



ARIZONA AGRICULTURE

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A Conversation about Forest Health: Bob Thorpe

By Julie Murphree, Arizona Farm Bureau Outreach Director

State Representative Bob Thorpe has served in the Arizona House since 2013 including being Chairman of four committees, where he currently chairs the Technology Committee. And, he happens to have expertise in forest management due to his years as a volunteer firefighter.

With an undergraduate degree and several years of graduate studies, Thorpe has over 40-years of business experience including Walt Disney as an "Imagineer," Price Waterhouse accounting firm, and the aerospace industry where he built aircraft training devices for the U.S. Military including the F/A-18, F-16 and the Apache Helicopter. Thorpe both worked and volunteered for over 6 years in K-12 education and 8 years as a high technology instructor at UCLA Extension. Thorpe founded a software business with Fortune 500, international and government clients and has worked at several firms in the field of Information Technology, software and website development.

In his late 40's, Thorpe served his community for almost 8 years as a certified Arizona volunteer firefighter / EMT and has volunteered as a K-12 robotics competition judge and coach. Thorpe is a student of the U.S. Constitution and authored a book on Amazon on the topic. Thorpe volunteers at his church and on cattle round-ups on the Navajo Nation and is active in conservative political organizations.

Having climbed numerous mountains including the 14,500' high Mt. Whitney (twice) and the 17,800' high Popocatepetl, Thorpe is an avid sportsman enjoying outdoor activities including fly-fishing, shooting sporting clays, snow skiing and armature astronomy.

He's received numerous awards and recognitions including the Optometrist Legislator of the Year, Legislator Champion of the Arts (twice), AZCDL Lifetime Achievement Award and ACCCC's Arizona Community Colleges Legislator of the Year.

Born and raised in Southern California, Thorpe lives near Flagstaff with his wife and has two grown children, two Labradors retrievers and two desert tortoises. Thorpe and his wife designed, built and live in their award-winning energy-efficient home.

And, he slowed down enough to answer my questions regarding one of his keen interests, forest health. We'd visited at the Capitol after a press conference on behalf of Arizona's farmers and ranchers. Representative Thorpe lent his support for the water conservation effort advanced by Arizona agriculture. When we spoke, Representative Thorpe was keen to highlight that if we managed our forests correctly, we'd have more water left in our reservoirs.

Arizona Agriculture: Besides the obvious, why are you so passionate about forest health?

Rep. Thorpe: I gained a great deal of knowledge about forest health as a trained and certified Northern Arizona volunteer firefighter for over eight years, with a Red Card for fighting wildfires. My wife and I also own 10 acres of forested property near Flagstaff that we reduced from 8,000 to 5,000 trees with the help of an Arizona State Land Department's Forest Stewardship program. I am a big fan of NAU Forestry Professor Wally Covington whose research indicates that the largest Ponderosa Pine forests, which are in Northern Arizona, historically had about 50 trees per acre. However, my property and plenty of our forests currently have between 500 to 1,000 trees per acre. The

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Rep. Bob Thorpe is a big advocate of Arizona agriculture and forest health, two of our primary sectors that serve as economic engines for the Grand Canyon state. He suggests that if we applied true forest management we'd have more water in our reservoirs.

Latest Census of Agriculture Releases: Highlights Across the Grand Canyon State

By Dave DeWalt, State Statistician for the USDA National Agricultural Statistics Service Mountain Region - Arizona Field Office

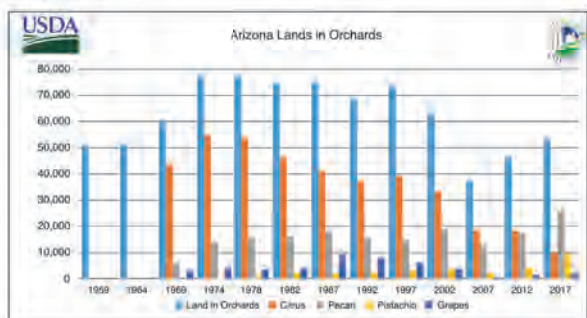
The USDA's National Agricultural Statistics Service (NASS) recently released the 2017 Census of Agriculture (COA), one of our largest projects conducted once every 5 years. Unlike the annual estimating program which estimates acreage, yield, production, price and value on major commodities produced in Arizona annually, the COA takes a look at the people who are our farmers and ranchers, accounts for items not in our annual program such as total harvested cropland and total land in orchards, and accounts for minor commodities produced across the Grand Canyon State.

Here are some key highlights from Arizona's Latest Census of Agriculture.

There were 19,086 farms in Arizona in 2017, a decrease of 4.6 percent from the 2012 Census. Most of the decrease was in Maricopa and Pima counties. The Navajo Nation counties (Apache, Coconino, and Navajo) account for 62 percent of Arizona's total farms.

Ninety-five percent of farms and ranches were family owned.

Harvested cropland increased 2.9 percent to 915,647 acres. Pinal, Maricopa, and Yuma counties accounted for 67 percent of the State's harvested cropland. Since 1959, Arizona's harvested cropland acreage has fluctuated from 800,000 acres to 1,100,000 acres but has been mostly below 1,000,000 acres over the last 30 years.



Land in Orchards increased 16 percent to 53,518 acres. Cochise County, at 22,762 acres, had the largest increase from 2012, at 129 percent. Yuma County had 12,702 acres, a drop of 26 percent. The chart below shows how citrus dominated orchard acreage during the 1970s and then began its gradual decline. It also shows how pecans and pistachio acreage has increased significantly, especially since 2012.

