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BLUE DIAMOND GROWERS

# almond facts

NEWS, VIEWS, AND INDUSTRY INSIGHT

JULY– AUGUST 2021


Both Salida and Turlock facilities become California Green Business Certified by the Modesto Chamber of Commerce.

Meet the BDG Foundation Scholarship Recipients

Salida and Turlock Sites Receive Green Business Network Certification

NEW Article Series: Sustainably Speaking with Dr. Dan

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## Features



ON THE COVER:
*"Blue Diamond Goes Green" Both Stanislaus County Facilities Now Recognized as Part of Modesto Chamber of Commerce's California Green Business Network, Stanislaus.*




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*Blue Diamond*, the world's largest processor and marketer of almonds, exports to over 100 countries.

*Almond Facts*, established in 1922, is published bimonthly by *Blue Diamond Growers*, 1802 C Street, Sacramento, California 95811, phone: 916.442.0771. Address all correspondence to the Editor, *Almond Facts*, P.O. Box 1768, Sacramento, California 95812. Advertising subscription rates provided upon request.

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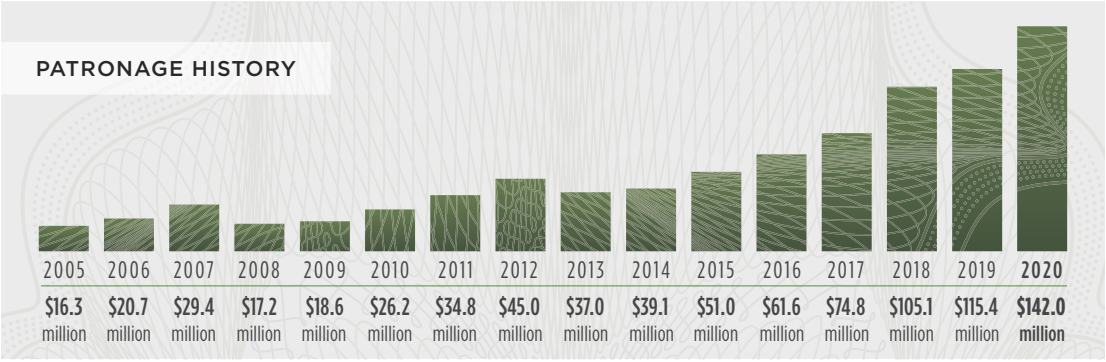


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Mark Jansen
President & CEO

# Unwavering Confidence in Our Future

*At this time last year, our industry was bracing for a monster, record-sized almond harvest, unlike any we had seen before. Coupled with the supply chain obstacles such as global shipping challenges and the height of the pandemic, there was a fair amount of uncertainty, even for those of us who had been strategically planning for a record crop.*

As we near the end of the 2020 crop year, we can certainly look back with a sense of accomplishment. To date, almond industry shipments have already surpassed last year's record shipments and are expected to exceed 2.8 billion lbs. by the end of August. As a result, we were able to successfully absorb 2020's record 3.1 billion lb. crop in a single year, with modest carryover.

The confidence we gained should serve us well in the upcoming year. This year's National Statistical Service (NASS) Objective estimate calls for a 2.8 billion lb. almond crop. Many of us were surprised to see such wide variation between the Subjective (3.2 billion) and Objective estimates and the explanations behind the 13% swing are complex. Frankly, we won't really know precise numbers until we have substantially received the crop, likely not until December.

From your co-op's standpoint, we anticipate and are operationally planning for a good-sized crop. Harvest is right around the corner, and I know many growers are pulling out their equipment and getting ready to shake. In the southern part of the central valley, we are already seeing nuts on the ground which signals harvest a week earlier than in most years. We will be watching the yield numbers and observing any stress on the trees from last year's record crop that reduces kernel size and weight.

I'm sure you've seen that the drought in California is garnering attention around the globe. The media has reached out to the Almond Board as well as to me and some of our grower members to discuss the impacts of the drought on the crop. A consistent theme this year, that we didn't really see in 2015/2016, is transparent discussion of climate change. Fortunately, through that conversation, the almond industry and agriculture in general have appropriately been painted as a victim of a changing climate versus a villain in terms of water consumption.

Our key messaging as a co-op has been to highlight our growers' commitment to sustainability and water efficiency. You can read more about our efforts in a new regular Almond Facts column by Sustainability Director Dr. Dan Sonke on page 36. We've also been able to successfully promote the sustainability of our *Blue Diamond* facilities as both our Salida and Turlock campuses earned certification as Green Businesses over the last few months. More information about that recognition can be found on page 13.

Best of luck to you, our growers, as we enter the busiest time of the year – we're here to support you during harvest and every step of the way. ◆

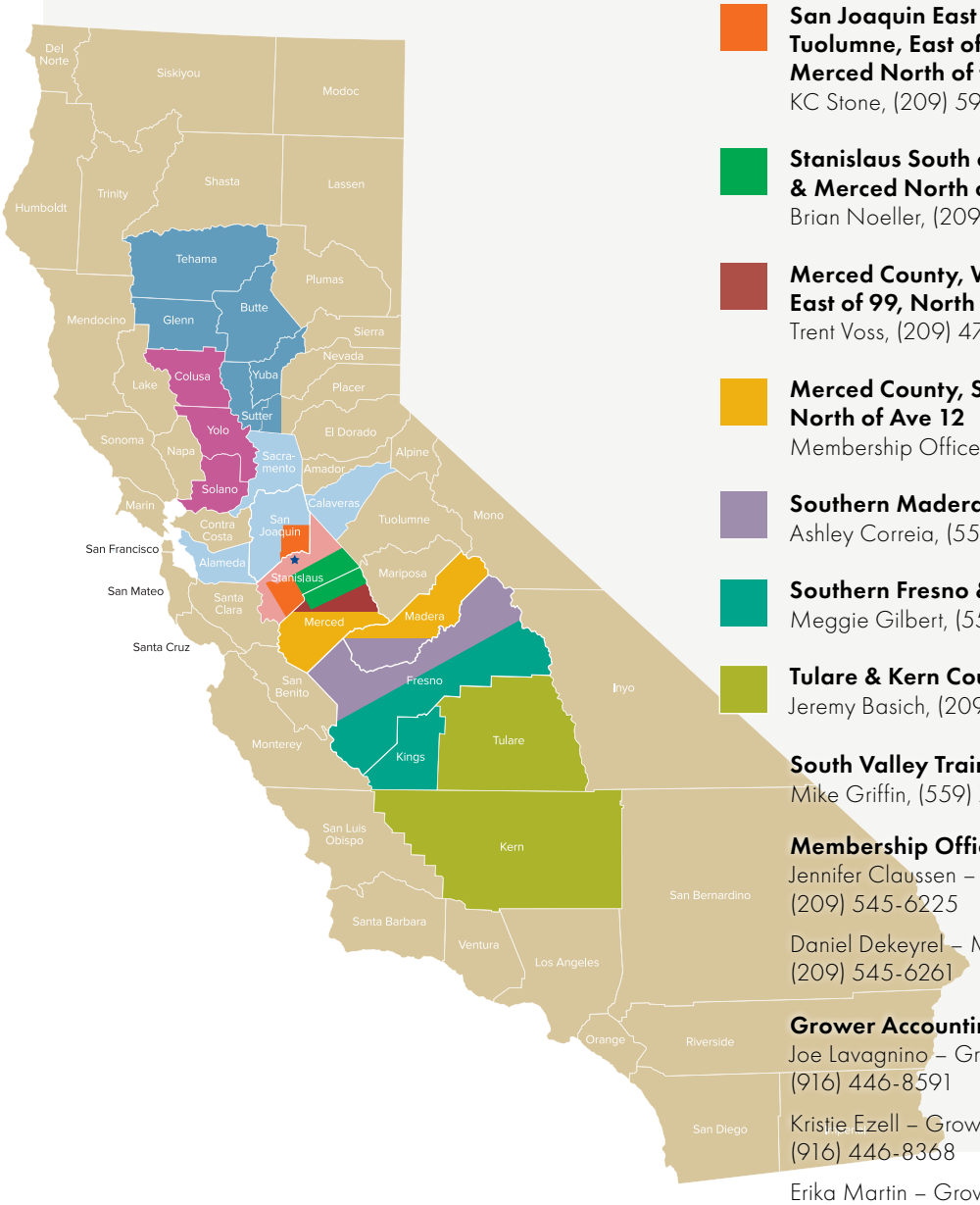
*Mark Jansen*
*President & CEO*

# Regional Managers

**Vice President**
**Member Relations**
Mel Machado
(209) 545-6222 – Salida
(209) 531-6352 – Cellular

**Director, Northern Region**
Ben Goudie
(209) 225-0413

**Director, Southern Region**
Jeremy Basich
(209) 446-2107




**Glenn, Butte, Tehama, Placer, Yuba & Sutter**
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**Colusa, Yolo & Solano**
John Aja, (530) 338-6440

**Sacramento, Calaveras, Alameda & San Joaquin West of Austin Rd**
Ben Goudie, (209) 225-0413

**Stanislaus County North of Tuolumne River & West of San Joaquin River**
Justin Elam, (209) 303-7306

**San Joaquin East of Austin Rd; Stanislaus South of Tuolumne, East of San Joaquin River & West of Hwy 99; Merced North of the Merced River, West of Hwy 99**
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**Stanislaus South of Tuolumne River, East of 99 & Merced North of Merced River, East of 99**
Brian Noeller, (209) 417-2010

**Merced County, West of 99 & South of Merced River, East of 99, North of Hwy 140**
Trent Voss, (209) 470-5981

**Merced County, South of Hwy 140 & Madera County, North of Ave 12**
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**Southern Madera County & Northern Fresno County**
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**Southern Fresno & Kings Counties**
Meggie Gilbert, (559) 470-9731

**Tulare & Kern Counties**
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Kristie Ezell – Grower Accounting Coordinator
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Erika Martin – Grower Accounting Assistant
(916) 446-8385

# 2021 Grower Liaisons

## DISTRICT 1

Brian Erickson
Stacy Gore
Jerry Montz
Kevin Davies (C)
John Nock
Raymond Antonowich
Darren Rice
P. Samantha Lewis
Chris Alves (VC)
Luke Konyn
Robert Thill
Dan Cummings (**)
W. Howard Isom (*)
Steve Carlos (!)

