



Thirty educators gathered for the Summer Agricultural Institute five-day tour designed to teach K-12 educators about food and fiber production and agriculture with practical curriculum development.

IMPROVING THE LIVES, COMMUNITIES, AND ECONOMY IN MARICOPA COUNTY

IN THIS ISSUE

## Summer Agriculture Institute

By Brandon Moak

The Summer Agricultural Institute (SAI) celebrated its 25<sup>th</sup> anniversary this June 8<sup>th</sup> – 12<sup>th</sup>, traveling across central and northern Arizona. SAI is a five-day tour designed to teach K-12 educators about food and fiber production and help them incorporate that knowledge in the classroom curriculum. SAI combines hands- on learning about agriculture with practical curriculum development.

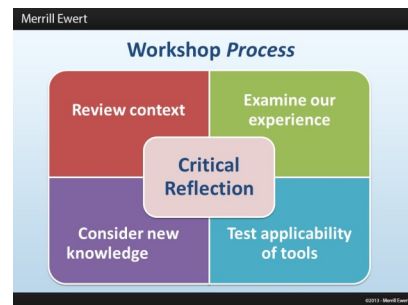
Thirty educators arrived early Monday morning at the Maricopa County Cooperative Extension office and were immediately put to work drawing a picture representing their view of agriculture. Tours then began with educators visiting Rousseau Farms, Triple G Dairy, and Heiden Land & Cattle. In Pinal County, they spent time at the UA’s Maricopa Agricultural Center, the USDA Arid Lands Research Center, and learned about jalapeño production at Knorr Farms. In northern Arizona, participants experienced the beauty of Alcantara Vineyards and the original Pendley Apple Homestead located at Slide Rock State Park. Lunch was provided by Yavapai County Cattlewomen and served at Groseta Ranch where Andy Groseta shared his family’s ranch history. Other tours in the region included the Yavapai-Apache Nation’s Coverleaf Ranch, Bonnie Plant, Cooper Ag. Center, Yavapai College’s Agribusiness and Science Technology Center, Perkinsville Meat Processing, the Mortimer Family Farm, and presentations on Flagstaff’s forest restoration and the Diablo Trust.

On Thursday, participants broke into smaller groups and travelled with agriculture families touring their local operations. Educators experienced what a day was like in the life of someone involved in agriculture. Participants concluded their day with their agriculture families by enjoying a Celebration Dinner held at Buckeye Union High School. The meal was prepared by Larry Canepa, a 2014 SAI Alumnus and chef of his catering business Dinner at Eight. During the evening, educators talked about their SAI experience. One teacher said, “This was a very eye-opening experience for me. I had no idea about the incredible diversity of agriculture here in Arizona and all the different parts there are to it.” Another explained, “I have never met a harder working, passionate group of people than during this week.” Yet, another said, “Experiencing this entire week has blown my mind away.” On Friday, educators returned to the Cooperative Extension Office where Monica Pastor, University of Arizona Associate Area Agent, introduced classroom curricula on Arizona agriculture that is correlated to Arizona’s College and Career Ready Standards, some of which contained lessons developed by SAI Alumni. Participants concluded their week by once again drawing a picture representing their view of agriculture. Many were amazed to see the transformation of their views that occurred in just a few days.

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### Ficus Whitefly Update



### Facilitation in Cooperative Extension



### Program Spotlight: Project CENTRL

## Ficus Whitefly Update

By Rebecca Senior

The Ficus whitefly is still here. In April this year, it was recognized as a new pest and monitoring of its presence began. Here are a few things learned in the last three months.

The Ficus whitefly has laid eggs on new growth leaves, proving it is able to survive more than one life cycle in our environment. This was expected as it has been established in southern Florida since 2007, where it can be hot but not as dry as the low desert. Natural enemies were observed in the tree canopies and that is good news.

Pests have natural controls such as fungal diseases, parasitoids, and insect predators that hunt and stalk their prey. In Integrated Pest Management (IPM) the term biological control is used for these natural controls.

Field observations on June 16<sup>th</sup> showed eggs, but no nymphs, on the newest flush of leaves. Egg density was sparse and there were many tiny black lady beetles (*Delphastus* spp.) patrolling the new leaves. Both adult and larval lady beetles feed on whiteflies. Lacewing adults were present along with their distinctive white eggs held above the leaves on a silken stalk. Lacewing and lady beetle larvae have a similar alligator shape but lacewings are much smaller. Most adult lacewings feed on pollen, nectar, and honeydew, but their larvae are relentless hunters. If one drops on your arm you may feel the pinch of the tiny hunters' scythe-like mandibles.

Assassin bugs were seen in the tree canopies where according to *Natural Enemies of the Southwest*, "they stalk and ambush prey, pierce it with their needle-like beak, and inject it with venom." Parasitized nymphs are present, the result of a parasitic wasp too small to easily see.