Economics of Arizona Agriculture

The total value of agricultural production in Arizona, at \$3.85 billion, was dominated by the top 400 farms in terms of sales. These 400 farms accounted

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A Fixture in Arizona Agriculture

Disruptive Technology in Ag; Look Beyond the Labels

By Philip Bashaw, Arizona Farm Bureau CEO



Philip Bashaw

It appears everywhere industries are being upended by the rise of “disruptive technology.” Our ability to harness all manner of technological change and the “Internet of things” is changing the way we communicate, work, shop, manage our home, travel and recreate. It is also impacting how consumers are making choices about their food.

Agriculture has been at the forefront of adopting technology for decades. We raise crops and livestock much differently now than we ever thought possible. Satellite technology has made us more precise and efficient, new plant varieties have allowed for increased mechanization and lower pesticide and fertilizer application all while providing higher yields. We raise livestock that exhibit more desirable traits and productivity through the adoption of selective breeding and increasingly better genetics through AI. We can also track animals, crops and commodities in real-time.

But now, with the rise of plant-based and cell-cultured protein products, we are faced with our own form of disruptive technology that makes us uncomfortable. The rise of plant-based proteins meant to mimic the taste and texture of meat and the growing of meat cells

cultured in labs gives us pause. It is not the technology that concerns us. We have adopted new technologies in our production practices for decades and even these new technologies have the potential to provide benefits for agriculture.

What is concerning to us is yet an additional product in the seemingly endless stream of marketing which will be used as an attack to vilify conventional agriculture to gain market share. What we have all seen is an endless attack on the current production systems that are the bedrock of the safest and most abundant food supply the world has ever known.

We are already seeing it related to these new plant and cell-based protein products. Just a few examples include Meatless Monday’s, cow farts causing climate change, dietary recommendations that promote more plant-based diets (which are more propaganda than sound science), advertisements for humane meat, clean meat, etc. These attacks on our current production systems are not just a war between two brands, they are attacks on the bedrock of the safest and most abundant food supply in the world. Worse, for agricultural producers, they are an attack on our livelihoods, our lifestyle and our reputation as stewards of our precious natural resources.

The question is.... How will we respond to the latest attack? We clearly need to ensure that these new products are clearly labeled, and consumers know what they are buying. However, if we stop there we will have won the battle and lost the war. As the current marketing suggests, labeling these products will be seen by their proponents as a benefit, not a detriment. They will use those labels to advertise their products as the superior alternative at the expense of the current products on the market. They will say that they are safer, cleaner, have a lower carbon footprint and use less water to produce. We will need to think beyond the labels and fight marketing with marketing.

The good news is that we can benefit from other trends over the last several years. Our beef producers are the natural, traditional and minimally processed alternative to these products. Why would you want a product grown in a lab when you can have a product that is grown on the land by real people. We also have the benefit of an iconic history and the advantage of showing our products in a natural setting. I don’t know about you, but a herd of cattle on the range is much more appealing than a grouping of cells in a Petrie dish. We also have the benefit of a segment of the public who is much more interested in where their food comes from and how it is produced.... we need to tell them.

Tumultuous Market Conditions Create Ripe Opportunities for Value-Added Agriculture

By Julie Murphree, Arizona Farm Bureau Outreach Director



Julie Murphree

The partners exhibited unrestrained energy and enthusiasm that’s contagious. They know their product, the market potential and what it takes to scale. And, it’s all dependent on a rare breed of dairy goats: Swiss Oberhasli.

Established in 2009 in beautiful Prescott, Arizona, Capream Dairy is a fully operational USDA Grade A goat dairy, recently insured by Farm Bureau Financial Services. Their premium milk from the rare Swiss Oberhasli goat breed produces wonderfully tasty milk (I personally taste tested) where the company plans to manufacture milk, gelato and cheese. Owner Gary Carder can’t wipe the smile off his face; he knows he’s got something here.

Or, what about Paul Rovey of Rovey Dairy and his newest herd; a bit smaller and woolly? His newest herd management endeavors include sheep he’s milking for their quality sheep cheese. He’s adding to his product list with a quality cheese that’s already being fawned over by high-end chefs and others because again the market opportunity is ripe for value-added products in the agriculture industry.

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Forest Health

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problems associated with overgrown, dense forests include:

1. An increase in catastrophic wildfires that destroy public resources, produces pollution and clogs waterways and lakes with ash and silt,
2. Unhealthy trees that must compete for scarce water and sunlight resources, and
3. Bark beetles that attack and can kill stressed, century-old trees within weeks because they cannot produce the needed sap to push the beetle larvae out.

Arizona Agriculture: Give an overview of what we're facing here in Arizona with our forests and why our fires tend to be so devastating.

Rep. Thorpe: When a forest is at historic densities of, for example, 50 trees per acre, a wildfire caused by lightning or by humans is typically a low-intensity fire, which can have about 18-inch tall flame lengths. A low-intensity fire will burn grasses that recover quickly, and it cleans the understory [also known as undergrowth] of the forest of dead fuels and unwanted plants and saplings. Low-intensity fires are an important part of a healthy forest, for example, because they release nitrogen into the soil that greens up the forest and they provide a better hunting environment for birds like Spotted Owls that hunt by sight and do much better in a clean forest.

Fires in overgrown forests, like the 2011 Wallow Fire that destroyed over one half a billion acres of forest, tend to be catastrophic because the fire travels up into the top of the trees as a crown fire, and jumps from tree to tree, destroying everything in its path. Unlike low-intensity fires where firefighters can literally walk right into the fire zone to fight and manage them, catastrophic wildfires can have 24-foot-tall flame lengths with intense heat that make them very difficult to fight directly on the ground, and the immense heat destroys the forest and sterilizes the ground which can delay recovery and regrowth of the forest by decades.

Arizona Agriculture: Explain what you're trying to do with the trees on your own property?

