



Our fabulous Master Gardener Volunteers at our Annual Fall Festival and Plant Sale at Metro Tech High School.

IMPROVING THE LIVES, COMMUNITIES, AND ECONOMY IN MARICOPA COUNTY



THE UNIVERSITY OF ARIZONA
COLLEGE OF AGRICULTURE & LIFE SCIENCES
Cooperative Extension
Maricopa County

Maricopa County Cooperative Extension

November 2017

IN THIS ISSUE

What's Your Fall Festival Story?

By Jo Cook

On October 28th plant growers and lovers descended on the campus of Metro Tech High School for the Fall Festival and Plant Sale. Elements of garden treasures and enticing activities covered the Metro Tech campus sprinkled around the Metro Tech High School and Master Gardener-grown plants. More than 1,000 visitors from all over the Valley were welcomed to the Fall Festival and Plant Sale.

What were some of the best things about the Fall Festival?

- Watching plants fly off the table as guests descend on the plant sale. The plants don't fly but some of the buyers seemed to in the process of selecting and buying more than 1,000 plants!
- Counting the number of ooohs, aaaaaahs, and the occasional gasp over the plants donated by Master Gardeners.
- Great interactions between Master Gardeners and the public.

These interactions are exactly what makes the Master Gardener program the vibrant community resource for which it is known; an exciting group of volunteers who take adult education very seriously and want to share their passion for gardening by

educating their communities. What makes this happen? Master Gardeners.

One of the elements that is most gratifying about the Fall Festival and Plant Sale is the participation of the Master Gardener Trainees called Interns. At Fall Festival time Interns are just completing their 17-week intensive training to become Certified Master Gardeners. Throughout Intern training facets of plant identification, selection, and propagation bring focus to preparations for the plant sale. Propagation classes, hands-on demonstrations during other classes, and the sage advice of their mentors prepare the Interns for identifying, growing and studying the plants they donate to the Plant Sale. When a Master Gardener or Intern donates a plant they receive one half of the retail price to shop the plant sale.

This Fall Festival had something for everyone; plants were in evidence everywhere including those grown by Metro Tech Horticulture students, and local vendors. The shoppers enjoyed vendors selling everything from soap to wind chimes, handmade greeting cards to a knife sharpener. The Master Gardener hosted Rummage Sale was a big hit as was the sale of Master Gardener planting calendars, soil probes and Master Gardener Press books.

Another wonderful year and another amazing event. We could not have done it without the help of our incredible Master Gardener Volunteers.



MCCE Landscape Renovation



Arizona Agriculture



The Farm at South Mountain

Landscape Renovation at MCCE: That Was Then, This is Now

By Rebecca Senior

Our mission is to help the people of Maricopa County live better through sharing of our research and education. Teaching through example and demonstration is the goal of the current landscape renovation which is called the Landscape to Living Classroom project.

In April of 1973 plans were drawn for a brand new Cooperative Extension building, and not long after a design for the first demonstration garden along the west side of the building. Many things have changed in 44 years.

The last redesign of the landscape was in January 1998. Carol Shuler, a local landscape architect who wrote one of the early books promoting low water use plants, was the designer. She used a plant palette of 119 beautiful and drought tolerant species unfortunately many are no longer in the landscape. Our plant list is drawn primarily from **Landscape Plants for the Arizona Desert** <http://www.amwua.org/plants/> and includes the plants Shuler selected.

Efficient use of water is critical in the low desert. Demonstrating best practices to create a more drought tolerant landscape is a top priority for our project.

U of A
Maricopa County
Cooperative Extension:
THEN



U of A
Maricopa County
Cooperative Extension:
NOW

Sometimes the best practice is using technological advancements such as drip irrigation and smart controllers. We are certainly doing this with an all new irrigation system of pvc pipe and multiport emitters.

A low tech and affordable solution to less water use is passive rainwater harvesting. With a shovel and strong arms, a flat landscape can be sculpted and shaped into depressions that capture and store water. Mulch the depressions with organic material (ideally add the landscape trimmings) to retain moisture.



