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# A CONVERSATION ON WHY FOOD SECURITY IS NATIONAL **SECURITY: ALICIA ELLIS**

By Julie Murphree, Arizona Farm Bureau Director of Strategic Communications

r. Alicia Ellis is an Assistant Teaching Professor and Director of the MA in Global Security program at Arizona State University (ASU). She develops coursework on national and global security, economic statecraft, geopolitics, and war and conflict. Alicia was appointed as a Presidential Management Fellow in 2012, during which she served as an analyst at the Department of Treasury's Office of Financial Research and later as a policy analyst for the U.S. Department of State's Bureau of Conflict and Stabilization Operations.

While assigned to the State Department, she studied Russian language at the Institute of World Politics, including six weeks immersion training in Odessa, Ukraine. A former Air Force officer, she served two deployments as an Air Battle Manager in support of Operation Enduring Freedom and Operation Iragi Freedom, including three months as the Joint Air Operations Center Liaison Officer.

She received her B.S. in Political Science from Northern Illinois University, her MA in International Relations from St. Mary's University, and her Ph.D. in Political Science from Arizona State University.

After moving out west, she joined the Arizona agriculture community, marrying into a family of  $5^{\rm th}$  generation farmers. She and her husband, Justin Perry, raised beef for Arizona families and restaurants until 2023, supplying many local favorites such as Four Peaks Brewery, Tarbell's, and ASU's University Club Bistro. They also own an agricultural composting business in east Mesa, where they experiment with regenerative farming methods on their 500-acre farm.

Never a light schedule on her calendar, Ellis recently returned from speaking at a conference in D.C. on the intersection of agriculture and competitive statecraft. Here, we learn a bit about that intersection and the importance of food security and national security.

Arizona Agriculture: From your vantage point and what you teach as a professor, define, from your perspective, food security. Also, on the flip side of the same coin, put your definition to "food insecurity."

Dr. Ellis: There are a lot of organizations that deal with this regularly that have specific definitions they use. For instance, the UN's Food and Agriculture Organization classifies someone as food insecure when they lack regular access to enough safe and nutritious food for normal growth and development, and there is a range of severity associated with those definitions.

But the work I do is a little bit different. What I try to shine a light on is how fragile even the most advanced food systems actually are. Abundance is sort of embedded in the American psyche because it's been so easy to get our food for most of us for so long, but that system really isn't as secure as we imagine it is. We got a little glimpse into that during Covid-19, when a handful of meat processing plants shut down as the virus spread through its staff.

We quickly started seeing empty butcher counters at the grocery store and rationing of meat products and of course overstocking exacerbates the issue when there are shortages, and that's a natural human reaction. This really exposed the processing bottlenecks in our beef, pork, and poultry supply chains.

We saw something similar happen in the fertilizer markets after the Russian inva-

sion of Ukraine in 2022. Those are the sort of vulnerabilities in the system that worry me, especially when you start thinking about how quickly the system can break down whether it's due to a natural event, or whether adversaries target those key nodes through cyber or biological means. It concerns me that you need so few targets to seriously disrupt not just the domestic food supply, but in many ways, it would have global ripple effects as well. So those are the kind of risks that I examine in the graduate course I offer at ASU on Security and the Global Economy.

I have an entire section of that course that reconceptualizes food systems as a question of national security. I think it's important that we elevate it to that level because agriculture plays a special role in human security. It's really not the benign good we tend to think of it as; it's a strategic good and it's existential.

Arizona Agriculture: I recently read that with the amount of global food production and potential for the future, no one should have to go to bed hungry. While we almost certainly can anticipate your answer, what does become the biggest challenge to a country's leadership feeding and clothing its people?

Dr. Ellis: There are multiple threats on the horizon in the long term, which are probably the ones you're anticipating in my answer but I'm going to throw you for a loop and say right now I think it's geopolitics. And I'll give you an example to demonstrate the point. Everyone remembers when Russia launched its full-scale invasion of Ukraine in early 2022 and Ukraine couldn't get its grain exports out. The world was on the brink of a food crisis because some of the most food inse-

cure parts of the world were heavily reliant on grain imports coming out of the Black Sea from both Russia and Ukraine. That was a close call.

But there was a related event that I think was actually a much closer call although it flew under the radar a little bit. Russia was trying to avoid sanctions by insisting that Europe pay for its gas in rubles and when they were refused, Russia cut off the supply of natural gas being delivered by pipeline throughout Europe. This wasn't just a problem for Europeans heating their homes, it also led to a 70% reduction in European production of ammonia for fertilizers, which caused worldwide shortages and, of course, overstocking again. That meant delays for many farmers in getting their fertilizer before spring planting season, and for those who had to wait, decreased yields. Imagine this See FOOD SECURITY IS NATIONAL SECURITY Page 5



Says Alicia Ellis, "It's why the human species has flourished, it's why we've sustained a population of 8 billion people on the planet, and yet we just keep asking farmers to do more."



# **REMEMBER TO VOTE "YES" ON PROPOSITION 134**

By Chad Smith, Arizona Farm Bureau Director of Government Relations

he Geographic Distribution Ballot Initiative, *Proposition 134*, driven by the Arizona Farm Bureau in collaboration with several organizations that include the National Pork Council, is one of our top priorities this election year.