Rep. Thorpe: Each year, I try to reduce the number of my 5,000 trees by about 50, taking small- to medium-sized trees that range between 8 to 14 inches in diameter, and heating my house with the firewood. Proper forest management includes leaving some smaller diameter trees that will eventually replace the larger trees that will eventually die, to create space between the trees to reduce competition for sunlight and water, and to reduce the risk of crown fires. It's also important to leave some trees clumped closer together to keep the property looking natural and less like a tree farm, and the clumping also provides locations for deer and elk to gather and hide. Tall dead trees that are not in immediate danger of falling can be left standing to provide a location for nesting eagles and raptors. It's even good to leave some dead trees on the ground to provide rotting wood for insects and small mammals to eat, and then the insects then become food for the birds and mammals, and the mammals become food for larger predators and raptors... and so goes the cycle of life.

Arizona Agriculture: You discussed the devastating Wallow Fire and made comparisons to a coal-fired plant. Explain?

Rep. Thorpe: President Obama declared war on coal, on coal-fired power generation and on the U.S. coal mining industry. During his administration, Obama and his EPA enacted the Clean Power Plan and Visibility and Regional Haze rulings that made it more difficult for Arizona coal power generation. Recently, I conducted research on the pollution that our Arizona coal-fired power plants were producing compared to the multimillion-dollar Federal Wallow fire, and what I found was staggering. The single Wallow fire produced more pollution than all our power plants produce annually. All the pollution indexes were about double or higher for the Wallow fire, and in particular, VOCs (Volatile Organic Compounds) was over 2,000 times higher for the Wallow fire than for our coal-fired power plants.

So why is it important to link Arizona power production and forest fires? Unlike the eastern states, the Federal government controls about 65 percent of Arizona's land, including our national forests that are overgrown and prone to devastating wildfire. If the Federal government is concerned with reducing pollution, it should pay more at-

tention to its own flawed forest management practices, and less on the state's power producing industries.

The EPA has routinely harmed our power producers with over-regulation, rule-making and non-compliance fines. However, they do not fine or treat the Federal forest managers in the same way when multimillion-dollar wildfires occur that destroy public and private resources and produce unimaginable amounts of pollution that directly impacts our citizens and our wildlife. If the Federal government is not going to properly manage our public lands and forests, and reduce catastrophic wildfires, then the lands need to be given to Arizona to manage, as had already occurred in many of the eastern states a century ago.

Arizona Agriculture: You suggested that forest health benefits Yuma County and Pinal County; other Arizona areas in general, explain?

Rep. Thorpe: You may be surprised to learn that the water needed for growing Romaine Lettuce in Yuma may be impacted by our Northern Arizona forests. Arizona is an arid state with an average of about 8 inches of annual rainfall. Our Central Arizona Project (CAP) was built in the early 1900s to create reservoirs and canals to provide needed water to central and southern Arizona cities and agriculture. Watershed is negatively impacted by overgrown, unhealthy, and burnt forests. A typical mature Ponderosa pine tree drinks about 300 gallons per day when the ground is wet. So, for example, 10 acres of pines at 500 trees per acre drinks about 1.5 million gallons per day when the ground is wet. This water literally disappears right into the air through transpiration, instead of replenishing groundwater or flowing downhill in creeks and streams for use by our cities and agriculture.

Arizona Agriculture: So, what's at stake here is more than just healthy forests and forest fires, we're talking water resources. If we did this right, what would it look like?

Rep. Thorpe: As an arid state, we must find ways to increase our watershed and always wisely use our water resources. Thinning our forests back to historic densities will increase our watershed. By treating our forests as crops, we can regularly harvest trees for wood products including wood pellets and log heating fuels, biomass electricity production, and even diesel and aircraft fuel production. Managed, healthy forests will save countless millions of taxpayer dollars because they are less prone to multimillion-dollar catastrophic wildfires, and the related pollution, and loss of natural, public and private resources. Additionally, healthy public forests provide recreational opportunities and increased tourism revenue.

Arizona Agriculture: How does agriculture, forestry and the legislature come together to get this right knowing that some of this is out of our hands when it comes to federal lands?

Rep. Thorpe: With only 17 percent of Arizona lands in private ownership generating important taxes for education and local government, and with the unequal, unfair treatment that western states have been subjected to as compared to the eastern states, it is up to the citizens of Arizona, and our State and Federal elected officials to fight for complete Arizona sovereignty and parity with eastern states. If the Federal government wants to occupy over 65 percent of Arizona lands, then it needs to compensate Arizona citizens, dollar for dollar, for the loss of property taxes and other economic hardships that we are subject to in comparison to the eastern states. With such a small percentage of Arizona lands in private ownership, and such a huge proportion under Federal control, the question needs to be asked: is Arizona truly a State, or are we still merely a territory? 🗣️

Editor's note: One of Rep Thorpe's favorite quotes from the Federalist, "We may safely rely on the disposition of the State Legislatures to erect barriers against the encroachments of the national authority." Alexander Hamilton, Federalist #85. Additionally, *as we move into fire season*, remember to stay engaged with state and federal agencies if fire breaks out on rangelands you manage.

For state and private lessees, contact the AZ Interagency Dispatch Center at 800.309.7081 to report a fire.

Market

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The United States Department of Agriculture (USDA) defines value-added products as a change in the physical state or form of the product; the production of a product in a manner that enhances its value, as demonstrated through a business plan. Something we've been doing in agriculture for a long time, but with some of the income struggles in agriculture and depressed commodity prices often dominating the news, some contend the only way to growth is finding the value-added product in your agriculture business.

