Hidden Battlefields

It’s early May, a fine bright day but not unbearably hot, yet. I’ve been working in my yard since sun-up and I’m tired. I’m standing at my sliding doors with a well deserved cup of coffee and admiring my garden. The summer vegetables are fresh and young, while what remains of the winter garden is past its prime. The snapdragons are in full bloom, a sweep of yellow that stretches towards the green mounds of the hollyhocks along the fence. The roses are flush with color, white, red, pink, orange, yellow, even a pale bluish mauve I particularly love. Clumps of grass wave gracefully in the slight breeze and the Russian Sage is just starting to sport the purple haze of flowers it will host all summer. The waterfall gurgles softly and the air is full of bird song. It looks about as peaceful as you can get but it’s a war zone.

All through my yard, pitch battles are being fought on hidden battlefields. There is death, destruction, drama in every corner. In the roses, ants are guarding their herds of aphids and harvesting the honeydew they produce. Earlier, I found a small battalion of ladybug nymphs advancing, commando style, on those herds. An adult lady bug had already claimed the high ground of a pine bough and was devastating a small unit of aphids there. Spittlebugs have established bunkers of frothy slime in the rosemary bush. They probably feel safe; hidden in their unique protective shield, free to destroy my lovely bush, viscously sucking out sap, but they are no match for the air force of Hover Flies. In the leaf litter, jumping spiders patrol for small insects and deep in the rose blossoms, crab spiders lay in wait for their prey. There’s a Praying Mantis in the honeysuckle, perhaps silently stalking the Western Leaf-footed bug I saw near there. Dragonflies patrol the airways, bringing death to flies, butterflies, and maybe the Scribbled Sallow Moth, who’s pretty purple and yellow larvae are devastating my snapdragons. Unfortunately, the Hover Flies attacking the Spittle Bugs are just as likely to fall prey to the dragonfly and my pretty white lady bug might end up a meal for the mantis. There’s a lot of death from “friendly fire” in this garden war.

I have an endless fascination with the insects. They are beautiful, bizarre, and absolutely crucial to every ecosystem on earth. Let me share a few of my favorites:

Spittlebugs are the nymphs of a family of insects known as Froghoppers

Hover Flies are voracious predators of many soft-bodied insects
Assassin Flies and Robber Flies belong to the same family. They are aggressive hunters. They are not particular about their prey which prevents them from being truly useful agents of biological pest control. They are just as likely to attack beneficial insects as they are insect pests.

**The Ground Troop**

The Tiger (or Banded Desert) centipede destroys its’ prey with a potent venom.

The Johnson (or Red) Jumping Spider belongs to a genus that have neon fangs of iridescent green or blue. Ants are their favored prey but any insect of the appropriate size will do.

The 7-Spotted ladybug is an introduced species.

Black-v Ladybug is found mostly in the Southwest United States.

Ladybugs are voracious hunters and excellent biological control for aphids.
The ancient Greeks named this insect “mantis” meaning the diviner. They believed it had supernatural powers.

Leaf-footed Bugs eat thistles and other weeds, but they are also pests of tomatoes, pomegranates and watermelons.

Tomato Colored Beetles look like spotless Ladybugs but they are actually plant eaters and a pest to (what else?!) the tomatoes.

The beautifully marked Globe Mallow Leaf Beetle are minor garden pests. Mostly on ornamentals.

I love the caterpillar of the Scribbled Sallow Moth for its striking colors, but it decimated my snapdragons.

The Agave Snout Weevil destroyed all my mature agaves this year.

I have yet to identify this flower weevil, but I think its very pretty. Help with an id is appreciated.

I don’t consider the Tranatula Hawk either friend or foe. I just like it for its grace and its very pretty.
If you were thinking, “Well, that was a hot summer.” You’re not wrong. And depending on where you live in Mohave County, you were either a little on the wet side, or very dry. Below are some climate data and plots I pulled from our Climate Extension Specialist, Dr. Mike Crimmins. The data are from weather stations in Yucca and Seligman that have well established, reliable long-term data.

Though these weather stations may not be in your area, they may give you a general idea how we did during our monsoon season. The black line on the plots show the average accumulation of precipitation during the period of record. The blue line represents measured precipitation and when they occurred during the 2017 season. The brown area represents lower than average accumulation and the green area represents above average precipitation. Yucca had a tough year.