## DISTRICT 2

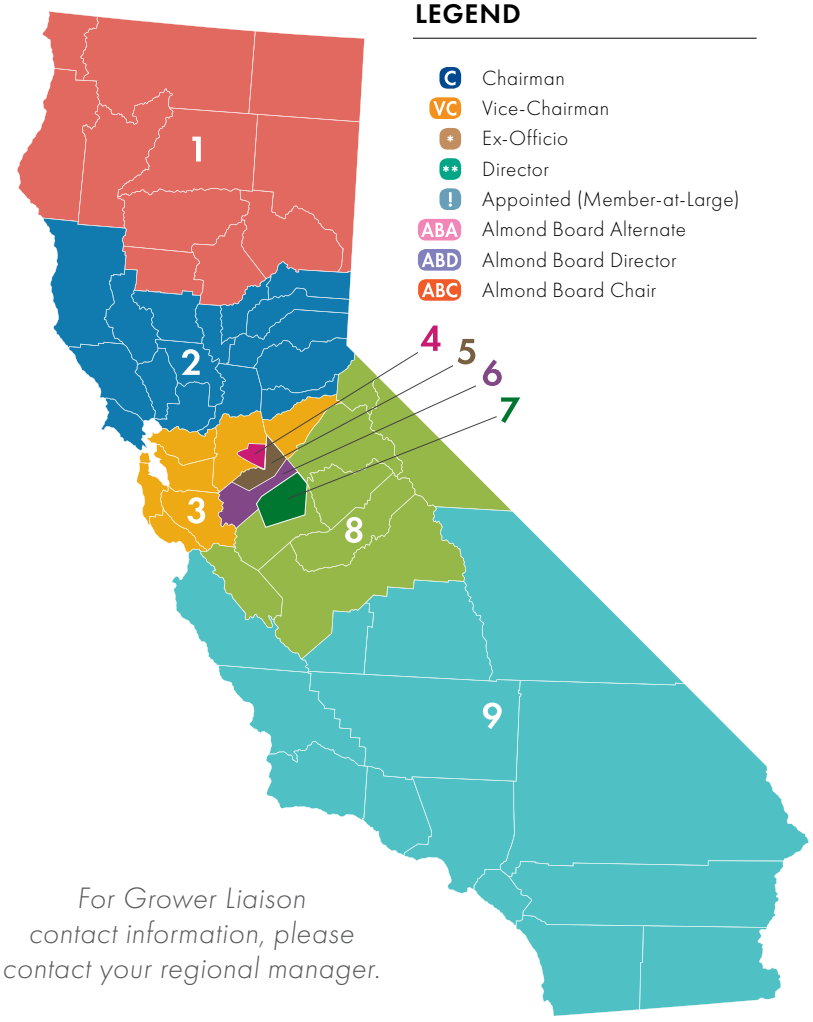
Don Bransford
Ryan Finnen
Brian Cahill
Michael F. Doherty (VC)
Kelli Evans (C)
Jim Peart
Brook Bachmann
Cathy Marsh
Sid La Grande
Joe Martinez
Sarah Pippitt
John Monroe (**)
Elaine Rominger (*)
Gerald Rominger (*)
Maryann Warmerdam (!)

## DISTRICT 3

Don Van Vliet
Rick Phillips
Louie Tallerico
Michael M. Petz
Lloyd Van Dyken
Bruce Oosterkamp
Craig Miller
Ian Koetsier (VC)
Nick Alta
Chris Rishwain (C)
Jack Dalton
Dale Van Groningen (**)
John Thoming (*) (ABA)
Mike Bogetti (!)

## DISTRICT 4

Kevin Van Laar
Rick Morris
Paul Adrian
Will Drost
Wes Eisenga (C)
Robin Giuntoli
Joe Gasper
John Almeida (VC)
Phil Mohler
Jake Sonke
Bryan Van Groningen
Kevin Fondse (**)
Kenneth Roos (*)
Wayne Bruns (!)




**LEGEND**

- (C) Chairman
- (VC) Vice-Chairman
- (*) Ex-Officio
- (**) Director
- (!) Appointed (Member-at-Large)
- (ABA) Almond Board Alternate
- (ABD) Almond Board Director
- (ABC) Almond Board Chair

*For Grower Liaison contact information, please contact your regional manager.*

## DISTRICT 5

John De Visser
Manuel Furtado
Lucas Van Duyn (VC)
Jack Hoekstra
Sonny Johns (C)
Sid Miller
Gary Darpinian
Eric Heinrich
Naomi A. Layland
Alex Vanderstoel
Ryan Valk
Stephen Van Duyn (**)
Neil Van Duyn (*)
Grant Ardis (!)

## DISTRICT 6

Frank Borba
Trent Voss
Michael Mora
Richard Gemperle
David M. Genzoli
Paul Lara
Darryl Starn (C)
Christine Gemperle (VC)
Don Clark
Jared Serpa
Hal Carlton
Charles Crivelli III (**)
Steve Vilas (*)
Bill Brush (ABA)
Paul Danborn (!)

## DISTRICT 7

Galen Miyamoto (C)
Joe Sansoni
Jimmi Atwal
Jim Snyder
Victor Yamamoto
Bobby Deol
Alan Sano
Frank Fagundes (VC)
Jeffrey Baize
Tim Lohman
Rick Scoto
Dan Mendenhall (**)
Robert J. Weimer (*)
Louie Bandoni (!)

## DISTRICT 8

Ryan Indart
Lee Erickson (C)
Norman Pretzer
David Massaro (VC)
Jerry Rai
Anthony Basila
Dan Wattenbarger
David Tolmosoff
Robert Allen
Jens Finderup
RJ Maan
Matt Efird (**)
George Goshgarian (*)
Aldo Sansoni (*)
Steve Bains (!)

## DISTRICT 9

Gurcharon Dhillon
Kyle Balakian
Keith Gilbert
David Snell
John Allen
Don Davis (VC)
Chris Vanborg
Mark Fanucchi
Doug Kindig
Ray Van Beek (C)
Kent Stenderup (**) (ABC)
Clinton Shick (*)
Karamjit Jhandi (!)

# *Blue Diamond Growers* Member Relations Re-Organization

*For many Blue Diamond members, the first, and occasionally only contact with cooperative management is through their Regional Manager. The local Regional Manager serves as the day-to-day liaison between Blue Diamond's management and the member/growers on their farming operations providing a wealth of information, covering all facets of almond production to the member community.*

Throughout the history the *Blue Diamond Growers* cooperative, the legacy of our field staff is quite rich. Daryl Brun, Rob Kiss, Dave Baker, Bob Ketcher, Steve Rothenberg and Gerry Guthrie each served growers in their areas for 25 to 30 years and are renowned for their expertise in almond production.

Recent years have brought about significant changes in *Blue Diamond* operations. Industry acreage continues to grow and annual production either challenges or surpasses previous records nearly every year. The increasing statewide production necessitated a review of *Blue Diamond* operations and marketing programs, ultimately driving the cooperative to close membership. This allowed *Blue Diamond* to optimize its operations on all levels, maximizing production efficiencies within the plants while expanding marketing programs. All efforts focus on the cooperative's mission – to maximize the return to the growers who entrust *Blue Diamond* with their almonds.

The evolution of *Blue Diamond*'s strategic direction also brought about a change in the role of the Regional Manager. While Field Staff at one point had a primary role in recruiting growers to join the cooperative, with membership closure, other activities have assumed greater priority. These activities, in the form of "Strategic Initiatives" serve to minimize risks to the cooperative's operations and maximize value to the membership. Examples of the initiatives include:

- **Delivery Quality**
  Working with huller/shellers to minimize chipped and broken kernels.

  Presentations to grower groups and Pest Control Advisors to minimize reject levels.

- **Sustainability**
  Enrolling members in the California Almond Sustainability Program and the *Blue Diamond* Sustainability Incentive Program.

- **Social Media**
  Identifying and providing support to growers who wish to participate in social media outreach campaigns to promote almond growing and the cooperative and connect growers to consumers and the general public.

- **Mapping**
  Identifying member orchards on Land IQ base maps to facilitate production risk analysis.

During 2020 & 2021, a full Member Relations program review was completed utilizing the services of an external consultant, with input from *Blue Diamond* management, the Board of Directors, current and former Regional Managers, and *Blue Diamond* members. The central purpose of the review was:

"To define Member Relations Division's organizational structure and roles of the Regional Managers to more effectively drive the *Blue Diamond Growers* supply strategy and build even stronger member relationships."

The program review identified several key changes in the structure of the Member Relations Division aimed at optimizing field staff activities while enhancing the services and value delivered to the membership.

- Transition Mel Machado away from the daily management of the team into a more strategic role to increase his impact throughout the cooperative enterprise.
- Divide the daily management and leadership of the field staff between two Director positions to provide daily leadership and team management.
- Create a framework to enhance two-way communication with member/growers.
- Identify Service Levels to meet the specific needs of the membership.
- Create a capability development program to increase Regional Manager team knowledge and skills.

## Resulting Staff Changes

As a result of the review, several changes in the Member Relations organization have occurred over the past few months.

- Mel Machado was named Vice President of Member Relations.
- Ben Goudie, who previously served as Membership Development Manager, has been named the new Director, Member Relations-North. Ben is now responsible for management of the Regional Manager team from Stanislaus County, north to Tehama County. In addition to his management responsibilities, Ben will also serve *Blue Diamond*'s members in District 3, covering Alameda, Calaveras, Sacramento, and San Joaquin County west of Austin Road.
- Jeremy Basich joined the staff as Director, Member Relations-South. Jeremy brings experience in produce marketing and from the Independent handling side of the almond industry. Jeremy is responsible for managing the Regional Manager team from Merced County, south to Kern County. Jeremy will also serve the *Blue Diamond* members in Tulare and Kern counties.
- Kabir Tumber previously served *Blue Diamond* within the Global Consumer Marketing organization as a Senior Category Management Analyst. Kabir joined the Member Relations team as Membership Development Manager, which was previously filled by Ben Goudie. Kabir holds a Bachelors in Managerial Economic and a Masters in Agricultural Economics from UC Davis. Prior to joining *Blue Diamond*, Kabir served as an analyst gaining working knowledge on Geographic Information Systems and the Sustainable Groundwater Management Act.

There have also been changes within the ranks of the Regional Managers, realigning staff assignments in some areas and adding several new people to the team.

### Continuing as members of the Member Relations Team:

Christine Ivory
Brian Noeller
KC Stone
Mike Griffin
Justin Elam

### Joining the Member Relations Team

John Aja, joins the staff, bringing experience in grower relations from Foster Farms.

Trent Voss, previously served as a Pest Control Advisor for tree nut growers in Stanislaus County.

Ken Miyamoto, joins the team after serving as an Agricultural Biologist with the Merced County Department of Agriculture.*

Ashley Correia brings her experience with the field relations staff at the Almond Board of California.

Meggie Gilbert comes to *Blue Diamond* after working as an area manager for Simplot and BASF Crop Protection.

The changes to the Member Relations organization also necessitated a few adjustments in area assignments.

- **Districts 1 & 2**
  Glenn, Butte, Tehama, Placer, Yuba & Sutter – **Christine Ivory**

  Colusa, Yolo & Solano – **John Aja**
- **District 3**
  Sacramento, Calaveras, Alameda, & San Joaquin west of Austin Rd – **Ben Goudie**
- **District 4**
  San Joaquin east of Austin Rd – **KC Stone**
- **District 5**
  Stanislaus north of Tuolumne River and west of San Joaquin River- **Justin Elam**, who previously served as Regional Manager in District 7.
- **District 6**
  Stanislaus south of Tuolumne River, west of 99 & east of San Joaquin River – **KC Stone**

  Stanislaus south of Tuolumne River, east of 99 & Merced north of Merced River, east of 99 – **Brian Noeller**
- **District 7**
  Merced County, West of 99 & South of Merced River, East of 99, North of Hwy 140 – **Trent Voss**

  Merced County, South of Hwy 140 and Madera County, North of Ave 12 – **Ken Miyamoto**
- **District 8**
  Madera & Fresno south of Ave 12 north of Central Ave – **Ashley Correia**

  Fresno south of Central Ave and all of Kings – **Meggie Gilbert**
- **District 9**
  Tulare and Kern – **Jeremy Basich**

Finally, Mike Griffin, who has served *Blue Diamond*'s members in Madera and Fresno counties for 28 years has announced his intent to retire at the end of 2021. Mike will complete his career coordinating the training and development of the new Regional Managers, passing on the wealth of experience he possesses.