For decades agriculture-based businesses have been superstars at aggressive efficiency efforts (cost cutting) work to boost margins. But today, most contend that an agriculture business cannot survive if it does not simultaneously spend the money to develop and market new on-trend products where they exist. So, in considering these opportunities, where might you be?

And, if most U.S. farmers struggle to overcome the triple dose of bad news: trade disputes, low crop prices and, in some cases catastrophic weather occurrences, what are we doing to find the silver lining surrounding these sobering clouds?

According to the USDA and the latest Census of Agriculture (2017) just released, one of the fastest growing dimensions in the agriculture industry is agritourism. This is certainly no accident. Farmers and ranchers are looking for those opportunities to grow the business, agritourism is yet another opportunity.

Personally, I believe Arizona agriculture has a lock on this kind of agriculture creativity and innovation. Look at our mix of agritourism throughout the state, unique agriculture products and unusual crops. With hemp coming online, we'll output a slew of value-added products (don't believe it, spend some time on Arizona Farm Bureau's fillyourplate.org).

As more and more farms and ranches and more and more of agriculture tries to connect food to consumers, we'll have more of the public's embrace. They'll spend their dollars and we'll improve our margins for the business.

And, if agritourism or a special value-added product gets consumers engaged on the farm or talking about what we do, it only increases the public embrace. Who doesn't want to make an extra dollar and tell the Arizona agriculture story at the same time? 🗣️

Ag In the Classroom is Live in 5...4...3...2...

By **Tori Summey**, Arizona Farm Bureau Ag Education Manager

The close of the 2018-2019 school year brought an exciting new development for the Agriculture in the Classroom social media campaign: Live Videos! In a coordinated effort between Arizona Farm Bureau staff, AITC is now offering up Monday morning live videos on Instagram and Facebook.

Aptly labeled #MakeItMonday, this new campaign provides viewers the opportunity to receive weekly lessons and activities as well as the option to ask questions and interact with the AITC team. The topic of these videos ranges from basic knowledge of Arizona's commodities to more complicated issues facing Arizona farmers and ranchers.

"I am very excited about our Live Campaign! This new way of communicating will allow our friends and followers of AZFB AITC to get to know us a little better, allow for real-time questions, and hopefully participants to leave with a bit of knowledge or an activity that can be used immediately," said Katie Aikins, Arizona Farm Bureau's Director of Education. "We have a lot of fun teaching students and teachers here at AITC.



Tune in every Monday during the school year for our #makeitmonday videos and you will see why!"

Viewers can expect to engage weekly with Katie Aikins, as well as Agriculture in the Classroom Manager, Tori Summey. There will also be the occasional appearance of Farm Bureau members, teachers, and other program staff in future videos. Any members who wish

A new teaching tool, Facebook Live segments, will be regular teaching vignettes covering a variety of topics during the school year hosted by Arizona Farm Bureau's Ag in the Classroom program.

See **AG LIVE** Page 5

Census *continued from page 1*

for 90 percent of the total value. Maricopa, Yuma, and Pinal counties accounted for 83 percent of the total Arizona value.

There were 17,428 farms with sales less than \$50,000 (91 percent of Arizona farms) which accounted for 1.4 percent of the total value.

Crops generated 54 percent of the value and livestock generated the other 46 percent. In contrast from 20 years ago, two-thirds of the value came from crops and one third came from livestock. The top commodities were vegetables/melons/potatoes at 26.2 percent of the total value, milk from cows at 22.2 percent, and cattle at 16.6 percent. These 3 categories accounted for 65 percent of the total agricultural production value in Arizona.

Farm production expenses totaled \$3.64 billion, an increase of 11.7 percent from 2012. Leading expenses were for feed and hired labor, which accounted for 40 percent of total expenses. Net farm income at \$348 million, decreased 42 percent from 2012.

Producer Types	# of Producers and Average Age
All Producers	32,796
Average Age	59.4
Young Producers	2,493
Average Age	28.5
New /Beginning Producer	7,312
Average Age	48.5
Military Service	2,861
Average Age	66.2

Demographics

For the census to remain relevant and serve the needs of the agricultural community, NASS received feedback from data users about revising the questions in the demographic section to better capture the roles of all persons involved in making decisions for U.S. farms and ranches. The 2017 COA questionnaire allowed farmers and ranchers to designate multiple people per farm as principals. The decision-makers on farms

were referred to as producers instead of operators. USDA NASS also added questions about producers with military service and young producers.

The average age of all producers (32,796 in Arizona) was 59.4 years old

compared to 58.2 in 2012. The chart below shows additional number of producers and average age statistics. Young producers are those under 36 years of age. New or beginning producers are those operating any farm for 10 years or less.

Arizona has the distinction of having the highest percentage of female producers of any other state. Forty-nine percent of all producers in Arizona were female. The national average was 36 percent female.

There were 19,481 American Indian producers on 11,729 of Arizona farms, amounting to 59.4 percent of all producers on 61.5 percent of the farms. There were 286 Asian, Black, or Native Hawaiian/Pacific Islander producers on 262 farms (0.9 and 1.4 percent, respectively). The rest of the Arizona producers (13,187 on 7,555 farms) were considered White. There were 1,482 Hispanic producers on 1,102 farms with Maricopa, Yuma, and Cochise counties accounting for nearly half of them.

The COA contains considerably more data. You may be curious about other data points that I haven't mentioned in this article. Feel free to contact me if you are looking for something specific for your data needs at 602.280.8850, or email dave.dewalt@usda.gov

Editor's note: USDA NASS could never accomplish this project without the cooperation from Arizona's farmers and ranchers and to those folks, NASS is extremely grateful for their input.