Arizona Agriculture Literacy Days

By Brandon Moak

It is that time of year for Arizona Agriculture Literacy Days, an event provided by CALS-CE Ag Literacy program that focuses on educating students about people's connection to agriculture and the commodities produced on Arizona's lands. Many youth are unaware that many products they use and eat come from what farmers and ranchers grow and often think that it magically appears in the stores.

To volunteer, contact a nearby elementary school teacher and introduce him/her to Arizona Agriculture Literacy Days. Be sure to explain that each participating classroom will receive a free copy of *Arizona Agriculture: Bee's Amazing Adventure*. Register at <https://cals.arizona.edu/agliteracy/AZ-Ag-Lit-Days> in order to receive a copy to read and donate to a classroom. Volunteers do not need a background in agriculture to participate in the program. Arizona Agriculture Literacy Days is held every year in the fall with a special emphasis during the three days before Thanksgiving. The 12th annual event runs from October 16–December 15.

Through the culmination of months of research and careful concept development, *Arizona Agriculture: Bee's Amazing Adventure* introduces children in grades K-4 to the Grand Canyon State's diverse agricultural industry. Authored by Bonnie Apperson Jacobs and Terri Mainwaring and published in cooperation with The University of Arizona College of Agriculture and Life Sciences Cooperative Extension (CALS-CE) and Maricopa County Farm Bureau (MCFB), *Arizona Agriculture: Bee's Amazing Adventure* contains interesting facts and captivating photography—complete with a glossary and curriculum guide. This children's book accurately captures Arizona's irrigated farming and high desert ranching. It helps students develop a deeper understanding of and appreciation for Arizona's farmers and ranchers and the many diverse products they bring to the market, including plants that beautify homes and businesses.

Event Spotlight: The Farm at South Mountain



On Wednesday, October 11, Master Gardeners were treated to a tour of the amazing Farm at South Mountain. The weather smiled on us as we walked through the incredible commercial vegetable gardens of The Farm under the leadership of Farm Manager Greg Brownell. A smaller group of MGS learned about the Farm's educational venture in collaboration with the Arizona State University's School of Sustainability and The Southwest Institute of the Healing Arts.

Greg Brownell led the eager group through acres of neat rows of vegetables and flowers, which are grown to provide produce for The Farm's three restaurants and its catering business, Santa Barbara Catering Company. At the moment, arugula, Asian greens, beets, chard, fennel, kale and radish are being planted, as we learned from a handy blackboard set outside a shed where seedlings were waiting in their small pots for transplantation.

The Farm uses mostly natural methods to control insects and increase yield, including planting rows of zinnias and other flowers chosen to repel pests and attract pollinators. It is also actively experimenting with hydroponics. ASU student interns Leah Castle and Collin Mieras showed us the clever closed growing system whereby goldfish in a constantly aerated barrel excrete nutrients which are fed into a pond containing guppies. The guppies nip on the roots of lettuce, chives, and cabbage planted in floating foam boards punched with holes about two inches in diameter. The guppies' appetite encourages the plants to grow faster, as does the fertilizer produced by the fish waste. That water is cleaned by being pumped to another barrel and the cycle begins again. So far, this system is only experimental, and will be used as part of the education curriculum being developed by Leah and Collin.

The interns' plan for the Learning Garden, which will be open to school groups, is for raised planter beds, a labyrinth, a chicken and/or pheasant run, planters filled with medicinal herbs and a pergola planted with cooling vines.

One of the purposes of the Learning Garden will be to teach Phoenix residents that planting and caring for a food garden need not break the budget. Walkways will be made of recycled bricks, old milk cartons will house sweet plants to attract pollinators, benches will be made from two by fours laid over concrete blocks.

This garden will also teach principles and practice of composting. A worm composting system is already working successfully. In the ingenious system, worms are fed vegetable and fruit scraps from The Farm's kitchens in one bin. That bin is attached to another with holes through which the worms migrate when they have composted the first bin into "black gold". They're on to the next feast of decaying plant material, and on they go to a third bin. In the meantime, the soil in the first and second bins matures, with microbes finishing the work the worms started.

"In Arizona, the problem with vermicomposting is heat," says Leah. "That's why we've placed our worm bins under the shade of citrus trees."