## Commitment to Members

Each of the changes above in the Member Relations organization has been focused on demonstrating commitment to *Blue Diamond*'s members and increasing the value delivered to the member/grower community. In the coming months, the Member Relations team will be working to optimize their activities. This will include identifying service levels to efficiently deliver the services and support members require while maximizing the opportunities to fulfill the strategic needs of the cooperative.

**Ken Miyamoto's start date with Blue Diamond Growers is August 16, 2021.* ◆

**Mel Machado**
***VP Member Relations***
***Blue Diamond Growers***



# *Blue Diamond* Goes Green! Two Sites Certified With the Green Business Network

*Both Stanislaus County Facilities Now Recognized as Part of Modesto Chamber of Commerce's California Green Business Network, Stanislaus*


Following a comprehensive certification process, the *Blue Diamond Growers* plants in Salida and Turlock have earned distinction by becoming Green Business Certified by the Modesto Chamber of Commerce's California Green Business Network, Stanislaus County program. *Blue Diamond* is the first business in the county to receive this recognition for demonstrating sustainability as a top business priority.

The Salida plant earned their certification in April with the Turlock site following close behind in June. The Green Business Certified honor goes to companies that achieve a verified set of standards, including reducing water use, conserving energy, preventing pollution, increasing recycling, avoiding waste, encouraging alternative transportation, and partnering with other local vendors.

Salida's certification came on the heels of growth and positive milestones at the Salida facility. In 2020, a multi-year construction plan was completed including the addition of a 50-million-pound-capacity Brown Almond Bulk Warehouse. The new warehouse is the second facility of similar capacity recently built at the site. According to Salida Site Leader, Dennis Bettencourt, the site has successfully diverted more than 18 tons of waste from the landfill for more optimal uses, among other achievements in reducing water and energy usage.

"We are proud that *Blue Diamond*'s priority on sustainability is being recognized" said Bettencourt. "We are honored by this recognition, as well as motivated to continue providing *Blue Diamond* almonds to the world in a way that honors, respects and preserves the planet and the natural resources that mean so much to all of us."

Both Green Business Certified recognitions were organized by the Modesto Chamber of Commerce just as Turlock's state-of-the-art 250,000-square-foot plant celebrated its eight anniversary in June.

"*Blue Diamond Growers* has a long-standing commitment to implementing sustainable practices across all of our facilities and in our almond orchards, too," said Mark Jansen, President and CEO of *Blue Diamond Growers*. "This recognition further demonstrates that we are committed to doing our part to build a healthier and more sustainable future for our local communities through adopting new technologies and practices that improve our sustainability efforts. We are proud to have not one, but two facilities to have earned this honor and important recognition." ◆

# 2021 Board of Directors and Grower Liaison Committee Election Reminder

*Blue Diamond* members are encouraged to exercise one of their rights and responsibilities as owners of the cooperative: electing members of the Board of Directors and Grower Liaison Committees. The annual election is an opportunity to help shape policy or represent your district by running for a seat on the Board of Directors or the Grower Liaison Committee.

## Board of Directors:

Each *Blue Diamond* district elects one Director to shape Cooperative policy and affirm the Cooperative business strategy. The Director positions from Districts 1, 4 and 6 are standing for election during the 2021 cycle. Incumbent Dan Cummings (District 1) is seeking reelection. Incumbents Kevin Fondse (District 4) and Charles Crivelli III (District 6) are not seeking re-election. To learn more about the responsibilities of a Director, we strongly encourage you to contact any current Director.

## Requirement for nomination:

- A petition signed by 15 *Blue Diamond* members from the district in which the potential nominee wishes to run, filed by **September 1st**.

## Grower Liaison Committees:

Each *Blue Diamond* district has a Grower Liaison Committee (GLC) made up of nine growers elected by the membership in their respective districts for three-year terms, plus three members appointed by the committee. Three GLC positions in each district are up for election each year. The GLCs meet twice each year with their district director and management to receive business and crop updates.

### *Requirement for nomination:*

- A petition signed by five *Blue Diamond* members from the district in which the potential nominee wishes to run, filed by **September 1st**.

***Petition forms for both Board of Directors and Grower Liaison Committee are available from your Regional Manager or the Blue Diamond Growers Website at bluediamondgrowers.com/grower-forms/.***

The following are the directorial district designations:

***District 1:*** Tehama, Butte, Glenn, Shasta, Plumas, Lassen, Modoc, Siskiyou, Trinity, Humboldt, Del Norte Counties.

***District 2:*** Colusa, Yolo, Solano, Lake, Napa, Sonoma, Marin, Mendocino, Sutter, Yuba, Sacramento, Sierra, Nevada, Placer, El Dorado, Amador Counties.

***District 3:*** Contra Costa, Alameda, Calaveras, San Francisco, San Mateo, Santa Cruz, Santa Clara Counties and the portion of San Joaquin County west and north of a line described as follows: from the southern San Joaquin County line one-fourth mile west of Austin Road north to Highway 99; then one-fourth mile east of Austin Road north to Road J7; then east to Jack Tone Road; then north to Highway 4; then east to the San Joaquin County line.

***District 4:*** The portion of San Joaquin County east and south of the same line described in District 3.

***District 5:*** The portion of Stanislaus County north of the Tuolumne River and east of the San Joaquin River.

***District 6:*** The portion of Stanislaus County south of the Tuolumne River and west of the San Joaquin River.

***District 7:*** Merced County north of Highway 140 and the San Joaquin River.

***District 8:*** Merced County south of Highway 140 and the San Joaquin River, Madera, Mariposa and Fresno Counties.

***District 9:*** Kern, Kings and Tulare Counties. ◆

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## Big Win for XTREMES in the *People* Food Awards!

After taste testers sampled over 2,000 different foods to find the very best new products on grocery store shelves, *Blue Diamond*'s XTREMES Cayenne Pepper Almonds won *People* magazine's 'Best Nuts' in their 'Best Supermarket Products of the Year' exclusive. One staff member from *People* said: "It's hard not to eat the whole can!"


## *Blue Diamond* an Official Sponsor of USA Surfing Team

Surf's up! The Tokyo 2021 Summer Olympic Games kicked off on Friday, July 23. We're so excited that *Blue Diamond* is an official sponsor of the USA Surfing Team in Surfing's debut as a new Olympic competition. Go Team USA!

# SAVE THE DATE

## Blue Diamond's 111th Annual Meeting

## November 17, 2021

YOU'RE INVITED

We are delighted to announce that our 111th Annual Grower Meeting will be held in person* at the Modesto Centre Plaza. More info to come!

*Please note that our plans for an in-person meeting remain subject to change as we continue to monitor the COVID-19 situation and related restrictions.

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# BLUE DIAMOND INVESTMENT PROGRAMS

## Current Investment Rates available as of June 1, 2021

*Blue Diamond Growers offers members short-term and long-term investment programs.*

The objective of these programs is to serve as a competitive investment alternative for our members and provide *Blue Diamond Growers* with a steady source of funds. The interest rates effective June 1, 2021, for the program are listed here:

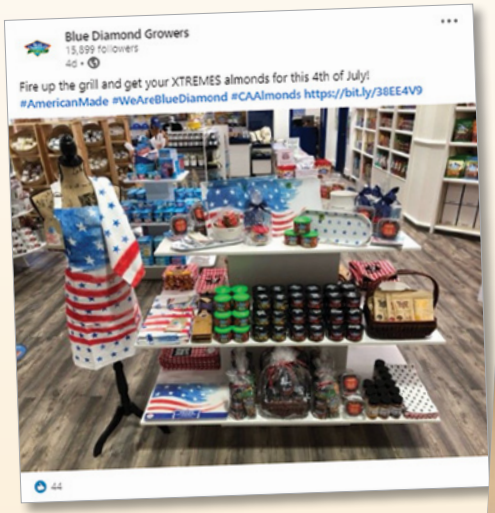
| | Short-Term Investment Certificate (STIC) | Long-Term Investment Certificate (LTIC) (Maturity Date of 6/30/2024) |
|---|---|---|
| Initial Investment Required | $1,000 | $50,000 |
| Interest Rate | 1.00% | 1.875% |
| | (Variable, subject to change) | (Fixed rate) |

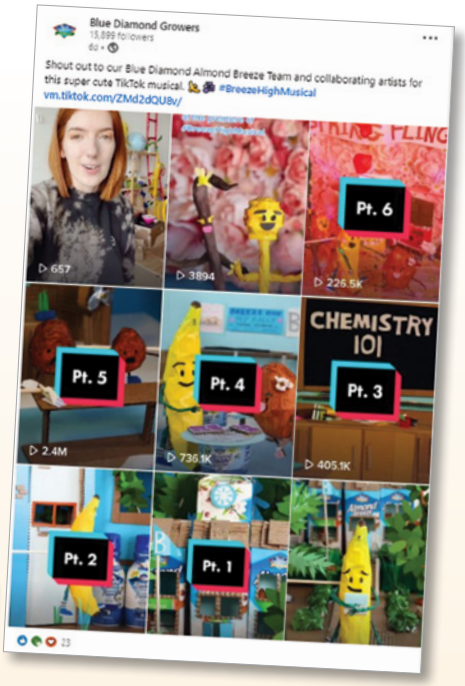
For more information, contact your local Regional Manager, or Member Services at (209) 545-6225.

*This summary does not constitute an offer to sell or a solicitation to purchase investment certificates. We will provide a package of documents for the programs to those members who are California residents and who express an interest in participating in the program.*

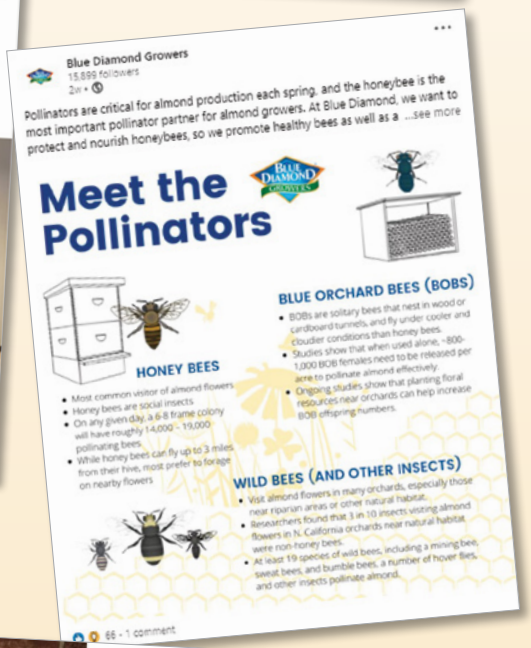
# *#WeAreBlueDiamond* Social Media Activity

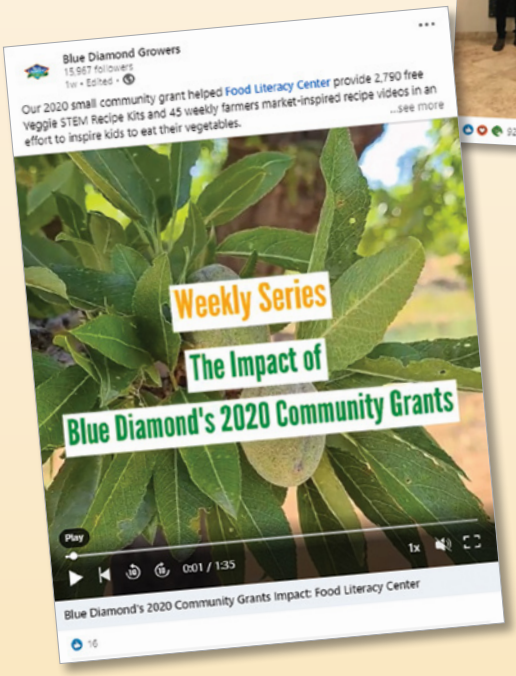
Take a look at how the summer stacked up for *Blue Diamond*! The Nut & Gift Shop celebrated the 4th of July with a patriotic display. Dip into the celebration of Pollinator Week. Take a quick glance at the success of our summer intern program. And applaud the nonprofit organizations that received grants from *Blue Diamond*'s Community Giving Program.