Producers by Sex

	2012	2017	% change
All producers	32,592	32,796	+0.6
Male producers	17,938	16,828	-6.2
Female producers	14,654	15,968	+9.0

Ag Live *continued from page 4*

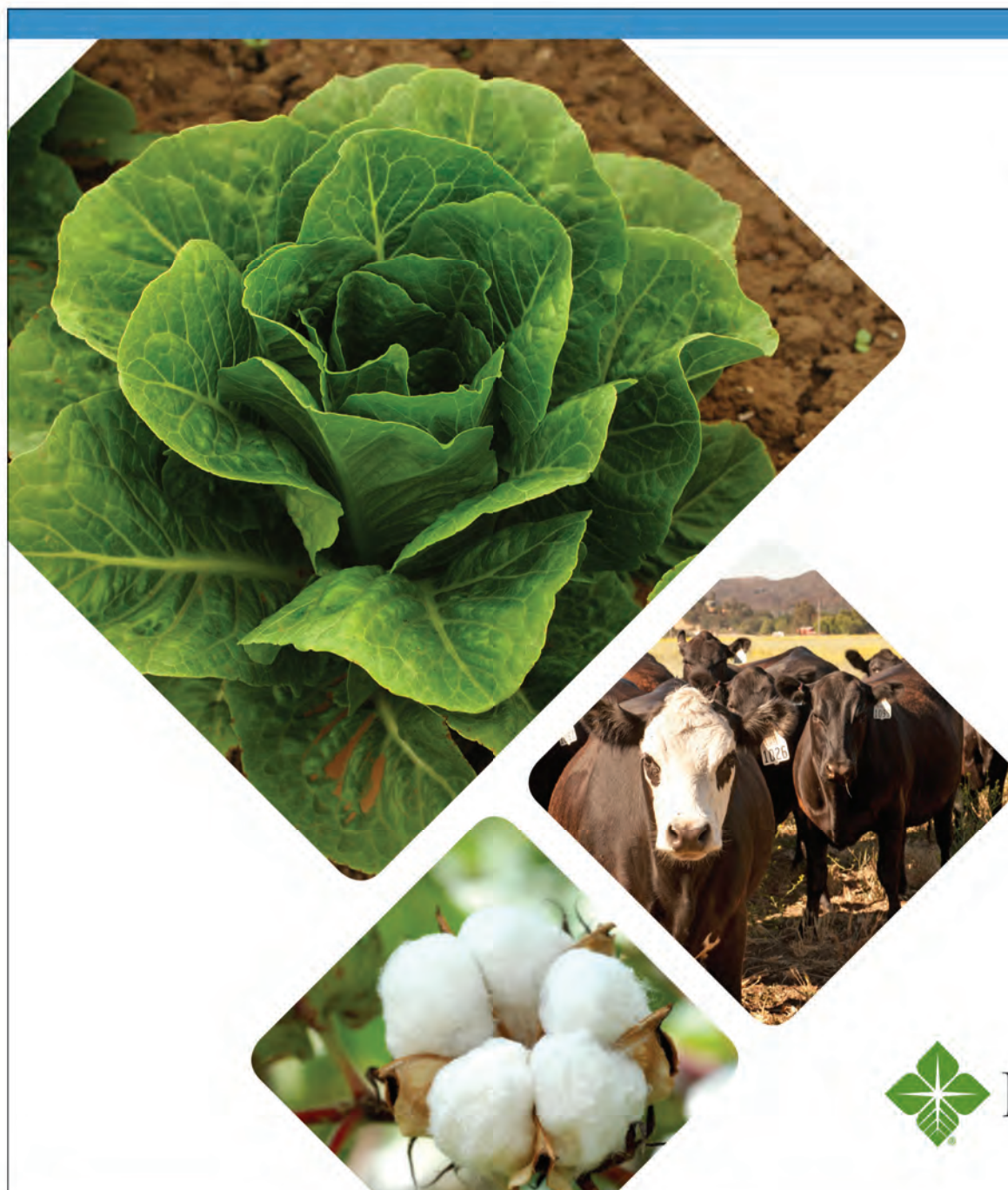
to be involved can contact AITC by emailing aitc@azfb.org.

The #MakeItMonday videos are scheduled to run following the regular academic year, ending Monday, May 20th and picking back up on July 23rd. However, viewers can anticipate live videos throughout the summer detailing how to cut and pick their favorite in-season fruits and vegetables. Ag in the Classroom will also be using live videos to highlight their summer programs and keep viewers up-to-date on events happening within AZFB.

"Who doesn't love a live video!?" said Aikins. "I personally like that they can't be


edited. What you see is what you get. And that is what we are all about here at AZFB AITC."

As transparency continues to play an integral role in building trust and educating consumers, the AITC staff strives to create an open platform for communication through #MakeItMonday and their other social media platforms. If you would like to view future videos, follow AITC on Facebook (AZFB AITC) and Instagram (@AZFB_AITC).




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Staff Reports



John Boelts is Arizona Farm Bureau's latest PALs graduate, from class 9.

Arizona agriculture's Yuma farmer, John Boelts, was recently recognized by American Farm Bureau Federation (AFBF), which honored 9 other outstanding young farm and ranch leaders as graduates of the organization's ninth Partners in Advocacy Leadership class. PAL provides advanced training to the organization's rising stars, with the goal

"I joined PALs so I could do my part to ensure farming and ranching are valued by the public, viable and prosperous in this country today, tomorrow and always," said Arizona Farm Bureau First Vice President John Boelts, also a produce, cotton and wheat farmer in Yuma.

"It's inspiring to see the work and commitment that PAL graduates put into this program," AFBF President Zippy Duvall said. "I look forward to seeing the results of their engagement to help shape the policies that affect our farms and our nation's food security."