This November voters from across Arizona will likely face ballot fatigue due to the large number of measures anticipated to be on the ballot. "Prop 134" is the cure. More importantly, this measure gives all Arizonians a voice when it comes to ballot initiatives.

If passed, never leaving Maricopa County to collect signatures will be a thing of the past, forcing activists outside of the major metropolitan areas to collect signatures.

Currently, for a measure to get on the ballot through signature collection, you simply must get 10% of registered voters for any statewide initiative, 15% for constitutional changes, and 5% for any referendums. Signature collectors never have to leave the major metropolitan areas to meet these requirements, which disregards the rest of Arizona voters. We have seen this all too many times with various measures, measures that ultimately impact all of us.



# AN INITIATIVE THAT GIVES RURAL ARIZONA A VOICE

This initiative will level the playing field and provide rural Arizona with a voice when it comes to ballot measures. If passed in November it would require signatures from every legislative district. 10% of registered voters from each of Arizona's 30 state legislative districts (LD) for statewide initiatives, 15% from each LD for constitutional changes, and 5% for referendums. This would provide every district, and every county a voice in what initiatives make it on the ballot.

Making sure our rural voices are heard is a must and that is why this is one of our top priorities this year. Our polling shows that voters must be informed and educated on the initiative, and this will be even more important given the large number of measures that will be before them in November. In fact, the count is 13 ballot initiatives. That is why we are

See VOTE "YES" ON PROPOSITION 134 Page 4



Farm Bureau Member Makes

the Ag Innovation Challenge

# UNDERSTANDING THE CENTRAL ARIZONA WATER CONSERVATION DISTRICT AND ITS IMPORTANCE

By Daniel Harris, Arizona Farm Bureau Government Relations Manager

he Central Arizona Water Conservation District (CAWCD) plays a vital role in managing water resources in Arizona, and its elections often fly under the radar, despite their massive impact on the future of water distribution and policy in the state. With the 2024 election barely a month away, it's crucial to understand the district's significance, the challenges ahead, and why voters should not overlook this crucial down-ballot race.





### WHAT IS THE CAWCD?

The Central Arizona Water Conservation District is a multi-county conservation district, encompassing Maricopa, Pima, and Pinal counties. It oversees the operation of the Central Arizona Project (CAP), a 336-mile-long canal that transports water from the Colorado River to central and southern Arizona. CAP delivers water to residents, businesses, farmers, and tribes, making it one of the most critical infrastructure elements in Arizona's water management system.

The CAWCD board is comprised of 15 members who serve six-year, unpaid terms. The board members are elected from the three counties in the service area: 10 from Maricopa County, four from Pima County, and one from Pinal County. The board is responsible for setting water rates, establishing policies, and managing taxes related to CAP water delivery and the repayment of CAP construction costs.

### WHY THIS ELECTION MATTERS

Five of the ten Maricopa County seats on the CAWCD board are up for election this

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year, and while only six candidates are running for these five positions, the outcome will have far-reaching consequences for water policy in the state. Water is an essential resource, and the decisions made by CAWCD board members will shape Arizona's water future at a time when uncertainty about the state's water supply is growing.

One of the most pressing concerns is the impending expiration of the current rules governing the operations of Lake Mead and Lake Powell in 2026. These reservoirs are vital sources of water for Arizona, and ongoing negotiations will determine how much water each state will receive after the existing rules expire. Arizona's water supply, already strained, could see even more drastic reductions, especially since CAP holds junior water rights on the Colorado River, meaning it could face deeper cuts.

With 36% of Arizona's total water supply coming from the Colorado River, the CAW-CD board will be instrumental in determining how to manage these reductions. This will include addressing the impact of less water on cities, agricultural interests, and tribal allocations, as well as how the district will continue to finance critical projects like canal repairs and groundwater replenishment.

### THE CANDIDATES AND THEIR IMPACT

This year's candidates include four incumbents and two newcomers, all with different backgrounds in water management and public service:

- Lisa Atkins: A longtime board member with three previous terms and a history as board president.
- **Brian Biesemeyer:** Recently retired as Scottsdale's Water Department director, with significant experience managing water and wastewater services.
- **Rudy Fischer:** A retired business executive with prior experience on a California city council and water board.
- **Terry Goddard:** Current CAWCD board president and former Arizona attorney general and Phoenix mayor.
- **Heather Macre:** A commercial litigation and healthcare law expert who has served two terms on the board.
- April Pinger-Tornquist: A research and development engineer who has served since 2018.

These candidates are vying to help guide Arizona through some of the toughest water challenges the state has ever faced, including the potential for long-term water cuts from the Colorado River and the balancing of interests between urban development, agriculture, and tribal water rights.

### THE BIGGER PICTURE: GROUNDWATER AND DEVELOPMENT

In addition to managing Colorado River water, CAWCD plays a role in replenishing groundwater, a crucial resource for housing development on the outskirts of Phoenix. As metro Phoenix continues to expand, the board's decisions will influence whether there is enough water to support that growth while maintaining sustainable groundwater levels.

