gardeners in the Library Program presentations (PowerPoints, hands-on demos and focused content). From September on we have had good attendance, despite some limitations in room size due to early voting reducing our usual space in October. October’s topic was “Planting Your Cool Shade Tree”, and once again, using audience participants, we planted a new tree at the Library during this program.



Operation Cool Shade is a program offered by Mohave Electric Cooperative (MEC), and the City of Bullhead City each year. Trees are made available and sold (for \$9, which also includes a light bulb) to their customers in September, and are distributed in November. We were involved every step of the way this year, from our review of the available trees, to the recommendation of the four trees to be available (Chilean Mesquite, Desert Willow, Indian Rosewood and Escarpment Live Oak), through distribution of the trees in November. We also tailored our monthly library presentation toward the event with a presentation in October titled “How to Plant your Cool Shade Tree” that focused on planting these native type trees. We will deal with citrus and deciduous fruit trees in upcoming spring programs.

All 1800 available trees were sold out within the first two weeks. During the tree hand out event, 17 of our Master Gardeners and Associates were on hand to provide further information as the trees were being picked up by the MEC customers who ordered them. It’s always a fun event, and we enjoy working with the high school clubs and local service organizations who also assist on distribution day. Not until we get there do we know who will be on hand to assist. Some years we physically handle the trees, placing them in cars, trucks, and occasionally, bicycles! Other years we primarily hand out flyers and provide information and answer questions.



We also partnered with MEC early in October when they sponsored a National Night Out event at their offices. We joined with local police, fire and other community service representatives and explained who we are and what we do. We had a chance to speak with hundreds of locals and make them aware of the programs we offer.



Our November Library Program was entitled "Container Gardening and Small Space Alternatives", and many members of our group did presentations. Doug Russell's presentation on Keyhole Gardening was a favorite, along with Sally Steven's segment on soil mixtures, hay and straw bales (good and bad) and other related topics from her vast store of knowledge. Maria Waitas, Leroy Jackson, Debbie Miller and Dennis Lesowsky also joined in, and it was an idea-filled two hours.



The hotline calls are often depressingly similar: Trees planted too deep; Improper irrigation; Improper pruning followed by sun damage; and just plain stress due to the hot summer. More unusual was a call on a golf course manager who wanted to reduce the size of three drainage ponds on their course. They were leaking and failure seemed imminent. They were home to fish and ducks, and fountains added to their visual impact. The lower of the cascading ponds was also used for irrigation. Bill Stillman handled this call and helped define the steps which should be taken to fix the problem. He pointed out reducing the size wouldn't necessarily be cost effective. He also stressed that, whether reducing size or not, only professionals with good references should be consulted before tackling this project. The city engineer probably should also be involved since the basins/ponds might have been installed for flood control. As usual, this wasn't what they wanted to hear—our hotline callers generally are hoping for a "quick fix", and often there is none.

We are thrilled with our new Associates, and almost all of them have been very active and a great addition to our group. Having the Urban Home Horticulture Class locally last year was terrific, and we hope the relatively short drive to Kingman this year will provide additional students from this area when the 2019 class begins in January.

Our December meeting will be a traditional holiday party/dinner at a local Mexican restaurant, and spouses and children are included. It's a fun event after a busy fall schedule, and we enjoy being purely social for a change, after approving the previous month's minutes and adjourning!

We have a busy winter/spring coming up, and once again the Urban Home Horticulture Class schedule conflicts with our Library Programs, so we'll be platooning between both again this year. Hopefully some of the "regulars" from our Home Garden Day and Library Programs will sign up and be in the classes—we've been promoting it!

Merry Christmas and Happy New Year to all!



Kingman Master Gardeners

Linda L Reddick, Coordinator
Melissa Palmer, Co-Coordinator

We are approaching the end of 2018 with reflections on the past, and hopes for the future.

We began October with the Children's Safety Day event at the Home Depot. What a fun day planting with over 72 kids, accompanied by 82 parents who also seem to enjoy planting. It was really refreshing to see so many couples enjoy the event with their children. Many thanks to Izzy Brood and Mary Garrison for making that event so successful.

We continued the month with a workshop on Cover Crops, Crop Rotation and Iris Rhizomes. Meredith Langlois and Izzy Brood did a fantastic job explaining cover crops and Iris, and I followed along with crop rotation. Attendance was good, and the evaluation scores were fantastic, so way to go Meredith & Izzy

Late in October, Mary Garrison, Izzy Brood, Victoria Metz and I spent the afternoon planting self watering buckets with the clients at Arc. Arc clients are either mentally or physically challenged, ranging in age from 17 to 70. I can't describe the joy it brought us to see the smiles on their faces as they successfully planted their individual bucket with either broccoli, cauliflower or cabbage. The Arc director was thrilled at our accomplishments, and said we had inspired participation from some clients that never responded to an activity before.