Graduates of PAL Class 9 include: Angi Bailey, Oregon; April Clayton, Washington; Becca Ferry, Utah; Amy France, Kansas; Amelia Kent, Louisiana; Matt Niswander, Tennessee; James O'Brien, Texas; Tyson Roberts, Utah; and Jamie Tiralla, Maryland.

PAL training involves four learning modules designed to develop specific leadership skills while exploring components of leadership and its theories and philosophies. The modules build on one another over the two years of the program and include intense, in-person, hands-on training.

The PAL program is sponsored by AFBF, Farm Credit and Bayer Co. To be eligible for the program, candidates must be between the ages of 30 and 45, with demonstrated leadership skills. 🐾

of developing powerful advocates for agriculture and cultivating leaders who can help Farm Bureau advance its policy goals.

Jim Hartdegen: A Fixture in Arizona Agriculture

Staff Reports

James Alan Hartdegen, better known as Jim, is a fixture in Arizona agriculture. Like so many long-time ag families in Arizona, he has a story to tell.

While a Representative in the Arizona State Legislature from 1977 to 1991, he served as Chairman of the Natural Resources and Agriculture Committee for a number of years. He was a member of the Arizona Groundwater Study Commission that led to the 1980 Groundwater Act.

Hartdegen was elected and served two six-year terms (1997 – 2008) representing Pinal County on the CAWCD Board of Directors. He then was appointed by Governor Jan Brewer in May 2012 to complete the unexpired term of Terri Kibler, who left the Board.

Hartdegen served in the United States Army and in Vietnam, attaining the rank of Sgt. E-5. He is a member of Who's Who in American Politics, American Legion, Arizona Town Hall, Casa Grande Chamber, and a Life Member of VFW. He attended Mesa Community College and Arizona State University and in 1999, he founded The Hartdegen Group, a professional lobbying organization that represents electrical districts.

He recently answered the following questions about his time on the CAWCD Board of Directors and changes in Pinal County Agriculture.

Arizona Agriculture: When and why did you run for the CAWCD board?

Hartdegen: The CAWCD Board of Directors has 15 members, with ten of those from Maricopa County, four from Pima County and one from Pinal County. I ran for this board because Pinal County needed a steadfast representative, and I knew I would

be willing to dedicate my time and energy to be that person. I was first elected in 1997 and then again in 2003. The terms are six years long. Then I was appointed in 2012 to fulfill a vacated term for two years,

then found myself running again and was elected in 2015. It may sound crazy to people who don't know me to serve this many years in an unpaid position, but for me, it's been about contributing what I have to offer to support and represent my community. The health of Pinal County depends on its water supply, and I have taken my role seriously. I feel great pride to have been serving for so many years on a board that makes critically important decisions about our current and future water supplies.

Arizona Agriculture: What are the biggest changes you've seen regarding water for Pinal County agriculture?

Hartdegen: I first served on the CAWCD Board in 1997 and have seen many changes over the past 20 years. During my first term, the challenges for Pinal County agriculture were more like challenges farmers have faced no matter where you farm; they needed to answer the age

old question, "How do I make a living off the crops I can grow?" More recently however, the challenges have shifted from the farmers to the irrigation districts. Our state is looking at a future in which central Arizona agriculture will lose a certain amount of water, and some lands will not be farmed. Now irrigation districts have a greater responsibility and importance to the farmers they serve to secure the water supplies needed to support this economy. The irrigation districts are doing their best to plan and prepare, and I believe they will succeed so Pinal County agriculture will continue to thrive well into the future. 🐾



Jim Hartdegen (Pictured center) suggests that irrigation districts have a greater responsibility and importance to the farmers they serve.

Sales Tax on Livestock Feed

By Chelsea McGuire, Arizona Farm Bureau Government Relations Director

The only certain things in life are death and taxes, and sometimes farmers and ranchers feel like they're being taxed to death. To help alleviate some of the tax burdens on our farm and ranch families, Farm Bureau in 2016 helped spearhead a sales tax exemption on livestock feed. Thanks to a bill passed that year, the state may not levy Transaction Privilege Tax, or TPT, on feed for livestock, poultry or raptures, including salts, vitamins, and other additives. In non-statute language, that means that there's no state sales tax on livestock feed.

This doesn't mean, however, that you will never see a line item for taxes on your receipt from the feed store. The state statute only excludes livestock feed from state sales tax – not from city (or other local government) taxes. And in Arizona, the patchwork of city tax codes is complicated, varied, and difficult to navigate.

Most of our cities follow the Model City Tax Code, or MCTC. And section 465(r) of the MCTC exempts livestock feed from sales tax if it is sold to a commercial operator. So, if you live in one of those cities and you're "engaging or continuing in the business of farming, ranching, or feeding livestock," then your livestock feed is exempt – it's not subject to the city's normal sales tax rate. If you're not a commercial operator, however, then the feed that you buy for your recreational livestock or horses is subject to city sales tax in MCTC jurisdictions.

But before you run down to your stores to demand a refund of your city tax, there's one more wrinkle to unfold. The MCTC also contains "options," which are basically add-ons to the code that cities can choose to adopt. If a city adopts Model Option #10, that means that the city does not exempt livestock, feed, and agricultural chemicals purchased by farmers or ranchers. In other words, regardless of what you're buying the feed for, it's subject to city sales tax.



How do I figure out what jurisdiction I'm in?

A list of all the cities who have adopted the MCTC can be found at https://modelcitytaxcode.az.gov/City_profiles/City_profiles.htm. Click on your city to find out the tax rate and whether it has adopted Model Option #10.

What if I'm being charged tax that I don't need to pay?