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# Almond Flour Arepas with Black Beans, Guacamole, & Radishes *(Gluten-Free)*

Cooking Time: 46 minutes  Difficulty: Easy  Serves: Up to 4

## Ingredients

- 1 cup *Blue Diamond Almond Flour*
- ¼ teaspoon salt
- ¼ teaspoon baking soda
- 1 egg white
- 1 tablespoon olive oil
- 1 teaspoon lime juice
- ½ cup prepared guacamole
- ¾ cup canned black beans, drained and rinsed
- 2 thinly sliced radishes
- Crumbled queso fresco, optional

## Directions

1. Stir the first 6 ingredients in a bowl to form a dough. Divide into 4 equal portions. Working with one portion at a time, roll into a ball and place on a sheet of plastic wrap. Top with a second sheet. Roll or press into a 5-inch circle. Place tostada, still in plastic, in the refrigerator. Repeat with remaining dough. Chill tostadas 30 minutes.
2. Heat a non-stick skillet lightly sprayed with cooking spray over medium heat. Working with one tostada at a time, peel off top layer of plastic. Invert into pan, and peel away top sheet of plastic. Cook 45 seconds per side or until set and beginning to brown. Transfer to a wire rack to cool. Continue with remaining tostadas, lightly spraying the pan with cooking spray between each one.
3. Top each tostada with 2 tablespoons guacamole and 3 tablespoons black beans. Top evenly with sliced radish and top with queso fresco, if desired.

| TIME | DIFFICULTY | SERVES |
|---|---|---|
| 10 mins | Easy | 10 |

# Vanilla Peach Popsicles

## INGREDIENTS

2 ¾ Cups..... AB Vanilla Almondmilk
2 TSP.....Melted Coconut Oil
1 TBSP.....Maple Syrup
Pinch.....Salt
4-5.....Ripe Peaches - Chopped

# Vanilla Peach Popsicles

1. Bring vanilla almondmilk to room temp, (otherwise the melted coconut oil will harden as you add it). Whisk the almondmilk together with coconut oil, maple syrup and a pinch of salt.

2. Slice peaches into small pieces and drop them into a popsicle mold.

3. Pour the almond milk mixture over the peaches (depending on the size of your peaches you might have extra).

4. Place sticks, then freeze overnight.


## *Blue Diamond* Summer Internship off to a Great Start!

*Blue Diamond* welcomed 14 college interns across all three sites for a 12-week summer internship. The goal of *Blue Diamond*'s Intern Program is to develop future talent through meaningful, project-based work, cohort group meetings, development sessions, team building events, field and site tours, and regular coaching.

Our interns will be involved in Manufacturing, Engineering, Innovation, R&D, Process Improvement, IT and Procurement. We are certain that they will absorb valuable insight into the almond industry while learning new marketable skills and developing key relationships within their teams in Sacramento, Salida, and Turlock.

The first collective session kicked off in Sacramento where Jheri Anderson led the interns through their DISC profiles, showing them the significant benefits that diverse personality types bring to the workplace. Then, Director of Sustainability Dan Sonke, taught the interns more about the co-op and the almond industry and engaged them in a vibrant Q&A session.

# Introducing: Ashley Correia, BDG's Newest Regional Manager

**Almond Facts (AF):** You're no stranger to the almond industry. How did you get involved in agriculture?

**Ashley (A):** I grew up in a small farm town of Lemoore and joined the FFA program at Lemoore High. I enjoyed learning about the agriculture industry and knew that I wanted to pursue a career in agriculture. I went to Fresno State and graduated in 2013 with a B.S in Ag Business.

**AF:** Could you share an exciting highlight about working in agriculture?

**A:** Helping a grower fix an irrigation issue in their orchard that helped fix an issue that was causing their orchard to not produce as well.

**AF:** What brought you to *Blue Diamond*? What was the greatest appeal to you?

**A:** The role as a Regional Manager. This position is the best of both worlds, I get to work with growers and be out in the field as well as making sure their individual contracts are up to date.

**AF:** What led you to become a Regional Manager?

**A:** A couple of my field mentors were Field Representatives at *Blue Diamond* and taught me the *Blue Diamond* Way. I would go on industry ride-alongs with them and knew that one day I would enjoy this type of position.

**AF:** What is one of your greatest passions in this industry?

**A:** I love what the industry stands for. It is great to work with family organizations that have been around for many years.

**AF:** We heard you helped create a GPS application that locates pest detection traps in the county. Could you tell us about that?

**A:** Yes, I helped create a program that allowed the Pest Detection Trappers to properly GPS locate the insect traps in different trees and plants around the county. As an inspector overseeing the process, we were easily able to monitor our team as they completed servicing the traps in the county.

**AF:** What are you looking forward to the most as you begin your career with *Blue Diamond*?

**A:** I am looking forward to working with a great team and building relationships with growers and industry members in my coverage area.

**AF:** What is your favorite *Blue Diamond* product?

**A:** My favorite *Blue Diamond* product is chocolate covered almonds.

**AF:** What are some of your hobbies?

**A:** I enjoy crafting, hanging out with friends and family and riding my dirt bike.

**AF:** What else would you like our growers to know?

**A:** I love being outdoors. ◆

BA2 var. (PP#28,466)

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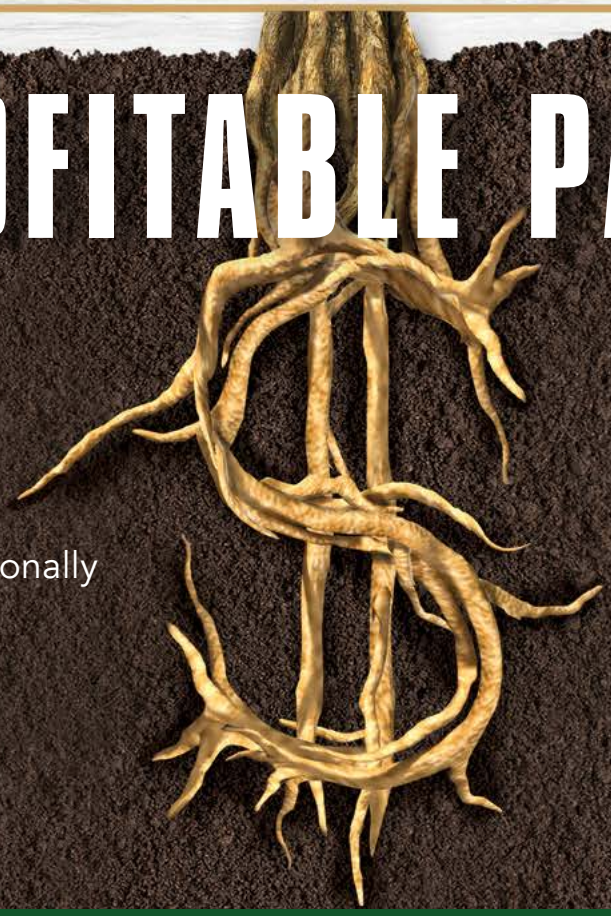

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# BDG Foundation Announces Scholarship Awards

*For agriculture to succeed for years to come, it will require the dedication and hard work of the next generation. The Blue Diamond Growers Foundation selected 24 young people to receive a scholarship for the 2021–2022 academic year. The Foundation assists students whose goals are to be positive influences on the future of agriculture and who want to make a difference in their communities.*

Here are the profiles of this year's *Blue Diamond Growers* Foundation scholarship recipients with an excerpt from each of their essays where they were asked to describe their future goals.

### Ashleigh Sorensen

**Fall 2021 School: Fresno State University**
**Major: Agribusiness**

Growing up with a farming family involved in the agriculture industry, I have always been interested in the field. After college I have aspirations to obtain my law degree and work as an agricultural lawyer. This career goal will allow me to be an advocate for the agriculture field and further my interest of bringing light to issues prevalent in the agriculture industry.

### Ashlyn Wooldridge

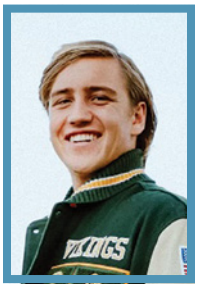
**Fall 2021 School: Cal Poly SLO**
**Major: Plant and Environment Sciences**

I plan to become a PCA. My desired degree would allow me to come back to Arbuckle and start my own crops as well as custom spraying. Many think being a PCA is just about pushing farmers to buy certain chemicals but I want to help farmers choose the right ones, give my own advice, and more importantly, be honest with all my clients. My goal is to be someone that young women look up to in agriculture because there should be more women in the agricultural field and I want to be a part of changing that.

### Averie Konefat

**Fall 2021 School: Cal Poly SLO**
**Major: Ag Science**

I am a member of the FFA and my weekends are usually full of competition days or other activities. I have a passion for educating the public about agriculture. I love teaching others so much that education is what I want to pursue as a career. Our country is suffering from a lack of ag literacy, and I hope to make an impact to change this. Being an ag teacher would give me a platform to inform the next generation about agriculture, which many feel is the backbone of our country.



### Cal Muxlow

**Fall 2021 School: Fresno State University**
**Major: Agribusiness**

Both the business side and the farming side of ag business correlate to make a great business, so that's why I want to grow in my understanding of both sides. For either managing a farm for someone or farming my own land one day, I want to be able to help the community the farm is by. I want to benefit society by being a farmer that prioritizes family, God, and hard work. My goal is to be a person that shows joy when I work. Hopefully, one day I will be farming my own land and my goal will be to have workers that have joy in the work they do.

### Gabriela Moreno

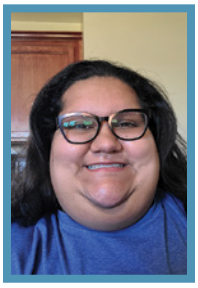
**Fall 2021 School: Merced Community College then Fresno State University**
**Major: Ag Education and Communications**

I would like to become an agriculture teacher and teach Ag leadership and Floriculture. I would also like to be a mentor to teens who suffer from mental illness. As someone who has struggled with it for so long, I know that life can get rough, but I have found such great support that I can now, not only better myself but also help others who suffer in silence. I also give back to the agriculture industry, an industry that was my motivation and happiness. I want to be an advisor, teacher, and mentor in the industry that helped me through the toughest time in my life. Without my advisors and family, I wouldn't have become this year's Chapter President, receiving awards and becoming an inspiration to younger kids who suffer from mental illnesses.