I would also like to direct your attention to the temperature and precipitation ranks in the included tables. The Yucca weather station experienced the 52nd wettest year during the 53-year period of record. At the same time, Yucca was the fourth warmest year during the same period. Seligman on the other hand, had a fairly decent monsoon season, ranking 15th out of 43 years. But look at the temperature, the warmest year on record!

I can’t predict the future, but I don’t see this trend of hotter, drier summers changing much in the future. I also haven’t figured out a way to control the weather yet. Our challenge as Master Gardeners will be to educate our clientele and prepare them for how their plants are likely to respond with these increasing climatic challenges. In the end, maybe we can save a few plants.

These plots and a tutorial on how they are interpreted can be found at: https://cals.arizona.edu/climate/misc/monsoon/monsoon_summaries.html
We probably say this every year, but it was a HOT summer in the River cities of Bullhead City, Ft. Mohave and Mohave Valley. A lot of plants and trees did not survive, and many of us will have a busy fall replacing the flora which succumbed to the weather, or trying to nurse it back to health! Though we love our desert location, even the most experienced gardeners don’t always win against Mother Nature!

We were pleased to be part of the Kingman Master Gardener Public Education program for June. The Bullhead Master Gardeners were asked to put together an irrigation workshop to be presented at the Kingman Extension Office. Leroy, Dennis and Bill put together a presentation which included a power point on irrigation and a hands-on piping assembly with the participants’ actually cutting, fitting and using adhesive to assemble the piping. Additionally, a soil moisture test was performed by most of the attendees using soil probes.
As is true every year also, with the exception of hotline calls, the Bullhead City Master Gardeners activity level in July and August was low. In early July however, we did participate in the Mohave County Library, Bullhead City branch, Summer Reading Program kickoff. Different civic groups manned tables at the Library and talked to the attendees about how they interacted with the community at large. We handed out seeds and our 2017-2018 schedule of Library presentations. The event was held on a Saturday and attendance was lighter than we had expected. We also had our Orientation in July for one of our two new Associates.

Hotline calls were surprisingly light also, given the heat. Dennis did calls and/or visits to look at a Pygmy Sego palm with browning fronds (a marginal plant for this area to begin with), two willow trees with dying tops, and an ash tree with leaf tip burn. As is often the case, improper irrigation was the culprit, in addition to some sunburn. Overwatering was diagnosed as the cause of a Rosewood tree problem.

Leroy, Dennis and Bill took on a mulberry tree dying in the valley. Site inspection found the 35 year old mulberry tree had been pruned up and thinned out, putting the tree in stress and allowing it to succumb to sooty canker. They were not sure if the tree could be saved since the major branch structures were infected near the intersection to the trunk.

Additionally, a citrus of the same age was not producing. It was apparent to us the citrus graft variety had died sometime back and only the rootstock was flourishing. We made the recommendation to keep it as a decoration or remove and replace it for a productive citrus variety. In addition, there were volunteer mesquite trees in the rear yard which needed pruning, pomegranate bushes which were not growing after 8 years (they were dwarf variety and would not get any bigger). Overall the homeowners had some decisions to make and some pruning to accomplish.

Bill and Leroy looked at some old Arborvitae trees showing stress on a property where other Arborvitae had already died and been removed. On one side the plants were placed next to a cement slab with the irrigation bubbler being placed next to the plant. Again, irrigation was being done improperly and, as we always do in such cases, a thorough explanation of using a soil probe and watering deeply but not daily was given. Bill had Sally get involved to help identify the plant material.

A 30’ tall saguaro was the subject of another visit. Though the tree was not oozing, it was girdled with a brown section starting 18 inches from the base, and there were open wounds which contained smelly black “goo”. We suspected bacterial necrosis caused by the stress induced by a total lack of water (except rain which, in Bullhead City, isn’t sufficient) for several years. A cactus expert
is needed for that one because of the proximity to the owner’s house and the potential for it to fall if it continues to rot near the base.

Bill also received an email directly from one of our event participants. She had many palm tree questions. Two palms were dying off (rot at the base of the palm) and several palms had unknown things hanging out from the fronds.