November took us to an IPM and Companion Planting workshop presented by Bob Clothworthy and Victoria Metz. Victoria did her presentation on companion planting. Bob's power point presentation was excellent which got the attendees totally involved in the workshop. When the audience gets involved in the conversations, I think you got their attention. It is always wonderful to see several first time attendees.

Sandy Hampson was gracious enough to allow the group to hold the deciduous tree pruning workshop at her home in December. It was certainly a bit on the chilly side, so attendance wasn't great, but those who attended had nothing but praise for Vince Beatty and Cindy Toepfer's

presentations on how to prune deciduous trees and shrubs. Again, we had some first time attendees who became so interested, they plan to take the up coming UHHC classes. It was December after all, so we had a group pot luck following the workshop. Great dishes and desserts, which caused most of us to eat too much. Thank you Vince, Cindy and Sandy.

Our school gardens are flourishing. The students have been picking pak choi and eating it raw from the garden, they always ask for seconds and thirds. The cauliflower is a little slow but the cabbage, and broccoli are setting heads. Thank you to Izzy Brood and Bob Clothworthy for their assistance with the school gardens.



I would like to Thank ALL of the Master Gardeners who have participated in such a wide variety of activities during the 2018 calendar year. You are a fantastic group with so much to offer, I do not think you realize the impact you have on the community through education. You are all beyond valuable, and shining stars to Mohave County Master Gardener program!

Merry Christmas and Happy New Year to all!

My final message for 2018 is:

*Live each day with a purpose.
Learn everything you can.
Love with passion and faith,
As 2019 awaits.*

Linda L Reddick
Kingman Master Gardener Coordinator



Cindy Toepher, Kingman Master Gardener purchased Red Swiss Chard and Red Russian Kale the 3rd week of October and planted them in a 2.5 ft long by 1 ft wide white plastic planter. The kale is an heirloom variety that turns more purple and becomes sweeter tasting after a frost. This picture was taken Dec. 3rd.



Lake Havasu City Master Gardeners

Dan Alberts, Coordinator
Sharon Gomez, Co-coordinator

Season's Greetings to all the Master Gardeners and Cooperative Extension employees of Mohave County! This year is waning, and a new year is approaching with the anticipation of new gardening projects. Personally, I will address some minor gardening design changes around my home after the holidays.

Since I last wrote in *Wind and Weeds*, three members of the LHC Master Gardeners who are winter visitors have returned. Welcome back to Steve, Jori, and Carol. Your involvement is appreciated!

Thanks to Andrew, Amy, and to all of the staff at the Cooperative Extension Office for their generosity in providing the Master Gardeners in each location of Mohave County with new laptops. This new equipment will certainly assist us in providing a better means of informing the public about gardening questions.

The last few weeks have been busy with our hotline calls. We have seen mesquite borers, addressed watering and fertilization issues with citrus, as well as watering issues with cacti to name a few. Some of these calls are due to the return of our winter visitors who have a second home here. At Home Garden Day here the Master Gardeners have consistently stayed busy answering gardening questions.

Work continues at the Community Garden here in Havasu. Most recently, we were asked to construct another raised planter bed which was accomplished in about 2 ½ hours. Thanks to all who helped in this project. After the start of the New Year, more projects are on the agenda at this location.



On February 9th and 10th, the LHC Master Gardeners will once again let their presence be known at Winterfest, with a booth in the downtown area of the city. This event has always worked well for us in meeting many different people from the community who have an interest in gardening, and have specific questions pertaining to desert horticulture.

Saturday, February 23rd, from 9 am-1 pm is the date for the annual "Meet the Master Gardeners" event here in town at the Lake Havasu City Library. There will be a keynote speaker from Australian Outback Nursery, which is a large wholesale nursery located in Tonopah, Arizona. Several of the Lake Havasu City Master Gardeners were able to tour their facility in October, and we are excited to bring them to the local area to share their knowledge of Australian native plants that will thrive in our desert.

On the evening of December the 11th, the Lake Havasu City Master Gardeners and their spouses all gathered together for our annual holiday potluck. This year, the event was hosted by Carol Bruch at her home here in Havasu. All 26 who were in attendance had a great time. Each menu item was perfect in presentation, and tasted great. Thanks to Carol for her hospitality, and all the great Christmas decorations in her home.