### Gunnar Kale

**Fall 2021 School: Morningside University**
**Major: Ag and Food Sciences (minor in Agronomy)**

All kids, no matter what their socio-economic background, should be able have access to quality, safe playing fields for both recreational and competitive activities. I will learn the best way to grow and maintain many different grasses and other plants. During the fall of my senior year, I will extern for our local city parks and rec department. I will learn the ins and outs of creating and maintaining public parks and sports fields. I want to take my knowledge of building and maintaining athletic fields back to my hometown of Merced. I want to provide beautiful, safe, top of the line sports facilities for our low-income community.



### Jane Saenz

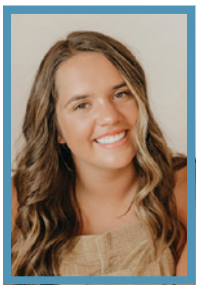
**Fall 2021 School: Cal Poly SLO**
**Major: Ag Systems Management, Wine and Viticulture**

With the same dedication I put into my school and extra-curricular activities, I see myself playing a role in California agriculture in the future by making great leaps into the College of Agriculture, Food and Environmental Sciences. My career will help find more ways to conserve water and help try to solve the finite fuel issue. Earning a college degree will help me be able to find internships and later become an asset to either a business or own one.

### Jenna Keller

**Fall 2021 School: Cal Poly or Cornell University**
**Major: Plant Science and International Ag**

Living in the country and on my family's farm has greatly influenced who I am as a person. It has allowed me to feel the satisfaction of planting and growing something from nothing but a little seed, to the food we put on our tables. I have always been interested in being a Foreign Service Agriculture Officer or working for the USDA. I believe I can use my degree to help communicate the importance of the Agricultural Industry to the world. I strive to become a more knowledgeable and effective advocate for this industry and its members as I pursue a college education.



### Kalifornia Kindelt

**Fall 2021 School: Cal Poly SLO**
**Major: Ag Communications**

Reflecting on the sacrifice of the relatives who paved the way for future generations to grow and thrive, I realize that the history of my family has instilled a love for community and agriculture in me. Agriculture is our way of life. I've been involved in 4-H since the age of seven and have raised a pig each year starting at the age of nine. As a student, a farmer and a female, it's important to note the lack of women within the field of Agribusiness. With my degree, I'll influence the occupation and pave the way for my daughters and great granddaughters just as was done for me over 100 years ago.

# GROWING THE GOODNESS

### Kathryn Williams

**Fall 2021**
**Major: Ag Communications**

I thought of exactly what I wanted to do with my life while I was sitting under the walnut trees that my great, great grandfather planted on our seventh-generation family farm. I wanted others to understand this strong connection to the land that farmers have. Growing up on a family farm has taught me about hard work, determination, and perseverance. I want to educate people that it takes all these characteristics to work in agriculture. I have been involved in FFA all four years of high school and have learned how to share my views to the public. Agricultural Communication will help me reach consumers and help them understand the risks, challenges and pride that farmers have in producing food for the world.

### Lauren McEwen

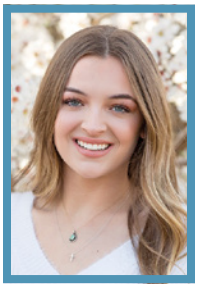
**Fall 2021 School: Cal Poly SLO**
**Major: Ag Communications**

I aspire to work as a journalist for a publication in the San Joaquin Valley, bringing the stories of agriculturists to the less informed. While pursuing a Spanish minor, I also hope to study abroad in a Spanish-speaking country, where I can further develop an appreciation for other cultures. Being bilingual will prove relevant as a correspondent because of the high demographic of Latinos in America, and the popularity of the Spanish language worldwide. My reporting of agricultural pursuits in the Valley will ensure that farmers, laborers, and consumers will have their voices and concerns addressed.

### Lauren Schaap

**Fall 2021 School: Cal Poly SLO**
**Major: Ag Communications**

Once I graduate, I will seek out a job as a marketing specialist at an agricultural firm in which I can apply my knowledge, utilize my gifts, and enjoy what I do. I have always had a passion for agriculture. I want the public to know how the agricultural industry works because it has positively impacted my life, and I believe that it would benefit others as well.



### Laynee Haywood

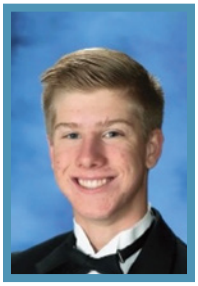
**Fall 2021 School: Texas Tech University**
**Major: Agribusiness (Concentration in International Agribusiness)**

After earning my Bachelor of Science degree, I plan to return to California to pursue a career in agricultural sales or marketing. I love knowing where and how our food is grown and want to promote the importance of California farmers. A misconception of some consumers today is farmers waste resources and produce unhealthy food with use of pesticides and chemicals. Expanding on the marketing of our products domestically and internationally and educating those consumers on the benefits California grown products provide, will not only strengthen the California farmer but also help feed the world with high quality nutritional commodities.

### Madalyn Nissen

**Fall 2021 School: Oklahoma State University**
**Major: Ag Education and Ag Communications**

After I graduate, I plan to come back to California and give back to my small agricultural community for all that they have done for me by becoming a high school agricultural educator. In ten years, I see myself as an agriculture education teacher here in Glenn County giving out my best effort every day to give back to my small agriculturally based community for all that it has done for me to help me in finding my passion for agriculture.



### Matthew Freitas

**Fall 2021 School: Cal Poly SLO**
**Major: Ag Systems Management**

I have been dedicated to life in Agriculture ever since I can remember between working with my family in the almond orchards, olive orchards, rice, alfalfa, and walnuts. I have always enjoyed going out and working in the orchards throughout the day alongside my family. I have been very blessed to do many things through FFA like attending the National FFA convention, State FFA conference, and numerous field days. After college I would love to come back home and become a PCA or Farm Manager.

### Michaela Mederos

**Fall 2021 School: Fresno State University**
**Major: Agribusiness Management**

My overall career goal upon graduating from college is to own and operate my own agricultural business in the valley. I would like to own a floral business, as I have learned through my Floriculture class that I have a passion for plant science and creating floral arrangements. I hope to be able to also give back to my community upon attaining my degree by coming back to Tulare and to become a volunteer leader at the local 4-H and FFA clubs. I hope to give back to the organizations that gave me so much growing up.

### M'Lyssa Frago

**Fall 2021 School: Cal Poly SLO**
**Major:Ag Communications**

After I earn my undergraduate degree, I plan to attend Law school. In the future, I plan to use the Ag Communications degree and the Law degree to become an ag lawyer. As an ag lawyer, I will be helping make sure that things concerning agriculture are fair and just. I would like to be an ag lawyer specifically because I have grown up surrounded by agriculture and it is a very important part of my life. Also, many farmers, such as my father, need legal representation when it comes to things like their rights and property, so I want to help.

### Natalie Machon

**Fall 2021 School: University of Colorado, Boulder**
**Major: Psychology**

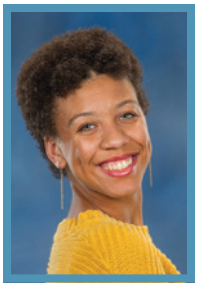
I am very interested in the mind and why people think the way they do. With this degree I am able to help people with mental illnesses and struggling with themselves so they can live a happier life. I know a lot of people who have been depressed and struggling silently and I want to help and be there for them. After that, I plan to go into law enforcement.

### Rachel Mancebo

**Fall 2021 School: Fresno State University**
**Major: Ag Education**

Ag teaching requires a different level of commitment. I have learned this through my experiences in FFA. Having such a strong background in agriculture, as well as my amazing experiences with my own teachers, I am confident that I will be able to become a valuable asset to a high school FFA program, and become the type of mentor to students that I have been lucky to have.

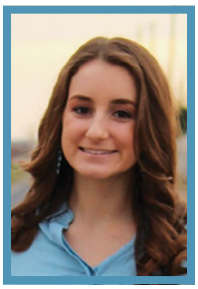
# GROWING THE GOODNESS



### Sarah Williams

**Fall 2021 School: Virginia Tech University**
**Major: Agribusiness**

The first time I zipped up my FFA jacket, I had no idea the influence it would have on my life. My jacket led me toward my true career passion, agriculture. Becoming a policy lobbyist with the Department of Agriculture will allow me to communicate through speaking, debating, and writing, work to make sure government officials hear the position of agricultural industries, and explain the importance of a bill and its impact. Women make up more than half of the U.S. population yet are under-represented on the boards of policy-making bodies. Being a woman leading and participating as a lobbyist will help bring a voice to female demographics in agriculture, while bringing us all together to create a stronger industry.



### Sydney Vieira

**Fall 2021 School: Oklahoma State University**
**Major: Agribusiness (Pre-Law Concentration)**

I was raised on an almond farm which inspired my passion for agriculture. I was able to watch my father and grandfather work hard every day to provide for our family. After earning my degree, I plan on attending law school to become an attorney to represent farmers and ranchers in court. I will use my education in agribusiness to help these smaller farmers and ranchers understand new laws and regulations and how they affect them. I plan to use my degree to represent smaller family farms like my own.

**If you wish to donate to the *Blue Diamond Growers* Foundation to support next year's students, please make checks payable to "*Blue Diamond Growers* Foundation" and mail it in using the remit envelope. Thank you for your contributions and support!**

### Tanner Cardoza

**Fall 2021 School: McPherson College**
**Major: Business**

In college, I hope to gain 'field' experience in Agricultural Business so that I can 'do' rather than 'just learn' from a book or a computer. The most memorable learning that I had in high school was when we were physically doing things as we were learning. I do not know where my career path will lead, but I do know that I will always be a strong advocate for the agriculture community, the agricultural industry and the FFA program. For without all the FFA and Ag community has done for me thus far, I would not be the person I am today.

### Taylor Trigueiro

**Fall 2021 School: Oklahoma State University**
**Major: Ag Education**

My goal as an Ag teacher is to be able to teach and encourage my students from my prior experiences. I want to be able to lead them by example. The lack of education about the agriculture industry is only growing throughout the next generations. Becoming an Ag teacher is my way of closing the gap between agriculturists and future generations.

### William Vannucci

**Fall 2021 School: American River College**
**Major: Horticulture**

Using what I learn from college, I plan to come back to my hometown and start my own small-scale farm, participating in Farm to Fork agriculture supporting my family, and giving back to my community. My family owns 10 acres of Ag land, and I hope to be able to start my own farm. I've been working on my family's backyard garden and also been harvesting the walnut and almond trees that border our property. I enjoy working in the garden because one I just find it very peaceful, and two, it is very rewarding when I can taste the work that I put into the garden.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# Current Washington Situation

July 9, 2021

Washington has been adjusting to the new situation with President Biden in the White House and the Democrats controlling both the Senate and House. This adjustment has not been easy or comfortable.