In September, things got back to normal, and we held our first meeting of the “gardening year.” We participated in both the Laughlin and Bullhead City Home Garden Days, and were pleased with the turnout at each. The Laughlin Master Gardeners are two in number, so Bonnie Muir, who lives in Laughlin, and Debbie Miller, an inactive Nevada Master Gardener, also help out each month, sometimes joined by Leroy Jackson and Pat Backman.

In September we held our first Home Garden Day for our new fiscal year. With September still being hot, most snowbirds are still pining away in their cooler climates and attendance for this month is normally low. That was not the case this month. We had twenty-four attendees show up with questions in hand, some bringing samples of plant materials and others with photographs of plant materials on their cell phones, with most looking for answers to their plant related problems. Discussions included vegetables and varieties, insects eating corn, national parks pass, eucalyptus dying or disease (red gum lerp psyllid), salt cedar trees and insect controls. Also, growing citrus from seed, root stock selection, pruning citrus and web sites showing how to prune them, saguaro care and past site visits, pine trees for the desert, and our upcoming workshops on vegetables and how to plant your tree. One of our discussions pertained to our new digital water meters and how to put them to good use to determine irrigation supplies to your plants. We considered this a very successful home garden days.

Bill, Leroy and Debbie also went up to Kingman and worked in the Mohave County Fair booth with our friends from Kingman and, as always, we enjoyed being there. On Saturday there were a number of attendees from Bullhead City and Lake Havasu, so many citrus questions were asked that the Kingman folks don’t normally have to deal with, just as Bullhead City doesn’t deal much with apples! Having Master Gardeners from both climate zones makes life easier for everyone! Sunday Leroy and Bill spent most of the time discussing gardening questions, how to prepare the soil, irrigation, critter abatement and what kind of vegetables do well in the Kingman area.

We are also gearing up for our biggest Fall Season event “Operation Cool Shade”. Each year the Master Gardeners, along with other personnel, hand out the trees sold a month in advance by Mohave Electric Cooperative to their customers. As in the past, we always appreciate the help the Kingman Master Gardeners provide each year. Prior to the tree distribution at the city maintenance yard, our Master Gardeners do a Library presentation on the Planting and Care of those desert trees. Power point and hands-on demonstration tree planting is planned for this event.
Looks like we made it through the heat, wind, and rain. Fall is in the air. Below is a brief summary of our Kingman Area events.

June 24, 2017 our neighbouring Master Gardeners from Bullhead City enlightened us with a very informative workshop on irrigation. Thank you Bill and Leroy.

July 6th we did a seed starting demonstration at the public library and was well received by the public. July 11th was our regular Ask the Master Gardener morning. July 15th, Sandy Hampson gave an impressive workshop on cacti and succulents. In a full house, with attendees from Yucca, Mohave Valley, BHC and LHC Sandy delivered a very detailed educational program.

August 8th was our regular Ask the Master Gardener morning. Several MG’S spent their Saturday mornings answering questions at the Farmers Market. The school gardening program is well under way for the 2017-18 school year. Much of August was consumed preparing for the Mohave County fair, organizing and overseeing both the Fresh Produce exhibit and the Master Gardener Booth.

September is always a busy month requiring a multitude of volunteer hours during the fair. A big thank you to all of the people who assisted in the Fresh Produce exhibit and manning the Master Gardener booth. It was terrific to have Bullhead City and Lake Havasu join the Kingman master gardeners in the booth. There are always a variety of questions from the public to be answered. As normal these three groups answered them just like the professionals they are. It is very important to note that most of the Kingman Master Gardeners volunteered many, many hours in other areas of the Fair, serving our community well in many different facets. Hat’s off to all of you.

With our personnel vacancies and group changes it has been a challenging three months. True to a gardener’s persistence, we will persevere. I appreciate your dedication to the program and to the community, as well as looking forward to a productive fall.
Hello and good tidings from the Master Gardeners of Lake Havasu City. Autumn has arrived officially in the low desert, which for us that reside here means we will most likely experience temperatures below 100 degrees. I will add however, we are prone to have days that will peak at over 100 into October. What is a plus however are the cooler nights in regard to plant growth. As you know, plants suffer physiological damage at temperatures above 86 degrees Fahrenheit. This is explained in literature from the American Horticultural Society if you are interested.