Left: Ashy gray lady beetle larva, a natural enemy of whiteflies, is unable to resist eating nutritious eggs of its own species.  
Image: ©Rebecca Senior

Letting the natural order of predator and prey unfold can sometimes be uncomfortable. A client with a defoliating large tree canopy wants to know something is being done. Keep in mind that defoliation is a symptom of later stages of a whitefly infestation. Pesticide applications after defoliation have less targets than at the beginning of the cycle, when eggs are being laid and nymphs start feeding. Before the first season's egg laying is the point in the whitefly life cycle when a carefully timed, once a year pesticide application is recommended.

Natural biological control is the best long term management of Ficus whiteflies. Learn to recognize natural enemies with the references below. Preserve and encourage natural enemies by using the recommended soil drench over a foliar pesticide spray. Eventually, apply little to no pesticides at all and enjoy the many benefits of natural biological control.

### Contact Information:

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Management recommendations:

<http://cals.arizona.edu/apmc/ficuswhitefly.html>

## Facilitation in Cooperative Extension - Dr. Merrill Ewert

By Ed Martin

On June 3, our office hosted a workshop led by Dr. Merrill Ewert, a person who has been working to improve the teaching/learning process his entire career. Earlier this spring, Dr. Ewert came to the office to find out more about Maricopa County Cooperative Extension and to see if he could lend a hand. My first reaction was sure, we can always use some help. But after a few minutes of conversation, I realized this wasn't the usual offer but rather an opportunity for my staff and I to learn from someone with experience that very few people have. Dr. Ewert was President of Fresno Pacific University for 10 years. Prior to that, he was Director of Cornell Cooperative Extension, and before that he spent several years in Africa working with nongovernmental organizations. His goal is to help teachers and instructors make better connections with the students or clientele they are trying to reach. His presentation to our office began with him letting us know that "Merrill" was just fine, no need for Dr. Ewert. Humble words from someone who has achieved so much. The workshop was very engaging, full of inquiries about how and why. There were group discussions, questions and answers, and also some time to just "think about that." Those of

us in the audience came away with some new ideas on how to engage clientele in conversations about today's challenging issues. We also learned some new strategies for teaching, or maybe it was new strategies about learning? That may actually be the point – effective learning and effective teaching go hand in hand. As educators, we need to explore new avenues and methods to help students and clientele learn, grow, and someday, be teachers themselves. If you want to get in touch with Dr. Merrill Ewert, you can email him at [merrill.ewert@gmail.com](mailto:merrill.ewert@gmail.com) and for more information, visit his website at <http://www.merrillewert.com/>.



## Project CENTRL



1983

Project CENTRL's first began and now has alumni in each of Arizona's Counties.



## Want to buy a vowel?

Not this time!

CENTRL is spelled without an "A" which stands for Center for Rural Leadership.

## FAST FACTS

## Over 600

With the graduating class on June 26th Project CENTRL has 603 alumni.

## Civic Leadership

There are six graduates of Project CENTRL who are currently serving as Mayor of their city or town plus four more alumni serve on their city or town Council.

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## Program Spotlight: Project CENTRL

A pressing question of our time is not "Where will the future lead?" but "Who will lead our future?" Project CENTRL is hard at work in answering this call by preparing highly motivated leaders to be more informed, responsive, and effective in meeting the growing challenges facing agriculture and rural Arizona.

Project CENTRL was developed by the University of Arizona, College of Agriculture and Life Sciences (CALs) Cooperative Extension under a seed grant from the W.K. Kellogg Foundation. Project CENTRL is a 501(C)3 organization that continues to operate in close partnership with CALs Extension.

Class 23 graduated from their one year program on June 26. The same day, Class 24 will begin their CENTRL experience. The program includes learning personality identification and public speaking skills in the first two seminars, learning about current rural Arizona issues and challenges in the next three seminars, and finishing up with "Making a Difference" during individual study tours to the State Capitol, Washington, D.C., and then Ciudad Obregon, Mexico.

An event sponsored by CENTRL alumni will be held on Saturday, August 15th from 10:00 am to 2:00 pm in Yarnell, Arizona, the site of the 2013 fire which took the lives of 19 Hotshots, and burned 127 homes. CENTRL Alumni are teaming up to provide a look at the recovery efforts, Arizona water issues, management of state land, and how a small, unincorporated community fits into larger issues such as range management. A hosted lunch will be provided in the lovely garden of the Hays family in Peeples Valley. Speakers will include Lisa Atkins, Commissioner, Arizona State Land Department and



*Project CENTRL Class members are able to participate in a helicopter tour by Salt River Project. This is an unforgettable opportunity to experience an aerial view of SRP's facilities and water sheds.*

former Board President, Central Arizona Project. If interested in attending, please RSVP to Karen at [kvander@ag.arizona.edu](mailto:kvander@ag.arizona.edu)

The CENTRL Board of Directors are proud of the program and of the leaders trained over the past thirty-two years. CENTRL's Board focuses on the future and constantly strives to modify the program's elements to meet current leadership and training demands.