The President has his Cabinet officers confirmed and in place, but many of the Deputy positions have not been filled or named; several nominations have yet to be made. The Senate confirmation process will extend these vacancies into the fall. Two key spots important to the almond industry because of the importance of agricultural trade are the Agricultural Ambassador at USTR and the Undersecretary for Trade and Foreign Agricultural Affairs at USDA. No candidate has been named for either position as of this date.

The Administration and Congress have been focused on obtaining infrastructure legislation. A possible path forward is slowing emerging. A group of Senators has developed a bipartisan infrastructure bill that may pass the Senate. The future for the bill in the House is less clear, but it may pass there. There is a bipartisan group of House Members also working on an infrastructure bill that will be like the Senate bipartisan bill.

Currently, the Democrat leadership in the Senate is insisting on a second infrastructure bill that will have to be passed through the Budget Reconciliation process in both the House and Senate, which likely means it will be passed by party line votes in both chambers. Some Democrats are stating that this second bill must be agreed to before the bipartisan bill can be approved.

No progress has been made on any of the pending FTA agreements. Trade Promotion Authority (TPA), by which Congress grants authority to the Administration to negotiate trade agreements, expired on July 1, severely hampering any progress on new agreements. It remains unclear when Congress might extend TPA. While some in Congress are pushing to complete the UK FTA, there has been no progress given the expiration of TPA which would ensure the agreement is considered by Congress. Without that assurance, the UK continues to focus its attention on wrapping up other deals post-Brexit.

On the UK side, the lead UK negotiator has now taken a new position. The UK seems to be turning its attention to joining the TPP. Some in Congress are asking the Administration for the US to enter the TPP, but again, that is made difficult without negotiating authority under TPA.

The Administration has stated its priorities are review and enforcement of existing trade deals before gaining TPA or pursuing new agreements. In that regard, USTR recently completed a review of the implementation status of USMCA with Canada and Mexico, and on a positive note, progress has been made with the EU in settling the Air Bus – Boeing case. An agreement was reached to suspend for now the retaliation until a solution can be reached.

The Administration is looking for ways to deal with China. This is getting careful attention. This is both on trade and military considerations as there is growing concern about China's action in Hong Kong, Taiwan, and the South China Sea. This will continue to receive close attention and color any trade discussions. For example, the US has now begun trade discussions with Taiwan because of China's actions. This is a first and will be found offensive by China and could trigger retaliation.

Considerable attention is being given to climate change by the Administration. This has increased attention on carbon sequestration. USDA is working to find a way for this to be a new income crop for farmers. The Senate Agriculture Committee recently passed the Growing Climate Solutions Act, a bill to help farmers sell carbon credits. This bill will pass the full Senate and the House will pass a similar bill later this summer. The chair of the relevant subcommittee, Conservation and Forestry, is the chief House sponsor of the bill. This proposal will become law in some form.

The Competition Policy, Antitrust and Consumer Rights subcommittee of the Senate Judiciary Committee is scheduled to hold a hearing on agriculture in September. Given the allegations made by the Department of Justice regarding the exercise of market power by Dairy Farmers of America, a review of the limits of cooperatives' protection under the Capper Volstead Act could be part of the hearing agenda.

Both Democrat and Republican House members are concerned and watching closely how the new House Districts will be drawn as a result of the 2020 Census. For the first time in the history of the State, California will lose a House seat, which means Congressional Districts will change. Typically, the Census data is released by March 31, but due to delays in collecting the data during the COVID-19 pandemic, the Census Bureau has announced that it will release the redistricting data by September 30, compressing the State's time to draw new districts. This needs to be watched closely.

This fall will be busy as attention begins to focus on next November's Congressional elections. By then all the aspiring Presidential candidates will be in full swing seeking to obtain the nomination. The Administration will be working hard to preserve the Democratic majority in both the House and Senate. As a result, it is foreseeable that both climate change, infrastructure and trade will receive increased attention. ◆

***Blue Diamond Advocate***
**Julian Heron,**
**Partner, Tuttle Taylor & Heron**

# Develop a Cover Crop Plan with Free Seed & Technical Advice with the Seeds for Bees Program

Seeds for Bees® encourages the use of cover crops to increase the density, diversity, and duration of bee forage in California orchards, farms, and vineyards, while improving soil health. The seed mixes available through Seeds for Bees are designed to bloom at critical times of the year when natural forage is scarce but managed and native bees are active. Blooming cover crops serve the needs of bees, beekeepers, and growers, while increasing sustainability of pollination and agriculture. This win-win situation benefits both beekeeper and grower by providing better nutrition for bees, adding organic matter to the grower's soil, increasing water infiltration, reducing erosion, and providing a natural weed control.

July may seem too early to start thinking about harvest tasks. However, now is the ideal time to plan for planting cover crops which needs to happen immediately after harvest. The fall is a busy time for growers, technical providers that advocate for cover crops, and the companies that are responsible for selling cover crop seed. The earlier you determine what type of cover crop mix you need and place your order, the more able you are to plant at the right time. It's better to have seed sitting in your shop waiting on you, than to be looking at rain clouds and waiting on the delivery driver to show up. Almond growers have a short window of time after harvest, and before the seasonal rains in which to capitalize on the ideal planting window in order to experience the most successful pollinator supportive cover crop possible.

Figuring out what seed mix is right for your operation can be a challenge. There are many factors to consider like crop type, soil type, irrigation type, planting method, termination method/date, and goals you are trying to accomplish. Managers of orchards and vineyards are increasingly looking towards the Seeds for Bees program

to help take the guesswork of out of their decision process. Participating in the Seeds for Bees program will grant you access to technical advice and free or discounted seed. Every enrollee will receive a consultation to ensure each

site uses cover crops without putting yields or crop protection at risk. A soon-to-be-published University of California study has found that orchards with cover crops have higher almond yields. At a Merced County site, yields were 225 lbs/acre higher when compared to control orchards with resident vegetation/weeds. In Kern County, the yields were 94 lbs/acre higher when compared to bare soil.

Adopting cover crops into your management has benefits beyond increasing pollinator and soil health. Driven by public demand, retailers are now encouraging growers and industry groups to develop and implement Best Management Practices to help them reach sustainability goals. Project Apis m. has teamed with The Almond Board of California (ABC) and Pollinator Partnership to promote the importance of providing pollinators with abundant and diverse sources of nutrient-dense forage. The ABC's Bee+ Scholarship ties their California Almond Sustainability Program (CASP) and Pollinator Partnership's Bee Friendly Farming (BFF) certification program to the Seeds for Bees program. CASP helps growers track sustainability practices they adopt and Seeds for Bees provides resources that help them qualify for the BFF Certification. When awarded the BFF certification, growers gain accolades for their efforts. Once your land is certified, the Bee Friendly Farm seal can be placed on websites and packaging which will communicate to other industry members and the public about the work you are doing.



The 2021–2022 Seeds for Bees open enrollment period is going on now. Open enrollment started June 15th. Interested applicants are encouraged to apply by going to the Project *Apis* m. Seeds for Bees website. We are currently accepting applications through November 15th, or until we run out of seed. Growers of all types can apply and first year applicants are awarded up to $2,000 of free seed. Don't forget - early planting is key to getting the most benefit as possible from your cover crop stand. Sign up today!

Feel free to contact me, Billy Synk, at Billy@ProjectApism.org for any questions regarding the Seeds for Bees program, cover crops, habitat, or bees/pollination. ◆

## SUSTAINABLY SPEAKING, WITH DR. DAN

# The Real Deal on Water and Almonds

Since the last drought, the idea that almonds are connected to California water problems has caught on with a significant portion of society in the US and abroad. Now we are in another drought and the hot topic in almond sustainability is, once again, water. Maybe you, like me, have had people ask you about whether almonds are using too much of California's water. In this article, I am sharing with you how we answer these questions at *Blue Diamond Growers*, so that you can help amplify the message.

The unfortunate number that has stuck with many people is the assertion that it takes a gallon of water to grow an almond. I prefer not to get in a debate about the accuracy of that number, but the reality is that it does take a significant amount of water to irrigate a high-yielding almond orchard. But it is also a reality that the amount it takes varies significantly based on where you are in the state. Almond irrigation is comparable to most other California orchard crops. This week I looked at some University of California data that estimates the difference in seasonal water need (known as evapotranspiration or ET) for an almond orchard in one area may vary as much as 14% from an almond orchard in another area. And that was just within the San Joaquin valley.

That same University of California document* suggests that there is less than 10% difference in ET between almonds and walnuts, stone fruit (peaches, plums, nectarines), olives, prunes, and pistachios grown in California. So, almond irrigation is comparable to other nutritious crops grown in California. In fact, the Almond Board of California estimates that almonds now occupy roughly 20% of irrigated farmland in California but utilize approximately 13% of California water used in agriculture. That is less than a proportionate share.

Also, it is no surprise to our members that approximately 85% of California almond farms are now on micro-irrigation systems. That is nearly twice the rate found in California crops overall. And more efficient production means that it takes 33% less water to grow a pound of almonds than it did 20 years ago.

Of course, for every pound of nuts produced, approximately a half pound of shell and as much as two pounds of hull are produced, and these co-products are put to beneficial use as bedding and feed for dairies. In that way, almond production offsets some irrigation which might otherwise go toward dairy feed crops, some of which are "thirsty" crops themselves.

In addition to our historic water savings, the Almond Board of California is also deploying resources for growers statewide with the goal of reducing this amount by another 20% by 2025. If you are not already receiving e-mails from the Almond Board about how to take advantage of these efforts in your orchard, be sure to sign up at www.almonds.com/about-us/press-room/sign-up. They have extensive materials available online at www.almonds.com/tools-and-resources/grower-tools/irrigation-tools as well.

Finally, a key talking point on responsible water use that we use at *Blue Diamond Growers* is that more and more of our members are participating in the California Almond Sustainability Program (CASP). The CASP includes a module on Irrigation Management best practices. We can demonstrate to customers, state officials, and other stakeholders that we are using best practices on irrigation by having a large portion of our growers assessed in that module. As a reminder, the *Blue Diamond Grower* Sustainability Incentive Program pays members for different levels of engagement with CASP.

# CULTIVATING SUSTAINABILITY

The Silver Level is reached with participation in a specific set of 6 modules which includes the Irrigation Management module. Contact your Member Relations Manager for information on how to enroll in this program if you have interest.