# ENGAGING IN THE ELECTION: WHY YOUR VOTE MATTERS

The decisions made by the CAWCD board will shape water policy for decades to come. This election is a unique opportunity for voters to have a say in how Arizona manages its water supply, particularly as the state grapples with increasing challenges related to drought, population growth, and climate change.

Although the race for CAWCD board may not grab headlines like other elections, the outcome is critical to the future of water in Arizona. Voters should take the time to learn about the candidates, their qualifications, and their positions on water management issues before casting their ballots.

# CONCLUSION: PROTECTING ARIZONA'S WATER FUTURE

Water is the lifeblood of Arizona's economy, agriculture, and communities. As the state faces increasing pressure on its water resources, the role of the CAWCD board is more important than ever. By voting in this election, Arizonans can help shape the future of water policy and ensure that their communities have access to the water they need to thrive.

# THE LATEST ON ARIZONA'S TREE NUT INDUSTRY

By Julie Murphree, Arizona Farm Bureau Director of Strategic Communications

rizona's tree nut industry is a thriving agricultural sector, marked by its substantial contributions to the national and global markets. Yes, we're nuts about Arizona's pecan, pistachio and now we can even say almond trees!

Known for its favorable climate and innovative farming techniques, Arizona has become a key player in the production of a variety of tree nuts, including pecans, pistachios, and almonds. The state's arid conditions, combined with advances in irrigation technology that include water-use reduction and sustainable farming practices, have enabled it to develop a robust industry capable of producing high-quality nuts.

With an emphasis on both traditional and emerging agricultural practices, Arizona's tree nut industry not only supports local economies but also caters to a growing demand for nutritious, plant-based foods all around the world.

Most of the tree nut acres in Arizona are pecans at 27,345 acres, according to the United States Department of Agricul-

See ARIZONA'S TREE NUT INDUSTRY Page 6

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# **VOTE "YES" ON PROPOSITION 134**

working to activate our grassroots advocates and engage you all in your local communities. We need all advocates on deck, helping us inform voters about the measure, what it does and how it will level the playing field.



By mandating that signatures be gathered statewide, Prop 134 will give all Arizonans an equal opportunity to have their voices heard in the initiative process.

It's important to note, that Prop 134 does not seek to eliminate citizen-led signature petitions. Instead, it aims to enhance the process by ensuring that initiative campaigns extend beyond urban centers and engage with voters across the entire state. This approach will help ensure that the initiatives appearing on the ballot are genuinely representative of all Arizonans, not just those residing in metropolitan areas.

Voting YES on Prop 134 is a vote for a more equitable and representative ballot initiative process. It is a step towards ensuring that every legislative district has a voice, leading to more balanced and fair outcomes. As we approach November, let's support Prop 134 to strengthen our democratic processes and make sure every Arizonan has a seat at the table.

To learn more, visit our website at <a href="https://www.azfb.org/Advocacy/Issues/Geo-">https://www.azfb.org/Advocacy/Issues/Geo-</a> graphic-Distribution-Ballot-Initiative

### OTHER ELECTION DETAILS

continued from Page 1

A tradition that goes back 40 years, American Farm Bureau Federation (AFBF) recently asked former President Donald Trump and Vice President Kamala Harris their priorities for American agriculture in a questionnaire.

Farm Bureau asked the Democratic and Republican presidential nominees to respond with their stances on several topics that directly affect farmers, ranchers and rural communities. Topics include crop insurance, taxes, labor and rural infrastructure.

> "The challenges facing America's farmers and ranchers continue to mount, from falling commodity prices to stubbornly high supply costs," said AFBF President Zippy Duvall. "The next president will set the agenda for trade, regulatory reform, labor and sustainability. It is important that our members, and others in rural America, know where the presidential candidates stand on issues that will affect the vibrancy of their communities and their ability to pass farms to the next generation."

The questionnaire includes 14 questions. In addition to the topics listed above, it covers food system resiliency, regulatory reform, international trade, sustainability, energy and biotechnolo-

The answers are presented unedited, to give members an unfiltered look at each candidate's platform. AFBF has invited candidates from both parties to respond to election questionnaires for more than 40 years. The survey responses are available now on FB.org/ election2024.

Editor's Note: For more information on this year's election please visit our Election Resource page on azfb.org. As we collect candidate responses to our questionnaires, we will also update you here 2024 Election Resources (azfb.org)



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# FOOD SECURITY IS NATIONAL SECURITY continued from Page 1

went on for a few more weeks and that it was happening all over the world at the same time; we would have had a serious global food crisis on our hands.

This was generally treated as a blip on the radar from which we quickly recovered, but it's more than that. It reveals vulnerabilities in the supply chain and dependencies on unreliable partners for our most critical goods. Part of the reason we avoided a bigger crisis in 2022 was because the U.S. exempted Russian fertilizer from sanctions. The United States imported almost 2 billion dollars of fertilizer from Russia that year, and we're no less dependent today. The world's leading fertilizer exporters are Russia, China, and Belarus, none of which I would put on my list of most reliable trading partners. This list of providers of the world's most important agricultural input is also a list of disrupters to world stability who aren't happy with the balance of power and want to see it shift in their favor. And in the case of Russia, there seems to be no limit to what they're willing to do to accomplish that, including causing chaos that disrupts supply chains and livelihoods and access to food. So, these geopolitical problems aren't going away any time soon

Arizona Agriculture: Geopolitical experts at the New England Complex Systems Institute identify a specific food price threshold above which protests become likely when a population is starving. This global flashpoint may be hard for us to grasp. Coming out of the military, what additional insights can you share about the volatility of a country due to hunger?