Locally here in Havasu, work is commencing again on the Community Garden now that it is cooler. Our group has been providing information and guidance to the people that provided the plot of land for this purpose. One example of this is the fact of acquiring some good nutritional planter soil from a local source that would otherwise be disposed of in our landfill. More on this in the next newsletter.

Star Nursery is making progress here in Havasu with construction of an overhead shade structure at their facility on the north end of town. I surmise that plant material will be arriving in the near future. This business will be most welcome and should do well here.

The next special Master Gardener event here will be on Saturday, November 11th when once again, we will host ‘Meet the Master Gardeners’ at the LHC Library from 9am to 1pm. This event has been well received by the public in past years, and this year should also be a success.

In closing, the LHC Master Gardeners share with all, their enthusiasm for Autumn gardening in Mohave County.
Mohave County Master Gardener Calendar Fall 2017

October
October 3rd 11 a.m.-1 p.m: “Home Garden Day”, Lake Havasu Library, 1770 McCulloch Blvd, LHC
October 10th 6 p.m., Master Gardener Meeting, Bullhead City Library, 1170 Hancock Dr., Bullhead City
October 11th 10 a.m.–12 p.m., (NV time): Laughlin Home Garden Day, Laughlin Library, 2840 Needles Hwy., Laughlin, NV
October 12th 10 a.m.–12 p.m., Home Garden Day, Bullhead City Library, 1170 Hancock Dr., BHC
October 17th 6:30 p.m.-7:45 p.m.: Business Meeting Lake Havasu Library, 1770 McCulloch Blvd,LHC
October 19th 2 p.m.–4 p.m., “Planting and Caring For Your Landscape Tree”, Bullhead City Library, 1170 Hancock Dr., Bullhead City
October 26th 6 p.m.-8 p.m.: Kingman Master Gardener meeting, MCCE office, 101Beale St., Kingman
TBD: Fox Creek Garden Club, Fox Creek Middle School, Bullhead City

November
November 7th, 11 a.m.-1 p.m: Home Garden Day, Lake Havasu Library, 1770 McCulloch Blvd, LHC
November 8th 10 a.m.–12 p.m,(NV time), Laughlin Home Garden Day, Laughlin Library, 2840 Needles Hwy., Laughlin, NV
November 9th 10 a.m.–12 p.m., Home Garden Day, Bullhead City Library, 1170 Hancock Dr., Bullhead City
November 11th Meet the Master Gardeners, LHC Library 9am-1pm.
November 14th 6 p.m., Master Gardener Meeting, Bullhead City Library, 1170 Hancock Dr., Bullhead City
November 16th 2 p.m.–4 p.m., “Getting Ready for the Holidays, Projects and Wreaths made from Plants and/or Natural Materials”, Bullhead City Library, 1170 Hancock Dr., Bullhead City
November 18th 6:30 a.m.–1 p.m., “Operation Cool Shade” (tree handout), Bullhead City Public Works, 1285 Alona’s Way, Bullhead City
November 18th KNG Assist BHC with “Operation Cool Shade”
November 21st 6:30 p.m.-7:45 p.m.: Business Meeting Lake Havasu Library, 1770 McCulloch Blvd, LHC
TBD: Fox Creek Garden Club, Fox Creek Middle School, Bullhead City
TBD: Kingman - Integrated Pest Management & Compost presentation at the Community Garden

December
December 5th 11 a.m.-1 p.m: Home Garden Day, Lake Havasu Library, 1770 McCulloch Blvd, LHC
December 7th November/December Kingman Master Gardener Potluck meeting, TBD
December 12th 6 p.m., Master Gardener Dinner Meeting, Oriel’s Restaurant, Bullhead City
December 13th 10 a.m.–12 p.m.,(NV time), Laughlin Home Garden Day, Laughlin Library, 2840 Needles Hwy., Laughlin, NV
December 14th 10 a.m.–12 p.m., Home Garden Day, Bullhead City Library, 1170 Hancock Dr., Bullhead City
December 19th 6:30 p.m.-7:45 p.m.: Business Meeting Lake Havasu Library, 1770 McCulloch Blvd, LHC
December 20th DEADLINE FOR FOR WINTER 2018 WIND & WEEDS ARTICLES
TBD: Deciduous Tree Pruning Workshop - Kingman

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