The Project CENTRL office is housed in the Pinal County CALs Extension office in Casa Grande and is staffed by Monica Pastor, Director and Karen Vanderheyden, Program Coordinator, Sr. A new addition to the staff is Sarah Limon, Secretary, who starts on July 6th.

Visit the Project CENTRL website at [www.centrl.org](http://www.centrl.org) for detailed information regarding curriculum, the current class, alumni, and the history of CENTRL.

# Director's Cut

By Ed Martin

Summer is finally here and the office is busy with 4-H activities (JOLT, record books, and YuPiCopa 4-H camp), helping people with their garden and turf irrigation concerns, and working with our agricultural clientele on getting the cotton up and growing, the corn and wheat harvested, and the alfalfa hay cut and baled. We are also approaching monsoon season, which means dust storms and winds. Don't forget you can download a mobile app called "Dust Storm" developed by the University of Arizona Cooperative Extension. This App is free and alerts you when a pending dust storm is on its way. The app is available for iPhone and Android systems. Early in June, Dr. Merrill Ewert, President Emeritus of Fresno Pacific University and former Director of Cornell Cooperative Extension, held a workshop at the Maricopa County office on learning and teaching. We appreciate his time and efforts and those who attended learned some new tools for engaging our clientele. We also had our Summer Agricultural (SAI) Institute in mid-June. The five-day tour/educational workshop exposes K-12 teachers to the world of production agriculture in Arizona and helps them incorporate what they learned into their classroom curriculum. On June 26, Project CENTRL held a graduation for Class XXIII where Mark Killian, Director of Arizona Department of Agriculture gave an inspiring talk on leadership. Finally, we are starting a new fiscal year and we want to thank the Maricopa County Board of Supervisors for their continued support of Cooperative Extension. With their support and that of the State and Federal governments (that's the "Cooperative" part of Cooperative Extension), we are able to bring high quality programs to help improve the lives, communities, environment, and economy of Maricopa County and beyond.



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## ABOUT TOWN

### Alfalfa and Cotton "Tent Talks" Meetings

When: July 8 7:00 - 9:30am  
Where: Jason Rovey's Farms, Buckeye, AZ 85326

When: July 9 7:00 - 9:30am  
Where: Ak-Chin Farms, Maricopa, AZ 85239

More Information:  
<http://ag.arizona.edu/crops/counties/all/events.html>

### Group GAP Meeting

When: July 14 5:00 - 6:30pm  
Where: Maricopa County Cooperative Extension  
Contact: Jesse Davenport (602) 827-8212  
[jmdavenp@email.arizona.edu](mailto:jmdavenp@email.arizona.edu)

### AZ Women in Agriculture Conference

When: July 17 7:30am - 3:45pm  
Where: Wigwam Resort  
300 Wigwam Blvd., Litchfield Park, AZ  
Contact: Peggy Jo Goodfellow (480) 635-3609  
More Information:  
<http://www.azfb.org/articles/146661/arizona-women-in-agriculture-conference>

### AZ Women in Agriculture Conference

When: July 17 - 19 8:00am - 5:00pm  
Where: University of Phoenix Stadium  
1 Cardinals Dr., Glendale, AZ  
Contact: Sharon Dewey (602) 827-8209  
More Information:  
[http://cals.arizona.edu/maricopa/garden/page\\_images/HS-July2015Program.pdf](http://cals.arizona.edu/maricopa/garden/page_images/HS-July2015Program.pdf)

### Maricopa County Farmers Market Manager Quarterly Meeting

When: August 3 2:00 - 4:00pm  
Where: Maricopa County Cooperative Extension  
Contact: Jesse Davenport (602) 827-8212  
[jmdavenp@email.arizona.edu](mailto:jmdavenp@email.arizona.edu)

### Desert Institute of Gardening

Topic: Intro. to Fall Vegetable Gardening  
When: August 11 6:30 - 8:30pm  
Where: Maricopa County Cooperative Extension  
Contact: Jo Cook [jocook@email.arizona.edu](mailto:jocook@email.arizona.edu)  
*\*See Extension Calendar below for upcoming events*

### Smartscape 101: Training for Landscape Professionals

When: Aug 10 - Sep 2 3:30 - 6:00pm (Mon. & Wed.)  
Where: Maricopa County Cooperative Extension  
More Information: [www.smartscape.org](http://www.smartscape.org)

### Health and School Readiness Fair

When: 5:00 - 7:00pm  
Where: Various Dates & Locations  
Contact: (623) 925-3911  
*\*See Extension Calendar below for dates & locations*

### \*Maricopa County Cooperative Extension Monthly Event Calendar

<http://extension.arizona.edu/calendar/month?ctid%5B%5D=16>



Check us out at:  
<https://www.facebook.com/MaricopaCountyCooperativeExtension>

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