**Dr. Ellis:** That's a pretty well-established linkage, the relationship between food insecurity and political instability, which can also turn violent. To give you an example, Russia lost about a third of its wheat harvest in 2011 and banned all wheat exports. The Middle East and North Africa were hit first and hardest because they import so much of their wheat from Russia, but also because it caused food prices to spike and then stay high.

When people can't feed their families, it undermines the legitimacy of political systems, so you saw all these underlying problems – poverty, corruption, et cetera – come to a head with protests and riots that were really catalyzed by anger over food prices. People run out of options, so it's a catalyst for political instability and conflict. It's also a vicious cycle: food crises don't just drive conflict, conflict also triggers food crises, which will in turn, deepen conflict over resources and worsen the humanitarian impact of conflict.

It's what the military would call a threat multiplier. There's actually a famous quote by Alfred Henry Lewis – "there are only nine meals between mankind and anarchy." This goes back to what I pointed out earlier, that this particular commodity is existential. There's nothing people won't do to ensure they have it. So, we have to think about it as a question of both national and global security, we have to think about building more resiliency into those systems, and we must think about where our most critical goods are coming from.

Arizona Agriculture: What region of the globe has the most concern for you? Perhaps another way to say it, what geopolitical flashpoint has you waking up at night worried?

*Dr. Ellis:* All of them right now. This can be a difficult question to answer because today they are so interconnected. The first thing that comes to mind is the Middle East both because of the conflict between Israel and Gaza and the potential to escalate into a much larger war, but also because parts of the Middle East and North Africa rank high in

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food insecurity. They tend to be very reliant on wheat imports, much of which come out of the Black Sea, from Russia and Ukraine, who are currently at war.

So, then you can't really talk about instability in the Middle East without reference to this other geopolitical flashpoint because it has an outsized impact on global food security. And if you're going to talk about the Russian invasion of Ukraine, then you must think about how its outcome will affect China's strategic calculation in the South China Sea, and if you're going to talk about that, then you are also talking about freedom of the seas and securing global shipping and trade, which is a primary responsibility of the United States Navy. This is a problem because right now the Navy is also trying to deal with the Houthis disrupting shipping in the Red Sea, which is causing higher prices and supply chain delays as ships are forced to bypass the Suez Canal and go all the way around the Horn of Africa, which adds significant time and cost and so now we're back to the Middle East again. So, they really are all connected to one another and any one of them has the potential for cascading effects.

Arizona Agriculture: According to a paper by the Organization for Economic Cooperation and Development (OECD), since 1960, global food production has increased by 390% while land use has increased by a mere 10%. These are the statistics that can give us hope. What else do you think Arizona and American agriculture do well?

**Dr. Ellis:** Well, we obviously do research and development really well, evidenced by that statistic. We do scale really well. Organizations that accumulate and market for small farmers play a really important role in scalability in a way that allows smaller family farms to survive and compete. That part of the system is one that I think works pretty well for both producers and consumers.

As a whole, the system also does efficiency really well, but I do think that we should be looking more closely at how we might balance that with resiliency, and we're probably overdue for a systemic risk assessment of our food systems at a national level, especially given the numerous geopolitical and other risks. The just-in-time economic model that most sectors of the economy follow is a bit risky when you're talking about your food supply. Markets might be really adept at adjusting and reallocating, but agriculture is different—when fertilizer supply chains are disrupted, you can't simply absorb a threeweek delay like you can for other goods, and the potential consequences of that on a large scale are incomprehensible.

I'm also not convinced we do communication very well. We should be working together between farmers, the supporting industries, and government to communicate needs and develop strategies that better support producers and meet national security priorities. For example, as far as I can tell, industry is generally unaware of the geostrategic importance of wheat and the way it's been used as a tool of U.S. statecraft for over a hundred years, or the way it can be used to prevent and ameliorate conflict so that we can avoid spending a lot more on military solutions.

Since overtaking the U.S. in 2017, Russia is now the world's largest wheat exporter, which has led to all kinds of geostrategic problems. Part of the reason the U.S. lags behind in wheat is because wheat is behind other commodities in research and development. That's something federal agencies could be supporting. It could play a role in educating consumers about the benefits of GMOs. It could be working on coherent trade policy for agriculture that supports U.S. producers, boosts exports, and ensures we're obtaining necessary inputs from reliable partners, not from Russia. Our partners overseas are concerned about this too, but we haven't given them somewhere else to turn for the world's most important food. If we can address some of those weaknesses, then I think it would enable us to better capitalize on our many strengths.

Arizona Agriculture: Despite an expertise in this extremely serious issue, food security, what makes you hopeful?

**Dr. Ellis:** At the risk of sounding cheesy, it's the ingenuity and spirit of farmers. They're asked to make an incredible lift – feed the world and risk your lives and livelihood in an industry that is completely reliant on something we can't control, the weather, – and while you're at it, solve the water crisis and climate change too, while also being the first to deal with its impact.