In addition to growing organic produce, The Farm uses it in its three restaurants, the upscale Quiescence, the breakfast café, Morning Glory, and lunch time favorite, The Farm Kitchen. The Farm is also busy hosting weddings and corporate events, and holds classes several times a week. For shoppers, small gifts and fragrances can be found at Botanica, the charming gift shop located near Quiescence and Morning Glory. www.thefarmsouthmountain.com.

At the end of the tour, The Farm treated us to a magnificent lunch. Thank you, Greg Brownell, Leah, Collin and the entire staff of The Farm at South Mountain! As Master Gardener Linda Rominger said, it was a "delightful tour of an idyllic garden spot."

AmeriCorps Volunteer: Christina Lopez

By Elisabeth Williams

The Roosevelt Early Childhood Family Resource Center (FRC) is a bustling place, full of families, young children and energy. Families come to the FRC for many reasons such as looking for community resources, attending a workshop or spending time with their children in a fun, educational environment. However, for some people like AmeriCorps volunteer, Christina Lopez, the FRC offers a place to give back to their community and neighborhood.

Christina grew up in Tempe and has lived near the Maricopa County Extension Office for 40+ years. She had a long career with Blue Cross Blue Shield of Arizona for 37 years but retired from full-time work in 2013. After her husband passed away, Christina found herself wanting to get involved in her community and thought AmeriCorps might be a good opportunity to try something new.

Christina wanted to learn and experience something different. In her role as an AmeriCorps volunteer at the FRC, each day brings something new to Christina. Some days are filled with chatty mothers who are looking for company and a cup of coffee. Other days bring exuberant children who want to play games and build castles with her. Still other days are focused on administrative tasks like helping to manage the data from workshops and classes offered at the FRC.

Christina simply says that volunteering at the FRC gives her something to look forward to each day. "I enjoy helping Gina and Carlo with their activities, meeting new families, watching the children and making new friends. I feel like I am contributing, at least a little bit. And that is important to me."



From Tim to Timinator: A 4-H Volunteer's Story of Stardom

By Robin Etnyre



For 23 years Tim Lonchar has called Intel Corporation his home. Upon retirement, the company provided a unique opportunity which allows Tim to be a paid volunteer to share his years of knowledge and experience with a deserving organization. As a dedicated 4-H volunteer, Tim turned his focus to the youth of Maricopa County.

Using 4-H curriculum, Tim embarked on an endeavor sharing his love for science, technology, engineering, and mathematics (STEM) with youth throughout the Phoenix metropolitan area. Starting several afterschool Special Interest (SPIN) clubs, Tim has provided direct education on robotics and electricity to a group of youth that 4-H has not reached this decade, opening the doors for them to explore new avenues.

Upon the completion of his Intel Fellow, Tim was not done impacting the leaders of tomorrow, and pursued a position as an AmeriCorps volunteer

serving Maricopa County 4-H's revamped new delivery modes program, where he started his fifth robotics SPIN Club at Holdeman Elementary School in Tempe, a school that use to host a 4-H club many years ago.

Through hard work and patience, Tim has developed several STEM kits which are easily transported into the school and provide hours of hands on educational experience. Youth learn through the 4-H supported method, called the Experiential Learning Model, which promotes youth to learn through adult mentorship and self-discovery.

Tim's love for sharing his many passions is gratefully welcomed by the youth with whom he interacts. Their appreciation is proven by the many endearing nicknames they have bestowed on him, including the Timinator, Timmy Neutron, and Mr. T, and their bright-eyed reactions when he enters the room!

Maricopa County 4-H is eager for Tim's expertise and are excited to see what else his passions will drive him to bring to our county!

The Director's Cut

By Ed Martin



Fall is finally here! It's not the temperatures outside that first alerts me, it's our own Master Gardener (MG) team that is my first sign of Fall. The classes have started, the MG Help Desk is busier than ever, and the entire office is buzzing with conversations about plants and fertilizers and soil. I want to thank Yvonne Cooper and her crew – too many to name here – for the outstanding job they have done in keeping our program moving forward. A big thanks to all our MG volunteers for their continued support.