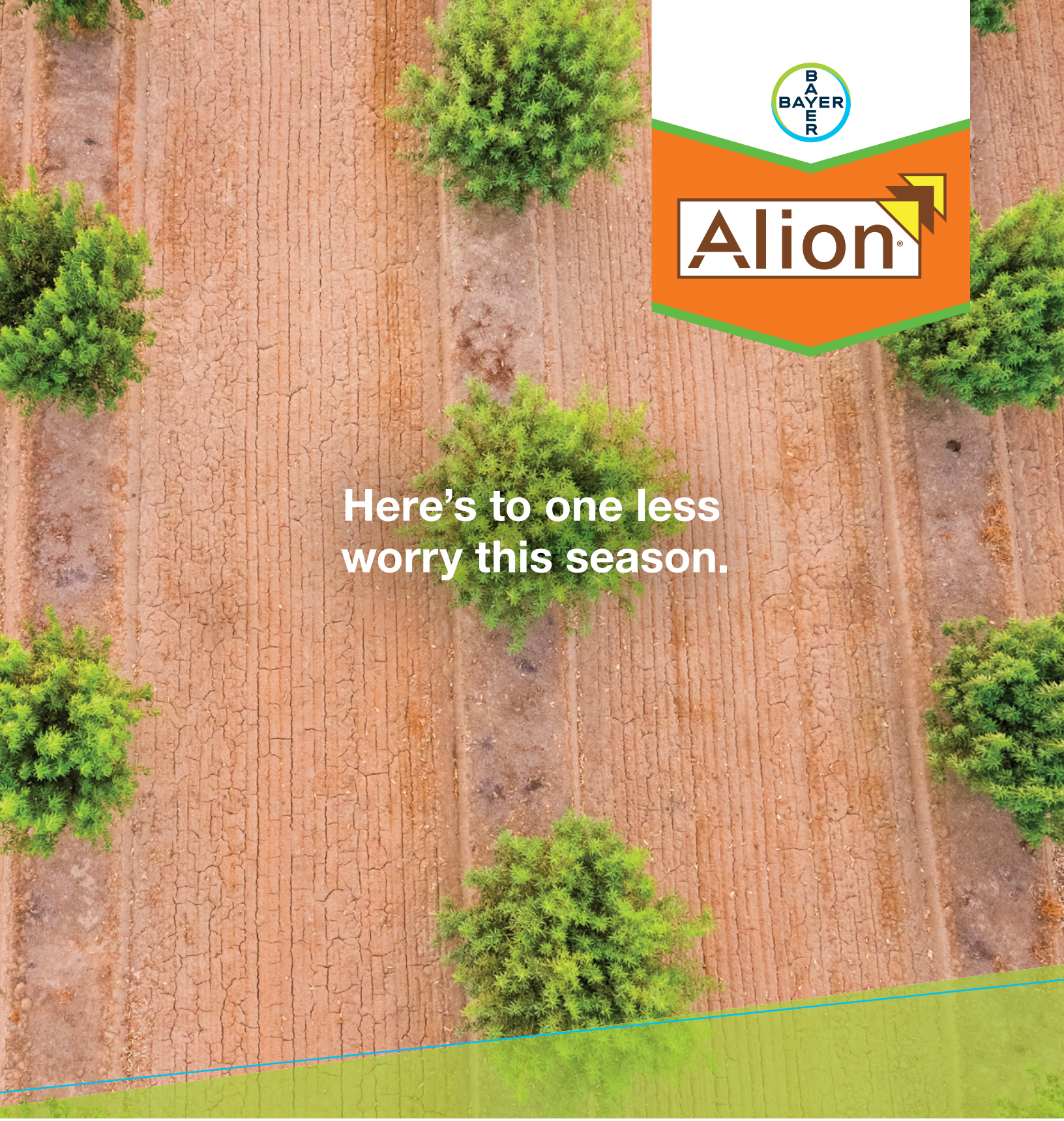
Our marketing teams sometimes use "influencers" on social media to talk about our products to their followers. Each of our members also can be an "influencer," whether in real life or on social media, by sharing information about responsible almond water use with their friends, family, and colleagues.

*Lawrence J. Schwankl et al. 2007. UCANR Publication 8212: Understanding Your Orchard's Water Requirements. http://anrcatalog.ucanr.edu/pdf/8212.pdf

### California almonds use water responsibly:

- Almond irrigation requirement is comparable to other fruit and nut trees in California
- California almond farms use 33% less water to grow 1 lb. of almonds today than 20 years ago
- Today, 85% of California almond farms use efficient micro-irrigation systems, which is nearly 2x the rate of California farms overall
- California almonds grow on 20% of California farmland, but use only 13% of California agriculture water
- Almond hulls and shells offset production of dairy feed crops
- The Almond Board of California is devoting resources to reduce almond water use by another 20% by 2025

**Dr. Dan Sonke**
***Director of Sustainability***
***Blue Diamond Growers***

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## THE BEE BOX

# 2020-21 National Honey Bee Colony Loss and Management Survey Result Sneak Peek

Every year in April, the Bee Informed Partnership (BIP) conducts a survey of US beekeepers to document their colony numbers and the practices they used over the past year. The survey's primary objective is to document colony losses, management practices, and their evolution over time. The survey is the longest national effort to monitor honey bee mortality rates in the US. This year marked the 15th anniversary of the survey initiated in 2007 with the support of Apiary Inspectors of America. The plight of honey bees gained the public's attention around 2006 when beekeepers started to report frequent unusual cases of colonies dying out. What was ultimately termed "Colony Collapse Disorder" (CCD) was an alarm bell that galvanized the interest of the public as well as researchers. However, as with many well-named phenomena, a high degree of misinformation has surrounded CCD ever since. What became apparent in the time of CCD was the lack of baseline information on the normal level of colony mortality. This is the gap in knowledge that the Loss Survey aimed to fill, by documenting loss rates year after year.

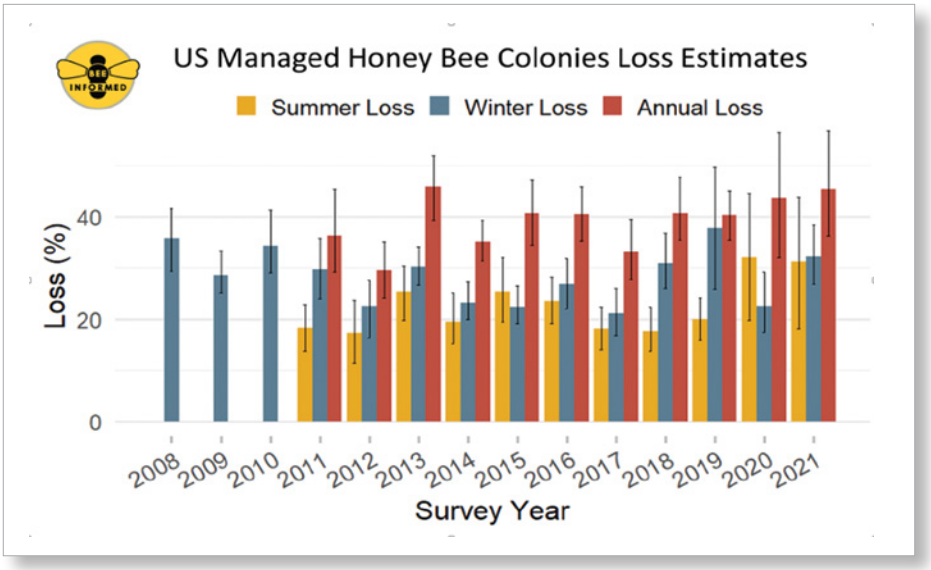


*Fig. 1: Seasonal honey bee colony loss rates in the United States across years. Annual loss estimates (from one 1 April to the next 1 April) combine winter (1 October – 1 April) and summer (1 April – 1 October) losses. The loss rate was calculated as the total number of colonies lost divided by the number of colonies "at risk" during the season. Colonies at risk were composed of viable colonies and new colonies made or acquired, while excluding colonies sold or parted with. Figure credit: Bee Informed Partnership.*

Recently released (beeinformed.org/2021/06/21/united-states-honey-bee-colony-losses-2020-2021-preliminary-results/) preliminary results from the survey show that colony losses of honey bees are still on the high end, with an estimated 43.7% turn-over of colonies between April 2020 and April 2021.

During winter alone (October 2020 to April 2021), an estimated 32.2% of managed colonies in the United States were lost (Fig. 1), which is 8.9 percentage points over what beekeepers deemed acceptable (23.3%).

Over the years that BIP organized the survey, there has been no clear indication towards an improvement of the loss rates reported by US beekeepers.

Not all beekeepers are affected to the same degree by colony losses. As in earlier years of the survey, backyard and sideliner beekeepers experienced a lower rate of loss during the summer when compared to the succeeding winter (27.0% vs 42.0% for backyard, and 19.5% vs 31.9% for

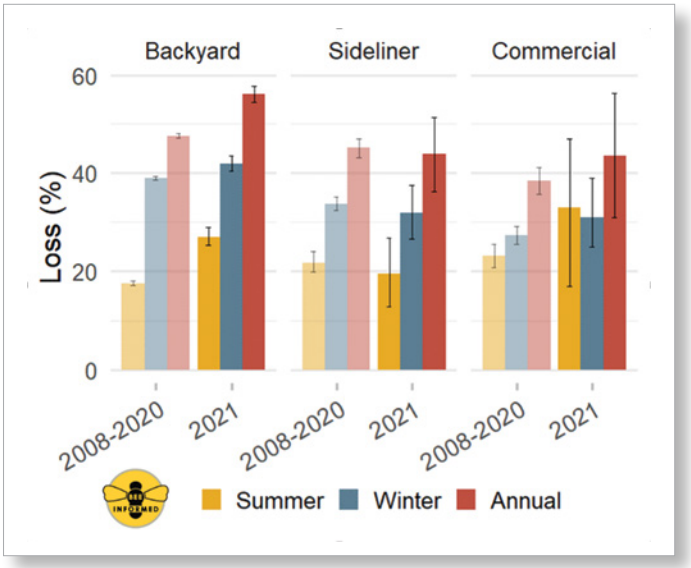


*Fig. 2: Managed honey bee colony loss rates estimated from different beekeeper operation types in the United States during the survey periods – summer (1 April – 1 October), winter (1 October – 1 April) and annual (1 April – 1 April). The average loss rates (translucent bars) over the last 10 to 13 years, depending on the season, are presented alongside loss rates reported in 2020-21 (opaque bars). Figure credit: Bee Informed Partnership.*

sideliners). In contrast, commercial beekeepers, as they have reported in previous years, experienced loss rates that were similar in summer and winter (30.9% vs 32.9%; Fig. 2).

Survey respondents were asked to identify the top three causes of colony loss in their operations over the summer and winter seasons. Varroa mites were the most frequently cited causes of colony loss in the winter (by 33% of small scale beekeepers, and 65% of commercial beekeepers), and tied first for commercial beekeepers in the summer (70% of commercial beekeepers). Queen issues were the most frequently cited causes of colony loss in the summer by small scale beekeepers (20%), and first tied for commercial beekeepers (70%).

A total of 3,347 beekeepers from the United States, that collectively managed 192,384 colonies on 1 October 2020, answered the survey. This corresponds to about 7% of the managed honey-producing colonies in the country (compared to 2.71 million estimated by USDA NASS, 2021).

Through the years of systematically documenting colony mortality rates, the survey brought important insights. First it dispelled the notion that honey bee colonies are only dying in the winter. Though winter still remains the principal period in which colonies die, summer losses are not trivial, and in some rare cases, can exceed winter losses. Commercial beekeepers in particular, seem to lose as many colonies in the winter season as the summer season, maybe due to their practices to "take their losses in the fall" and more active management throughout the summer. It also confirmed that professional beekeepers are experiencing lower annual mortality rates than small scale beekeepers, despite often being criticized for putting their colonies under stress by frequent moves and intense management. Finally, it became clear that loss rates are not steadily increasing over time, but follow a cycle of higher and (somewhat) lower losses, though remaining consistently higher than what beekeepers identify as acceptable levels. Although the total number of honey bee colonies in the country has remained relatively stable over the last 20 years (~2.6 million colonies according to the USDA NASS Honey Reports), loss rates remain high, indicating that beekeepers are under substantial pressure to offset losses by creating new colonies every year.