They're really the unsung heroes on whose output we built the modern world. It's why the United States has been so prosperous, why we can all go to work and do different things and pursue our interests and make other stuff that makes our lives increasingly comfortable. It's why the human species has flourished, it's why we've sustained a population of 8 billion people on the planet, and yet we just keep asking farmers to do more. And they just keep doing more, they get up every day and keep innovating and keep problem solving and I don't think most of the world realizes just how much we rely on them to do that. So, I think whatever comes next, farmers will solve that too, because they haven't let us down yet.

# LET'S ENGAGE

By Julie Murphree, Arizona Farm Bureau Director of Strategic Communications

uring County Farm Bureau Annual Meeting season several years ago, one of our county leaders reminded fellow farmers and ranchers, "we need to communicate better with the public about what we do." Impassioned and clear, he was telling the group of farm and ranch leaders it's time to step up. He added, "I'm the first to admit, I need to do more."

At Arizona Farm Bureau, the Advocacy, Communications, Member Engagement and Ag Education teams take pride in elevating the Arizona agriculture story to our various audiences. But it's not quite enough. Additionally, our impact is never as valuable as yours, the farmer or rancher.

On a social media channel when Rancher John or Jane speaks, it's so much richer than when a Farm Bureau staffer tells the Arizona agriculture story. Maybe a better way phrase, "It takes everyone to engage the public in our farm and ranch stories.

# STEPS TO GETTING TO THE "DO"

Our family farmed up until 2005. So, I get how hard it is to even conceive of launching a social media channel (X, Facebook, Instagram, and more). Or tolerating a media query. Or, pausing long enough to go into your child's classroom to read to the class an ag-accurate book (even virtually today).

There is hope though and for even the busiest of us, it can be done.

**Be original, be you.** Your best focus for the context of telling farming and ranching is your story. Begin to accept that even what seems mundane to you is fascinating to someone in the public who has no concept of farming or ranching. Saddled up a horse all your life to ride fence? Boring to you?! Not to Joe or Jane Public.

Pick just one channel in social media: Decide if you are more comfortable using Instagram, X or Facebook. Not to brag but Arizona Farm Bureau is on every channel imaginable, well except Tic Tok and Snapchat. If you have got questions, call one of us on staff.

**Dedicate a time each day or week or month.** One of our winegrower members once told me, "Julie, I devote about 15 to 20 minutes early in the morning to my social media channels then I'm done for the day, and I don't wor-

# ARIZONA'S TREE NUT INDUSTRY continued from Page 2

ture's National Agricultural Statistical Services. Pistachio acreage comes in behind pecans at approximately 8,000 acres since the latest USDA Census count. While almonds are the smallest in acreage and do not have the production history in the state like the other tree nuts, it's estimated that 4,000 to 6,000 acres of almonds have been planted in Arizona.

Arizona and New Mexico are showcasing their ability to produce an excellent pecan product. New Mexico has the natural advantage of high desert conditions, bright sunny days, cooler nighttime temperatures, conditions conducive for producing some of the highest yields per acre of any other pecan state. However, Texas and New Mexico pecans are smaller in size (70 nuts per pound is typical) while Georgia and Arizona pecan sizes are larger (55 to 65 nuts per pound).

Some buyers prefer the larger pecan sizes, the shellers typically blend sizes and growers are paid on a meat-point basis, meaning the payment is made on the percentage of the pecan that is kernel, and not shell (typically, about 56% meat and 44% shell).

Recently on the Rosie on the House radio show, we interviewed Arizona Pecan Growers President Harold Payne. So, we had a heavy focus on pecans but were able to mention pistachios' significance in our state as well. "Arizona yields have been steadily increasing as more orchards are coming into production," explained Payne. "There are very few new orchards in New Mexico, due to water constraints."

# SOME NATIONAL STATISTICS ON FRUIT, TREE NUT AND BERRY PRODUC-

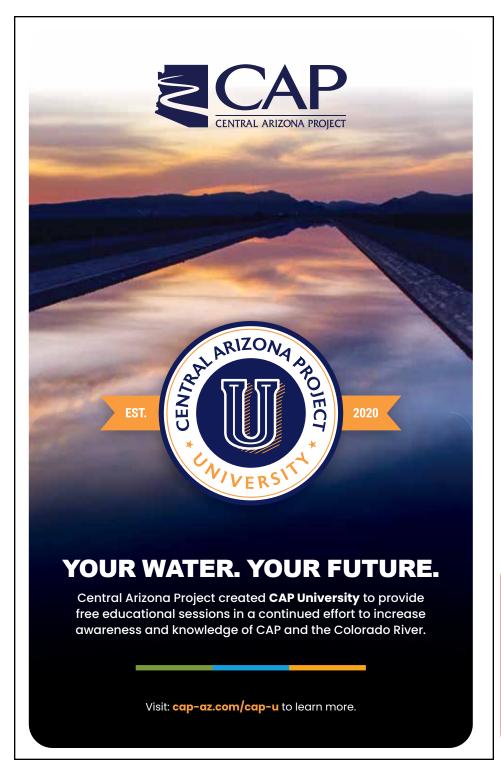
In the most recent USDA Census of Agriculture (2022 with data results released this year), U.S. fruit tree nut, and berry sales amounted to \$34.2 billion, accounting for 6.3% of total U.S. agricultural sales. This was an increase of \$5.6 billion, or 20% since 2017, the last time the Census of Agriculture was conducted. The number of acres producing these commodities was up 10%. Of note, the USDA's Census groups these 3 commodities together: fruit, tree nuts and berries.