Our SNAP-Ed program is busy with school programs and visits, and is expanding into the area of school gardens. The SNAP-Ed team has been coordinating with our Master Gardeners and working hard to address all the requests we are getting for school gardens. The EFNEP program continues to reach out into communities throughout the county to assist adults in learning about healthy lifestyles and nutrition. Our Turf program has been working with managers on winter grasses and the Field Crops program is harvesting and getting ready for winter plantings. Dr. Ayman Mostafa, our Area Field Crops IPM Agent, received a new appointment as a Regional Specialist with the UA Department of Entomology. Congratulations, Ayman! Our 4-H staff are going strong and starting to make in-rows in new areas within the county by working closer with after school programs. They also made a push to expand our club programs and overall, we are seeing an increase in 4-H participation. Our annual *Agricultural Literacy Days* is being held October 16 thru December 15. The Roosevelt Early Childhood Family Resource Center is moving along at full stride and have recommitted their efforts on their outdoor classroom. Finally, I hope everyone had a chance to attend our Fall Plant sale at Metro Tech High School on October 28th. Each year the event grows bigger and better!

CONTACT INFORMATION

- Traci Armstrong Florian Nutrition/SNAP-Ed/EFNEP
(602) 827-8237 tarmstro@cals.arizona.edu
- Kim Christman..... 4-H Youth Development
(602) 827-8291 kchristman@email.arizona.edu
- Scott Koenig..... Project CENTRL
(602) 827-8227 skoenig@email.arizona.edu
- Ed Martin County Director/ANR/Water Resources
(602) 827-8200 ecmartin@email.arizona.edu
- Patty Merk Family and Youth
(602) 827-8257 pmerk@cals.arizona.edu
- Ayman Mostafa Agriculture
(602) 827-8213 ayman@cals.arizona.edu
- Monica Pastor Agricultural Literacy
(602) 827-8217 mpastor@cals.arizona.edu
- Rebecca Senior Horticulture
(602) 827-8276 rsenior@cals.arizona.edu
- Kai Umeda Turfgrass Science
(602) 827-8214 kumeda@cals.arizona.edu

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, College of Agriculture Life Sciences, 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, or sexual orientation in its programs and activities.

ABOUT TOWN

Pest Management & Pesticide Safety Seminar: Day 1

When: Nov 15 & 16 7:30am - 2:00pm
Where: See Link for Location

Day 1 Information:

<https://extension.arizona.edu/pest-management-and-pesticide-safety-seminar-november-15th>

Day 2 Information:

<https://extension.arizona.edu/pest-management-and-pesticide-safety-seminar-november-16th>

Master Gardener Plant Clinic

When: Nov 15 9:00am - 10:30am
(3rd Wed Every Month)

Where: Maricopa County Cooperative Extension

More Information:

<https://extension.arizona.edu/master-gardener-monthly-plant-clinic>

DIG: The Transplanted Gardener

When: Nov. 16 6:00pm - 8:00pm

Where: Maricopa County Cooperative Extension

More Information:

<https://extension.arizona.edu/transplanted-gardener-desert-institute-gardening>

MAC Family Farm Day

When: Nov 18 10:00am - 2:00pm

Where: Maricopa Agricultural Center (MAC)

More Information:

<https://extension.arizona.edu/mac-family-farm-day>

Late Season Field Day

When: Nov 22 9:00am - 11:30am

Where: A Tumbling T Ranches

More Information:

<https://extension.arizona.edu/late-season-field-day-o>

Good & Bad Water on Turfgrass

When: Nov 29 8:00am - 12:00pm

Where: Maricopa County Cooperative Extension

More Information:

<https://extension.arizona.edu/good-bad-water-turfgrass-finding-harmonious-union>

Family Resource Center - Parent-Child Interaction Classes

Where: Roosevelt Family Resource Center

More Information:

<http://extension.arizona.edu/roosevelt-early-childhood-family-resource-center>

12th Annual Desert Turf School

Application Deadline: December 1

More Information:

<https://extension.arizona.edu/12th-annual-desert-turf-school>

Maricopa County Cooperative Extension Monthly Event Calendar

<http://extension.arizona.edu/maricopa>



Check us out at:

<https://www.facebook.com/MaricopaCountyCooperativeExtension>

Edited By:
Edward Martin
Amber Jones
Sheri Semones
Mary Conner