Merry Christmas and a Happy New Year to all!

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jeffrey C. Silvertooth, Associate Dean & Director, Extension & Economic Development, Division of Agriculture, Life and Veterinary Sciences, and Cooperative Extension, The University of Arizona. The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information in its programs and activities. Persons with a disability may request reasonable accommodation, such as a sign language interpreter, by contacting Mohave County Cooperative Extension Office at (928) 753-3788. Requests should be made as early as possible to allow time to arrange the accommodation.



Create a Hummingbird Haven

By Dottie Holman, Lake Havasu City Master Gardener Emeritus

Here in Arizona we are fortunate to have hummingbirds throughout the year. There are two hummingbird species which are most commonly seen in our area. One is the Anna's hummingbird, and the other is the Costa's hummingbird. As in many bird species, it is the male bird that has the most colorful markings. The male Anna's hummingbird has a red throat and crown, where the male Costa's hummingbird is distinguished by its purple or amethyst colored throat and crown. Both are territorial and very bossy. It is hard to imagine, but a hummingbird's wings beat up to 80 times per second and their hearts can race up to 1,260 beats per minute and that they can reach speeds up to 60 miles per hour...which means they rely on a constant supply of nectar to survive.

To attract hummingbirds you can invest in sugar-filled feeders, but another way is to plant flowers, shrubs, and trees that attract the hummingbirds. One of the nice things about creating a hummingbird haven is that it can be as small as a single red-flowered plant in a pot, or as large a garden as you wish. Regardless of its size, the key factor in attracting the hummingbirds is red flowers, although they will also go to flowers of other colors, especially yellow, if they like the nectar. When landscaping around your home

mix in a variety of plants that will entice these small but feisty dynamos into your yard.

Hummingbirds are extremely partial to tube shaped flowers and we are fortunate that we have a vast variety that grow here in Mohave County. Some of their favorite annuals and perennials are the red penstemons, cardinal flower, monkey flower, and autumn sages. Favorite shrubs are lantana (which attract butterflies and hummingbirds), Baja fairy duster, Mexican bird of paradise, various *Tecoma* species (including red and yellow bells, and cape honeysuckle), and the Sonoran native chuparosa, which literally translates into "sucking rose". Succulent aloes with orange and red flowers are another good choice, along with red yucca. Tree wise, the desert willow with its showy orchid-like flowers is an excellent choice, along with the palo verde tree with its yellow blooms. During their spring migration north, many hummingbirds take advantage of the blooming ocotillo in our deserts.

All of the plants that I have listed are both low in water usage and low on litter, which is a win-win situation. So check out your yard, and see if you can't help these little creatures maintain the energy that they need. Once a hummingbird has found your yard you can be assured that you will have a wonderful friendship with this amazing bird.



Hummingbird at chuparosa (*Justica californica*).
CC image courtesy of Joshua Tree National Park on Flickr



Plant Profile: Autumn Sage (*Salvia greggii*)
By Sandy Hampson, Kingman Area Master Gardener

Origin: Autumn sage (*Salvia greggii*) grows native in rocky soils in Central, West and South Texas, and Mexico.

Flower: Autumn sage blooms 1 inch flowers in spring, summer and fall as long as it receives some water. The normally red-flowered species also has white and pink forms, along with many new cultivars featuring wide range of colors including pale yellow, orange, salmon, fuchsia, purple, red-violet, burgundy, and two-toned flowers.

Size and form: Usually a 3 by 3 foot evergreen sub-shrub varying from very upright to sprawling. It has small, dull pale green, aromatic leaves.

Reproduction: Reproduces by seeds. Often will self-sow.

General care: Needs sun or partial sun. In a garden setting, prune back to 4 inches in late winter, and again by one half in August to maintain a tidy shape, or allow to grow and spread or sprawl for a more natural appearance, with occasional pruning of old wood.

Use: It is valued for its adaptability to garden soils, heat tolerance, it's very long blooming season and as a magnet for hummingbirds.