Interestingly, according to the USDA Census of Agriculture, farms that specialized in fruit, tree nut, and berry production on average had fewer acres and higher sales than farms overall

Ten states accounted for 93% of sales and 92% of acres producing fruit, tree nuts and berries in 2022. Arizona ranks in the top 10 states at number nine in the lineup with \$233.2 million in sales.

Finally, the number of acres producing fruit, tree nuts, and berries in 2022 was 10% higher than in 2017 (6.6 million acres in 2022 versus 6 million in 2017). The increase was driven by a 23% increase in tree nut acres and an 18% increase in berry acres. This is evident across the state in southeast and northwest Arizona where increased new acreage in tree nuts have been planted.

According to the Census, 93% of the fruit, tree nut and berry farms are family farms. In the meantime, below are valuable facts about Pecans and Pistachios that we've





When consumers select pecans to cook and bake with, pecan halves are the preferred form of the nut for their culinary needs. Photo courtesy of Green Valley Pecans.

harvested from the Arizona Pecan Growers Association and the National Pecan Shellers Association.

- 1. Arizona's Green Valley Pecan Company is the world's largest irrigated pecan orchard.
- 2. To produce fruit in half the time, farmers bud or graft seedlings onto established rootstock.
- 3. Pecan and Pistachio trees are alternate bearing and have a good crop only every other year.
- 4. It takes 78 pecans to make a pecan pie, though some serious pecan pie makers suggest you should double that number!
- 5. Pecans are heart-healthy and contain 19 vitamins and minerals.
- 6. Pecans are high in healthy unsaturated fat that can lower total blood cholesterol and preserve high-density lipoproteins (HDL) or "good" cholesterol. Sixty percent of the fats in pecans are monounsaturated and another 30 percent are polyunsaturated, leaving very little saturated fat in pecans. In addition, pecans contain no trans-fat.
- 7. Pecans contain more than 19 vitamins and minerals– including vitamin A, vitamin E, folic acid, calcium,

magnesium, phosphorus, potassium, several B vitamins and zinc.

3. Pecans are naturally sodium free.

- 9. A one ounce serving provides 10% of the Daily Recommended Intake for fiber.
- 10. Today, the U.S. produces about 80 percent of the world pecan supply. The top states, in order, are Georgia, New Mexico, Arizona and Texas.
- 11. A 2011 research study from Loma Linda University demonstrates that naturally occurring antioxidants in pecans may help contribute to heart health and disease prevention (January 2011 issue of The Journal of Nutrition). Eating pecans increased the amounts of antioxidants in the body and reduced "bad" cholesterol (LDL).
- 12. Today, "pecan" is pronounced many ways with strong differences in opinion inside of state and regional borders, even in the South. Webster's offers three pronunciations: pi-'kan, pi-'kan and 'pē-'kan.
- 13. Perhaps due to glaciation, pecans died out in Europe about 2 million years ago. The tree survived in North America and Mexico, however. Up until this year, most research says that the word pecan comes from the Algonquin Indians. According to new research from Andrew F. Smith, we don't know whether "pecan" came from Natchez, Algonquin, or some other language. Whether it was a word commonly used among many Indian language groups is unknown. Request your free copy of the new paper by Andrew F. Smith from the National Pecan Shellers Association.
- 14. About 1,000 pecan varieties exist, many of them named after Native American tribes.
- 15. Before 1920, pecans were "hand-shelled" by consumers. In 1920, commercial shelling equipment made it much easier for us to enjoy these delicacies and consumption dramatically in the 1920s and after.
- 16. According to National Pecan Shellers Association consumer research, pecan halves are the preferred form of the nut used in cooking and baking. When consumers think of pecans, they immediately associate the gems with pecan pie.

Regarding Pistachios, we've obtained some great facts from the American Pistachio Growers and our Arizona pistachio farmers themselves.

- 1. Pistachios are Heart-healthy: Research shows that pistachios can help reduce bad cholesterol levels and decrease the risk of heart disease. They are a rich source of monounsaturated fats, which are known to be good for heart health.
- 2. Pistachios are one of the oldest edible nuts in the world: Pistachio nuts have a long and fascinating history. They have been enjoyed by humans for thousands of years and are even mentioned in the Bible.
- 3. Pistachios are known as the "skinny nut:" Compared to other nuts, pistachios have a lower calorie content per serving. They are also relatively high in fiber, which helps you feel fuller for longer periods of time.
- 4. Pistachios are a good source of antioxidants: Antioxidants are important for protecting the body against damage from harmful free radicals. Pistachios contain various antioxidants, including lutein and zeaxanthin, both are beneficial for eye health.
- 5. Pistachios are a popular ingredient in Middle Eastern Cuisine: Pistachios are widely used in Middle Eastern dishes, adding a delightful crunch and flavor to dishes like baklava, falafel, and various meat and rich pilaf recipes.
- 6. Pistachios are versatile to Your Culinary Creations and have been in certain dishes for centuries: Pistachios have been used in various culinary creations for centuries. They can be enjoyed on their own, added to salads, desserts, and even used as a crust for meat or fish dishes.
- 7. Pistachios are sustainably grown: Pistachio trees are well-adapted to harsh climates and require minimal water compared to other crops. This makes them a more sustainable choice for farmers and contributes to the conservation of water resources.