If you're incorrectly charged sales tax on livestock feed, we recommend that your first phone call be to the store manager. Arizona Farm Bureau's Government Relations staff has put together a "cheat sheet" for you to use to navigate the long and winding provisions of Arizona's tax code. You can find it at www.azfb.org on the Public Policy page under Resources and Links.

If that doesn't work, reach out to the Department of Revenue and ask for further guidance.

And of course, be sure and let the Government Relations team know what's going on – we're happy to help you along every step of the way! 🐾

Higher Limits Now Available on USDA Farm Loans

Farm Bill Increases Limits and Makes Other Changes to Farm Loans

Staff Reports

Higher limits are now available for borrowers interested in USDA's farm loans, which help agricultural producers purchase farms or cover operating expenses. The 2018 Farm Bill increased the amount that producers can borrow through direct and guaranteed loans available through USDA's Farm Service Agency (FSA) and made changes to other loans, such as microloans and emergency loans.

"As natural disasters, trade disruptions, and persistent pressure on commodity prices continue to impact agricultural operations, farm loans become increasingly important to farmers and ranchers," FSA Administrator Richard Fordyce said. "The 2018 Farm Bill provides increased loan limits and more flexibility to farm loans, which gives producers more access to credit when they need it most."

Key changes include:

- The Direct Operating Loan limit increased from \$300,000 to \$400,000, and the Guaranteed Operating Loan limit increased from \$ 1.429 million to \$1.75 million. Operating loans help producers pay for normal operating expenses, including machinery and equipment, seed, livestock feed, and more.
- The Direct Farm Ownership Loan limit increased from \$300,000 to \$600,000, and the Guaranteed Farm Ownership Loan limit increased from \$1.429 million to \$1.75million. Farm ownership loans help producers become owner-operators of family farms as well as improve and expand current operations.
- Producers can now receive both a \$50,000 Farm Ownership Microloan and a \$50,000 Operating Microloan. Previously, microloans were limited to a combined \$50,000. Microloans provide flexible access to credit for small, beginning, niche, and non-traditional farm operations.
- Producers who previously received debt forgiveness as part of an approved FSA restructuring plan are now eligible to apply for emergency loans. Previously, these producers were ineligible.
- Beginning and socially disadvantaged producers can now receive up to a 95 percent guarantee against the loss of principal and interest on a loan, up from 90 percent.

About Farm Loans

Direct farm loans, which include microloans and emergency loans, are financed and serviced by FSA, while guaranteed farm loans are financed and serviced by commercial lenders. For guaranteed loans, FSA provides a guarantee against possible financial loss of principal and interest.

For more information on FSA farm loans, visit www.fsa.usda.gov or contact your local USDA service center. 🚗

Arizona, An Open-Range State

By Chelsea McGuire, Arizona Farm Bureau Government Relations Director

Arizona is an open-range state. That means that the responsibility for keeping livestock off property falls on the property owner, not the livestock owner. And when you stop to think about it, this makes perfect sense. It's a lot easier for me, a private landowner with a defined area of property, to fence out livestock than it is for a rancher, who has hundreds of cattle spread over thousands of acres, to try and account for all of his animals at all times.

What is a no-fence district?

But, in some areas of the state, landowners have joined together to petition for the creation of a no-fence district. In a no-fence district, Arizona's open range laws don't apply. That means that it's the livestock owner's responsibility to keep livestock off of property, rather than the property owner's responsibility.

How is a no-fence district established?

No-fence districts are established by the County Board of Supervisors. Most of the taxpayers in the relevant area may petition the County Board and ask that a no-fence district be formed. Upon submitting such a petition, the Board will immediately record it and order the formation of the district.

If you own livestock, it's a good idea to have maps of these no-fence districts on file to determine whether there's a chance that your animals could end up in one of them. Arizona Farm Bureau staff has compiled these maps and legal descriptions of property in one convenient resource, available at www.azfb.org on the Public Policy page under "Resources and Links." 🚗

In the Age of Digital Technology, Leadership Programs Remain Essential

By Stefanie Smallhouse, Arizona Farm Bureau President



Stefanie Smallhouse

Leadership is an absolutely humanistic element sought after in all areas of our lives: school, church, work, family, community and government. A few years ago, an interview with Author Simon Sinek went viral on YouTube because it was so relatable. He explained how 35 years of raising kids to think that everyone is a winner, in conjunction with the explosion of social media and digital technology, has had some detrimental side effects to the work place. The impact has left employers feeling the need to step up and find ways to reverse some of the effects. But the greater question is, does this go beyond just the workplace and will this lead to a leadership crisis everywhere?

There is certainly an exhaustive list of the benefits we've received from the digital revolution of the last four decades. But like the rapid-fire disclaimer

of all those side effects listed in the ad for the latest anxiety medication (which would cause more anxiety I would think!), we should be aware of where humanistic elements are essential and may be harmed from the reliance on technology.

Sinek explains, awarding every child regardless of achievement has created a lack of confidence and a sense of entitlement. Addiction to social media and gaming has starved a generation of person-to-person interactions, relationship building, imagination and allowing their minds to wander and create. Every technology which makes our lives easier, also creates an expectation of instant gratification.

Sarah Moulton, of Human Capital Leadership Institute, points out that there are four leadership traits that cannot be replaced by artificial intelligence: Reassuring Communication, Human Touch, Establishing Rapport, and Creativity. This means they need to be cultivated in us... the humans! Reassuring communication is critical because technology cannot teach nor convey hope, essentially. The human touch relates to problem solving based upon the needs of a unique individual or group; Dedication to seeing the solution through. Establishing rapport creates trust and empathy which is needed for people to work successfully towards the same goal. Moulton references Eric Wahl's explanation of creativity by saying, "Intellect without intuition makes for a smart person without impact."