Female hummingbird at red autumn sage (*Salvia greggii*) flowers.
CC image courtesy of TJ Gehling on Flickr



Mohave County Master Gardener Winter 2019 Calendar

January

- January 1: Happy New Year! Cooperative Extension Office Closed Dec. 24, 2018 – January 1, 2019
- January 8: LHC Home Garden Day, Lake Havasu City Library, 11:00 a.m. – 1:00 p.m.
- January 8: BHC Master Gardener Meeting, Bullhead City Library, 6:00 p.m. – 7:30 p.m.
- January 9: Laughlin Home Garden Day, Laughlin Library, 10 a.m. – 12 p.m. (NV time)
- January 10: BHC Home Garden Day, Bullhead City Library, 10:00 a.m. – 12:00 p.m.
- January 12: KGM Fruit Tree Pruning Workshop, 3766 N. Melody St., 10:00 a.m. - Noon. (Inclement weather alternate date 1/19)
- January 17: UHHC Week 1, Overview of MG Program and Introductions to Soil, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- January 17: BHC Library Presentation, “Trees and Shrubs: Pruning for Shape and Vigor; Winter Weeds” Bullhead City Library, 2 p.m. – 4 p.m.
- January 17: LHC Master Gardener Meeting, Lake Havasu City Library, 6:30 p.m. – 7:45 p.m. (meeting Thursday this month due to room availability)
- January 24: UHHC Week 2, Basic Botany, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- January 24: KGM Master Gardener meeting, Mohave County Cooperative Extension Office, 6:30 p.m.

February

- February 5: LHC Home Garden Day, Lake Havasu City Library, 11:00 a.m. – 1:00 p.m.
- February 7: UHHC Week 3, Fertilizing, Composting & Plant Propagation, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- February 9: KGM Rose Pruning Workshop, 3766 N. Melody St., 10:00AM to Noon (Inclement weather alternate date 2/16)
- February 9: LHC Winterfest, Downtown Lake Havasu Main Street District, 9:00 a.m. – 5:00 p.m.
- February 10: LHC Winterfest, Downtown Lake Havasu Main Street District, 9:00 a.m. – 4:00 p.m.
- February 12: BHC Master Gardener Meeting, Bullhead City Library, 6:00 p.m. – 7:30 p.m.
- February 13: Laughlin Home Garden Day, Laughlin Library, 10 a.m. – 12 p.m. (NV time)
- February 14: UHHC Week 4, Vegetables and Other Herbaceous Annuals, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- February 14: BHC Home Garden Day, Bullhead City Library, 10:00 a.m. – 12:00 p.m.

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



- February 19: LHC Master Gardener Meeting, Lake Havasu City Library, 6:30 p.m. – 7:45 p.m.
- February 21: UHHC Week 5, Raised Bed and Container Gardening, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- February 21: BHC Library Presentation, “All About Citrus Care, and Fruit Trees for the Area” Bullhead City Library, 2 p.m. – 4 p.m.
- February 23: LHC “Meet the Master Gardeners”, Lake Havasu City Library, 9:00 a.m. – 1:00 p.m.
- February 26: KGM Seed Starting Workshop, Mohave County Cooperative Extension Office, 5:30 p.m.–7:30 p.m.
- February 28: UHHC Week 6, How to Properly Select, Plant, Stake & Prune Trees, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- February 28: KGM Master Gardener meeting, Mohave County Cooperative Extension Office, 6:30 p.m.

March

- March 5: LHC Home Garden Day, Lake Havasu City Library, 11:00 a.m. – 1:00 p.m.
- March 7: UHHC Week 7, Native Plants, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- March 8: Mohave Contractors Show Setup, Riverview Mall, 1 p.m. – 5 p.m.
- March 9: KGM Grape Vine Pruning Workshop, DIG it Community Garden, 2301 Lillie Ave., Time TBA
- March 9: Mohave Contractors Show, Riverview Mall, 9 a.m. – 5 p.m.
- March 10: Mohave Contractors Show, Riverview Mall, 9 a.m. – 3 p.m., and teardown
- March 12: Master Gardener Meeting, Bullhead City Library, 6 p.m. – 7:30 p.m.
- March 13: Laughlin Home Garden Day, Laughlin Library, 10 a.m. – 12 p.m.
- March 14: UHHC “Spring Break”, No Class This Week!
- March 19: LHC Master Gardener Meeting, Lake Havasu City Library, 6:30 p.m. – 7:45 p.m.
- March 21: UHHC Week 8, Fruit Trees, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- March 21: BHC Library Presentation, “Irrigation: Determining Plant Needs; Planning for and Setting Up a Functioning System; Using Mulches in the Landscape”, Bullhead City Library, 10 a.m. – 12 p.m.
- March 28: UHHC Week 9, Entomology, Mohave County Cooperative Extension Office, 9:30 am – 1:00 pm
- March 28: KGM Master Gardener meeting, Mohave County Cooperative Extension Office, 6:30 p.m.
- March 29: CRBIA Home Show, Lake Havasu City Aquatic Center, 3:00 p.m. – 7:00 p.m.
- March 30: CRBIA Home Show, Lake Havasu City Aquatic Center, 9:00 a.m. – 5:00 p.m.
- March 31: CRBIA Home Show, Lake Havasu City Aquatic Center, 9:00 a.m. – 3:00 p.m.