Arizona's tree nut industry growth reflects a continuing trend towards diversification in the state's agriculture, showcasing Arizona's adaptability and its commitment to meeting both domestic and international market needs. As the industry continues to evolve, it stands as a testament to the innovative spirit driving Arizona's agricultural successes.



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# **GETTING THE MOST OUT OF FARM BUREAU'S ANNUAL CONVENTION**

### **DELEGATES CARRY THE ULTIMATE POWER IN FARM BUREAU**

ou campaigned or received encouragement from your County Farm Bureau president and earned the coveted slot of being a delegate representing your county at the Arizona Farm Bureau Annual Convention this coming November 18 and 19. Delegates are sitting atop a golden opportunity to influence agriculture's most important and hot topics while having a good time, learning a lot and visiting with fellow farmers and ranchers throughout Arizona.

In preparation for the meeting and exercising your vote, it's a good idea to visit with your County President or Policy Development Chair to learn which policies your county has submitted for consideration at the state level and key policies that other counties have submitted. This is often discussed at your county's October board meeting, so you'll want to attend this month's scheduled county board meetings.

Of course, if you were in the thick of your county'spolicy development you already know what policy issues are



Maricopa County Farm Bureau delegate Wes Kerr discusses policy on the delegate floor. Delegates from Arizona's County Farm Bureaus discuss and vote on policies that lead Farm Bureau's work on key issues impacting agriculture. Delegates should be prepared to weigh in on proposed policies.

most important to your county. The value of being involved in such discussion is by the time you make it to the state's November Annual Meeting is that you've been able to establish and have an informed opinion about the issues.

Tuesday, November the 19th is a full day of working on resolutions, as well as hearing from some great speakers. Remember, all Farm Bureau policies addressed at the Annual Meeting start at the county level and are discussed, amended and approved by delegates elected by, you, the grassroots members. Working together during the resolutions session, your county delegates will be able to influence the final language to be adopted as state policy or sent on to American Farm Bureau. This may mean convincing delegates from other counties to support your policy positions.

So be sure to get registered, including your hotel, and be prepared to fully participate in the Annual Meeting. You'll go home to the farm or ranch reinvigorated with new knowledge and new friendships and solid policy. And you'll have made a mark on the industry that you love and want to see prosper in our country – agriculture.

### **REGISTER BY NOVEMBER 8, 2024**

### **5 WAYS TO REGISTER**

BY PHONE Call Katie Booth at (480) 635-3605

Fax completed form to (480) 635-3781

### BY F-MAII

Scan document form to convention@azfb.org

Include this form, send to: Arizona Farm Bureau 325 S. Higley Rd., Ste 210 Gilbert, AZ 85296-4770

# ONLINE

Visit AZFB.ORG online

### **HOTEL RESERVATION INFORMATION**

# The Westin La Paloma Resort & Spa

3800 East Sunrise Drive **Tucson, AZ 85718** 

Deadline for Hotel Reservation is **OCTOBER 28, 2024** 

Please call (520) 742-6000 and mention

**Group Code: Arizona Farm Bureau Annual Meeting** 

our rate \$219/night, plus tax.



# 103<sup>rd</sup> ANNUAL CONVENTION REGISTRATION FORM

# November 18 and 19 - The Westin La Paloma Resort and Spa

Registration Fee \$185 per person (pricing includes all meals) Do Not Delay - Registration Deadline November 8th - Register Today!

Farm Bureau members throughout Arizona will set policy, hear informational and political speakers, attend awards and recognition events and the Ag Expo Trade Show. Don't miss out on the opportunity to network with ot

Name	Membership
Address	
City, State and Zip Code	
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Service to Ag Awards Dinner - Monday Evening	. #ppl
AgPac Breakfast - Tuesday Morning	
President's Luncheon - Tuesday Mid-day · · · · · · · · · · · · · · · · · · ·	#ppl



Include your	Arizona	Farm	Bureau	Membership	Fee
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	Maricopa and	Yuma	County.	 \$180.	.00
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# LET'S ENGAGE continued from Page 5

ry about it for the rest of the time." Most in the retail farming and ranching space get it, but others should too. Plus, more and more farmers have now shared with us that they're working with the younger generation to help them with outreach on the social media platforms.

Especially for Retail farmers, make a small sign that you always place next to the produce and/or animal ag when you are on your channel or about to take a photo. Don't just take a picture of tomatoes. They could be anyone's. But, if you grew them, place the sign by your wonderfully grown tomatoes so viewers know for sure they are yours. This is called brand awareness. Your farm logo should show up everywhere that you do.