At Arizona Farm Bureau we see great value in youth leadership programs such as the Arizona FFA and Arizona 4-H. These organizations provide opportunities to both urban and rural youth and instill the value of hard work, responsibility, leadership, ingenuity, problem solving and persistence through a myriad of programs offered to fit all sorts of interests. Aren't these the qualities of leadership we all want to guide the future?

It is true that the Age of Social Media has shifted our axis and we don't yet know what greatness and cost will result, but I don't believe Mr. Sinek has spent much time around Blue Jackets or the 4-H Creed. Believe me, there is very little instant gratification in agriculture, as we all know. These youth are confident, because they have earned their reward and they must interact with their peers to get the job done. Their minds have been engaged and broadened through the many projects the programs offer. As long as these programs remain robust with our support, there will be no leadership crisis in agriculture or elsewhere. 🚗

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Eleven Reasons to Attend the Women in Agriculture Conference

By Christy Davis, Arizona Farm Bureau Outreach Manager, Program Excellence

It's time to register for the 23rd annual Women in Agriculture Conference that will be held at the Westward Look Resort, in Tucson July 11 through 12. The theme this year is *Resilience in the Desert*.



Why should you attend the conference this year? Here are 11 good reasons.

- 1. Location, location, location!** The Westward Look Resort is a unique resort located in a lush desert setting. You'll be inspired by the breathtaking views of the Sonoran Desert and Cataline Mountains. The Westward Look is a relaxing getaway destination. Plus, it's close to shopping, dining, nightlife and local attractions
- 2. Complimentary shuttle.** The resort offers a complimentary shuttle service anywhere within a 3-mile radius! Less stress for you.
- 3. Free from Conflict.** The July dates for this conference don't conflict with FFA or the Summer Ag Institute activities.
- 4. Wilhelm Vineyards and Tapas!** Taste Wines from grapes grown in Elgin while you hear from Mackenzie Kimbro, multifaceted lifestyle brand blogger and cooking/lifestyles personality on RFD-TV Kimbro is a 6th generation Arizona Rancher, author and owner of Cola Blanco Products LLC and Roots Run Deep blog.
- 5. Networking.** There is plenty of time to relax and network with your fellow aggies. Plus, you can make new friends.

- 6. Meet the Keynote.** Meet and talk with Dr Sara Place, Senior Director of Sustainable Beef Production Research at NCBA. In today's environment, it can be difficult to separate fact from fiction when it comes to beef's sustainability. Dr. Place will go beyond the headlines and share the latest science with regard to beef's environmental impacts including greenhouse gas emissions and land use, and highlight how cattle fit in a sustainable food system by acting as Upcyclers as they upgrade plants into high quality protein for people.
- 7. Come and get the facts.** Learn from five panelists in vital areas of the agriculture industry. These expert Aggies will talk about their experiences as a first responder and what they did to handle the situation.
- 8. Your Just Desserts.** Enjoy homemade fruit cobbler and other good food.
- 9. Anyone's Welcome.** The educational conference encourages young and old, male and female and all segments of agriculture.
- 10. Learning to manage stress.** Cultivating Courage in the middle of a Crisis, American Farm Bureau Women's Leadership Chair Sherry Saylor will offer practical ideas as to how to cope with stress and how to encourage each other in tough times.
- 11. It's Inspirational and Encouraging:** One 2018 conference attendee said, "I have attended the conference each year for the past 11 years and I always learn something to apply to both my personal and professional life." Another attendee said, "I've been to 7 or 8 and each time it gets better!"

To register for the conference go to www.azfb.org, then click on the *Resilience in the Desert* theme photo. If you need more information, contact Christy Davis 480.635.3615 or christydavis@azfb.org.

Reserve your hotel room online at <https://book.passkey.com/e/49780730> by June 20, 2019 to receive the special group rate. 📱

Meet Arizona Agriculture's Teeple Family

Mike and Christine Teeple's Arizona lavender farm has captured national attention and been featured in a variety of publications. So, they probably don't need any outsized publicity efforts on our part. But, they are newly minted Arizona Farm Bureau members (as of last fall) and they're excited to be part of an organization that focuses on farming and ranching. The beauty of the Teeple's Red Rock Ranch &



Farms can take your breath away. They'd purchased the property a few decades ago to retire on and get away from the hustle and bustle of a busy life in Southern California as owners of a specialty construction business.

Teeple's lavender has been identified by the plant experts as having some of the highest quality lavender in the world, in part, because of

how well it grows in the high altitudes, known as high-elevation super lavender. But his expertise in growing lavender hasn't stopped at his own farms edge. He now goes all over the world helping to design and develop unique lavender farms for others. When you've got it, you've got it, right?

And now, since 2014 the Teeple's have added to their crop mix: wine grapes. Plus, they added a wine tasting room allowing for wine tastings throughout the summer and fall.

Tell us about Red Rock Ranch and Farms, LLC: Red Rock Ranch and Farms LLC started when 120 acres of undeveloped land was purchased in Concho, at an elevation of 6,000 feet, for an organic vegetable farm and orchard. However, the lavender purchased for landscaping became an unexpected boon with its beauty and commercial value. Starting in 1998 with the first field of lavender, the farm now has 35,000 lavender plants. Red Rock Ranch and Farms was the first commercial lavender grower in Arizona. Early on, a greenhouse for commercial lavender production was built. Visiting the farm during the annual lavender festival has sparked the interest of many people to start their own lavender farms in Arizona.

We have provided our clients with field design and lavender plants to start their own micro-farms. Although we cannot now claim to be the only lavender farm in Arizona, we are pleased to see that we played a part in lavender farming becoming a recognized industry in Arizona. 📱

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