Winter 2019 Wind & Weeds Assembled by Shelley, Master Gardener

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





2019 URBAN HOME HORTICULTURE COURSE SCHEDULE

Location: Mohave County Cooperative Extension Office
101 East Beale Street, Kingman, AZ 86401

Dates: Thursdays, January 17 – April 18, 2019

Time: 9:30 am- 1:00pm

Course cost is \$175 (NON REFUNDABLE) and will include 13 weekly 3 ½ hour classes.

For more information, please call 928-753-3788 x11 or email anickell@email.arizona.edu

Deadline for enrollment is Friday, January 11, 2019

January 17	INTRODUCTIONS & OVERVIEW OF MASTER GARDENER PROGRAM, INTRODUCTION TO SOILS Andrew Brischke, Area Assistant Agent Agriculture and Natural Resources (ANR), University of Arizona, Mohave County Cooperative Extension & Amy Nickel, Master Gardener Instructional Specialist
January 24	BOTANY & HORTICULTURE Hattie Braun, Coconino County Director/Master Gardener Program Coordinator, University of Arizona, Coconino County Cooperative Extension
January 31	IRRIGATION Bob Morris, Horticulture Specialist Emeritus, University of Nevada; Consultant, RLLM & Associates
February 7	FERTILIZING, COMPOSTING & PLANT PROPAGATION Linda Reddick, Kingman Master Gardener Emeritus University of Arizona, Mohave County Cooperative Extension & Andrew Brischke, Area Assistant Agent ANR, University of Arizona, Mohave County Cooperative Extension



- February 14 **VEGETABLES AND OTHER HERBACEOUS ANNUALS**
Dr. Angela O'Callaghan, Associate Professor/Social Horticulture Specialist, University of Nevada-Reno, Clark County Cooperative Extension
- February 21 **RAISED BED AND CONTAINER GARDENING**
Bob Morris, Horticulture Specialist Emeritus, University of Nevada; Consultant, RLLM & Associates
- February 28 **HOW TO PROPERLY SELECT, PLANT, STAKE & PRUNE TREES AND SHRUBS**
Jeff Schalau, County Director/Agent Agriculture & Natural Resources, Yavapai County; Interim County Director, Mohave County, University of Arizona Cooperative Extension
- March 7 **NATIVE PLANTS**
Andrew Brischke, Area Assistant Agent ANR, University of Arizona, Mohave County Cooperative Extension
- March 14 **SPRING BREAK – NO CLASS**
- March 21 **FRUIT TREES**
Josh Sherman, Area Assistant Agent Commercial Horticulture, University of Arizona, Cochise County Cooperative Extension
- March 28 **ENTOMOLOGY**
Joe Iburg, Pest Abatement Manager, Bullhead City
- April 4 **INTEGRATED PEST MANAGEMENT (IPM)**
John Sokolik, Private Consultant, Mohave Grow
- April 11 **DIAGNOSING PLANT PROBLEMS/FINDING SOLUTIONS**
Dr. Mike Matheron, Extension Plant Pathologist & Professor, Yuma Agricultural Center, University of Arizona

FINAL EXAM WILL BE HANDED OUT AT THIS CLASS



April 18

FINAL EXAM, GRADING & CLASS EVALUATION

Andrew Brischke, Area Assistant Agent ANR, University of Arizona, Mohave County Cooperative Extension &
Amy Nickel, Master Gardener Instructional Specialist

MASTER GARDENER PROGRAM Q & A

Master Gardener Area Coordinators & Co-Coordinators:

Linda Reddick, Kingman

Debbie Miller & Leroy Jackson, Bullhead City

Dan Alberts & Sharon Gomez, Lake Havasu City

Persons with a disability may request reasonable accommodation, such as a sign language interpreter, by contacting the University of Arizona, Mohave County Cooperative Extension office at (928) 753-3788. Requests should be made as early as possible to allow time to arrange the accommodation.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jeffrey C. Silvertooth, Associate Dean & Director, Extension & Economic Development, Division of Agriculture, Life and Veterinary Sciences, and Cooperative Extension, The University of Arizona. The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information in its programs and activities.