**Engage.** So, I can't convince you to open an X account (or use the one you opened but never post on). Fine. But remember every conversation you have with a supplier, family friend, colleague or new acquaintance might be an opportunity to talk about your farming and ranching life. Don't preach, just listen and find that opening to tell your agriculture story.

**Celebrate.** New achievements on the farm and ranch? Are market prices finally coming up? Anything new or different becomes something to tell. Even if you don't want to explain it call us at Arizona Farm Bureau and we'll help you celebrate a win. We need more of those in agriculture right now.

Exploit all the resources found through our Ag Education program. Parents of

children still in the home often feel the greatest conviction in helping in some way in the schools. Several of the Farm Bureau counties make a priority of supporting the Ag in the Classroom program with some of the farmer and rancher volunteers continuing to host tours, go into the classrooms and even participate as a "pen pal" with a classroom. If you want to discover all our resources, go to <a href="https://www.azfb.org/Agriculture-in-the-Classroom">https://www.azfb.org/Agriculture-in-the-Classroom</a>.

Just can't tolerate the idea of engaging the public? Arizona Farm Bureau and your commodity-specific associations

your commodity-specific associations will still be here for you and help you. We always want big wins when it comes to connecting with the public but like dating, it's usually a series of tiny steps that lead up to helping the mutual parties discover there is truly something there.

**Editor's Note:** To get your story told, contact Julie Murphree at juliemurphree@ azfb.org. She'll help you determine a plan of action.



Farm Bureau member Harold Maxwell talks to youth at a science fair telling the agriculture story by telling his story and experiences with technology and agriculture equipment.

# ARIZONA MAKES THE TOP 10 IN FARM BUREAU'S AG INNOVATION CHALLENGE

By Staff Reports

adma Agrobotics, LLC, from Arizona, has been selected as a semi-finalist in American Farm Bureau's Ag Innovation Challenge along with nine other competitors. Padma's Agrobotics Al-powered tool is a robotics technology designed to increase yield and decrease crop production costs. This is the second time an Arizona Farm Bureau member has made it to the semifinalist round. In 2018, Tucson, Arizona's Merchant's Garden AgroTech earned a nationwide semifinalist spot with nine others in this national Innovation Challenge competition.

Now, these 10 start-up companies offering agricultural innovations will compete for a top prize of \$100,000 in the 2025 Farm Bureau Ag Innovation Challenge. The American Farm Bureau Federation, in partnership with Farm Credit, continues to elevate the

importance of entrepreneurship in agriculture through the contest.

"New ideas and innovative businesses have continually pushed the boundaries of what's possible in farming," said AFBF President Zippy Duvall. "We doubled the prize and the impact for this competition, which helps entrepreneurs grow their ideas into products that support farmers and ranchers in their mission to provide the food, fuel and fiber we all rely on."

The competition provides an opportunity for individuals to showcase ideas and business innovations in agriculture. This is the 11<sup>th</sup> year of the Challenge, which was the first national business competition focused exclusively on rural entrepreneurs launching agriculture- and food-related businesses. Farm Bureau is offering \$145,000 in start-up funds throughout the course of the competition.

The 10 semifinalist teams will participate in a virtual pitch round with three judges representing various sectors of the agricultural supply chain. The 10 semi-finalist teams are:

- Gripp Inc., Indiana
- GSR Solutions, Vermont
- Halio, Utah
- Just-In Traps, Texas
- Labby, New York
- Northstar Lime LLC, Minnesota
- Padma Agrobotics LLC, Arizona
- Poultry Patrol, Iowa
   Poultry Patrol, Iowa
- ReEnvision Ag, lowa
- Rhize Bio Inc., North Carolina

The four finalist teams advancing to the final round each receive \$10,000 and will be announced October 17. The finalist teams will compete at the AFBF Convention on Sunday, January 26, in front of a live audience of Farm Bureau members, investors and industry representatives, competing for top titles and prizes:

- Farm Bureau Ag Innovation Challenge Winner, total of \$100,000
- Farm Bureau Ag Innovation Challenge Runner-up, total of \$25,000

Farm Bureau recognizes and supports these rural businesses with generous funding provided by sponsors Farm Credit, Bayer, John Deere, Farm Bureau Bank, Farm Bureau Financial Services and T-Mobile.

Previously Merchant's Garden Agro-Tech earned a nationwide semifinalist spot and came away with a tremendous wealth of experience, including a few extra dollars to invest in the company. "Being named a Top 10 Innovation from the American Farm Bureau, the largest farm organization in the world, brought significant value to our company beyond the \$10,000 in cash award," said Merchant's Garden owner and Arizona Farm Bureau member Chaz Shelton.

Since then, Arizona Farm Bureau has had other volunteer member leaders submit to compete in the Innovation Challenge. Padma Agrobotics, LLC is the second time an Arizona-based start-up has been selected.

"We know that in order to curb the migration of youth and big thinkers out of rural communities we need to provide opportunities for them to shine and expand entrepreneurial activities," said Arizona Farm Bureau President and southern Arizona rancher Stefanie Smallhouse. "Strong communities depend on small businesses and the entrepreneurial spirit. We have already seen some great innovation in Arizona agriculture, and I would encourage others to take on this challenge."

To learn more about the Challenge visit fb.org/challenge.