For more information about the Bee Informed Partnership's annual National Colony Loss and Management Survey, visit: beeinformed.org/citizen-science/loss-and-management-survey/ and find the complete preliminary result release on: beeinformed.org/2021/06/21/united-states-honey-bee-colony-losses-2020-2021-preliminary-results/. ◆

**Nathalie Steinhauer,**
**Science Coordinator**
**Bee Informed Partnership**

## THE ALMOND BOARD

# From Shell to Shaker: ABC Leadership Participant Explores New Possibilities for Almond Shells

*When Connor Wagner applied to participate in the Almond Board of California (ABC) Almond Leadership Program, he was eager to expand his knowledge of the industry and develop deeper relationships with his peers. Little did he know that the program would give him the chance to engage in a project that could impact the industry for years to come.*

For Wagner, the revelation happened during a Leadership program seminar at the University of California, Davis, which included a visit to West Biofuels in Woodland.

"I thought it was really cool how they were torrefying almond shells and using that shell in other products," he said.

Torrefaction is a process in which almond shells are heated in a zero-oxygen environment, a process that evaporates moisture and decomposes cellulose, hemicellulose, and lignin. What's left are torrefied almond shells (TAS) containing condensed stable carbon that can be used as a filler for compounds to make rubber, plastic, or composite products.[1]

With his interest piqued, Wagner attended a presentation the next day led by Bill Orts and Delilah Wood of USDA's Agricultural Research Services (ARS), who described the potential uses for torrefied almond shells.

"Long term they said they'd like to see torrefied shells in car tires," recalled Wagner, "and the whole rest of the day, I couldn't stop thinking about what Bill and Delilah had to say."

From that moment on, Wagner was inspired to explore the use of TAS in rubber products for his Leadership program project (each participant is required to conduct a special project and present it at the end of the year). Getting the material in tires was a worthy ambition, but he needed a more niche application to validate the idea on a smaller scale. Wagner eventually landed on the idea of testing TAS in rubber shaker head pads used in almond harvesting equipment.

*Wagner is a graduate of the 2019 Almond Leadership Program class. Photo courtesy of RPM Public Relations.*

### "Whey not" find higher value uses?

Wagner saw this vision for almond shell use in part because of his background growing up on a dairy in Escalon – he had already witnessed the rise of a coproduct that went from worthless to valuable: whey.

"Up until the late 1980s, dairy processors used to pour whey down the drain," said Wagner. Regulation prompted the dairy industry to find new uses for whey, which now has thriving markets for lactose products and whey protein.

Today, Wagner's family still operates the dairy in addition to their almond orchards. The California dairy industry will use most of the two billion pounds of almond shells produced this year for bedding. However, Wagner and others are concerned about the declining number of California dairies – good motivation for opening new and potentially more lucrative markets for almond shells.

The search for higher value uses of almond coproducts also aligns' with the industry's Almond Orchard 2025 Goal to achieve zero waste in the orchard while putting everything grown to optimal use. Wagner's work builds upon existing collaboration between ABC and USDA to explore new uses and markets for almond hulls and shells.

## Building a supply chain from scratch

On his drive home from the seminar, Wagner called his tire salesman who then connected him with Holz Rubber in Lodi. After presenting Holz with the details of the project, the company agreed to manufacture a small number of shaker pads for testing. But this was only the very beginning of the process for Wagner.

Holz was willing to make the shaker pads, but they don't make the rubber compounds that are used to mold their products. They provided Wagner with contact information for some compound formulators that might be willing to utilize TAS in a limited run.



*Top: When Wagner tested the TAS shaker pads during harvest, he found that while they performed well, they did generate slightly more heat than the control rubber shaker pads.*

*Left: The finished product: a TAS shaker pad.*

He spent months trying to track down these companies to convince one of them to work with him.

"One of the biggest struggles of this project was getting people to contact me back," said Wagner. "It's a small experimental project, so not a lot of people wanted to bother with it."

He eventually found a company that was happy to work with him in R & S Processing, based in Southern California. Wagner asked the company to replace carbon black, a standard ingredient in rubber formulations, with torrefied almond shells. After failed attempts to replace 25% to 100% of carbon black with TAS, they instead decided to replace 10% so that the tensile strength of the rubber wouldn't be compromised.

And yet again, a challenge emerged – TAS could not be shipped directly to R & S Processing; they first had to be ground down to a particle size of 150 microns. After hours of research, Wagner was able to connect with a company willing to grind 1,000 pounds of TAS. The first batch sent for grinding was too wet, so it did not meet specification, but with the second batch, the process of manufacturing rubber almond shaker heads could begin.

## Research and results

Given the challenges and obstacles along the way, Wagner was able to make remarkable progress in about six months. The day he gave his project presentation for fellow Almond Leadership Program classmates and mentors, ABC staff and industry leadership,[2] R & S Processing sent the compound formulation to Holz Rubber, who would then mold the shaker pads.

The TAS shaker pads performed successfully, but Wagner did observe that they generated slightly higher temperatures when compared to the control pads: When Wagner measured the temperature of the shaker pads after three hours of harvest and compared that to a set of control pads that did not contain TAS, he found that "what's going to ruin the rubber is heat. From what we know today, the torrefied almond shaker pads do not have better heat dispersion than the control."

Wagner, USDA, and ABC remain optimistic about where this research can go. Wagner's hard work will build onto existing research, paving the way for future iterations.

"I think it worked remarkably well for a first shot," said Colleen McMahan, research chemist at USDA ARS. "The collaboration and support of the Almond Board and the way Connor worked with us was just terrific. We're happy to continue this effort."

"It was a pleasure to work with Connor from the beginning on this, and it was only possible because of his determination," said Guangwei Huang, associate director for Food Research and Technology at the Almond Board. "I am very impressed with the steps he took to go through all of this."

## Next steps

In the past, USDA has had to ship TAS all over the country for processing: torrefaction occurred in Indiana, grinding occurred in Arkansas, and then the product was shipped to Oregon for compound formulation. However, Wagner was able to find regional partners for his project. Still, a more local source is needed long-term for both research and scale.

"To put torrefied almond shells into plastic or rubber we need to have a more integrated approach," said Huang. "Shipping ingredients to multiple processors is expensive, time-consuming, and can sacrifice quality and consistency."

Huang hopes this integrated solution might be an opportunity that an entrepreneur will embrace. In addition to rubber, ABC and USDA are also actively researching possibilities to add TAS to plastic products and advanced carbon materials.[3]

For Wagner, his time in the Almond Leadership Program ended over a year ago, but his passion for this work is stronger than ever.

"We need to find new uses for shells," he said. "It's really nice that the Almond Board sees the problem and is trying to get ahead of the game. And I want to be a part of that."

*A detailed overview of Wagner's project was featured in the November 2020 issue of Rubber World magazine, available online.*[4] ◆

[1] https://www.almonds.com/why-almonds/almond-living-magazine/biosolari-say-what-new-research-combines-hulls-shells-and-soil

[2] Learn more about presentations from the 2019 Leadership class: https://www.almonds.com/almond-industry/industry-news/almond-biochar-curriculum-free-fatty-acids-oh-my

[3] https://www.e-digitaleditions.com/i/1093876-2019-march-april-how-we-grow/7

[4] http://digitaleditions.walsworthprintgroup.com/publication/?m=9911&i=683723&p=32

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# TIME TO CONSIDER

*Stage 2C hull split: when all nuts are at least this stage, timely harvest can mommence. (UC IPM photo source)*

### Irrigation:

Kernels gain weight until just before harvest. July water stress will reduce kernel weight. Measured with a pressure chamber, the stress level threshold is -15 bars, with stressed trees (-15 to -20 bars) resulting in lighter nuts through shrivel. This reduction in kernel weight can be up to 20% of what fully irrigated kernels weigh. So, as much as possible in a drought year, maintain full ET irrigation from the end of hull split (90% of nuts split to stage 2C hull split) until just ahead of shake.

Too much irrigation will not benefit trees and may delay maturity and shake timing. A free, helpful publication on pressure chamber use in almonds (and walnuts and prunes) is found at: anrcatalog.ucanr.edu/pdf/8503.pdf.

## In a nutshell:

- Kernels gain weight through July. Where possible, maintain full irrigation (100% ET) up to orchard dry down for harvest for best kernel weight and orchard yield at harvest.
- Postharvest irrigation is key to future production. As soon as possible, get water back on harvested trees (but not on drying or windrowed nuts).
- Proper harvest timing reduces worm and trunk damage. Shut down shakers ASAP if trees don't shake clean.
- Where needed, control navel orangeworm and mites. When spraying, drive slowly (2 MPH) and use sufficient water volume (gallons per acre) to get good coverage.
- Make sure nuts are dry (kernels at or below 6% moisture, hulls at or under 12%) when picked up. Don't stockpile wet nuts.
- Take a hull sample for boron analysis.
- Take "report card" samples:
  - July leaf samples for nutrition program check (include chloride & sodium)
  - 500 nut harvest sample/variety/block to check for pest damage

As soon as possible, get water back on the orchard after shaking. Limiting water stress at harvest reduces early leaf drop this fall and the risk of future yield loss.

Maintaining nearly full to full ET following harvest is critical to orchard health this year and flower bud differentiation for next year. Target stem water potential is -10 to -14 bars in the postharvest period, a target that works for preharvest, too.

Is there a time to save on water between now and leaf drop? No. Adequate to good moisture levels in the orchard in July will deliver the heaviest kernels possible this year while good postharvest irrigation will help set up future crops.

*Harvest photo.*

## Harvest Timing:

Shake timing is critical to a successful harvest and long-term health of the orchard.

Timely harvest (shake) can mean reduced NOW damage, but can also hinder inshell production and increase the risk of ant damage as nuts have higher moisture content at shake and so take longer to dry longer on the orchard floor. On the other hand, growers committed to inshell production usually let the crop dry longer on the tree, literally exposing the nuts to increased NOW damage. Finally, shaking too early (not all nuts are split) too early harvest and/or poor shaker operation can result in bark damage that harms trees and income for the remaining life of the orchard.

The orchard is ready for timely harvest when 100% of the nuts on all trees are at least at Stage 2C of hull split. To confirm that the orchard is ready to harvest, test shake representative trees across the orchard, especially focusing on wetter areas (low spots, etc.) where the trees may be more vigorous and nut maturity delayed. If the trees shake clean without extended, hard shake, harvest can start. Be ready to wait on harvest if trees don't shake clean without an excessively long, hard shake. Someone with shut-down authority (owner, manager, and/or key employee) should check on the harvester(s) on a regular basis to make sure the job is done carefully and safely.

Review harvest options with your *Blue Diamond* field rep to time shake to deliver maximize income per acre based on NOW damage in preharvest samples and possible quality premiums tradeoffs between inshell and shelled product. Preharvest samples for NOW damage help with the decisions regarding inshell production of Nonpareil, Independence, and/or Sonora.

Timely shake of varieties like Winters, Padre and Independence should leave the fewest nuts in the trees.

## Stockpiles:

If the objective estimate confirms the 3.2 billion lb. crop from the subjective estimate, this year will be another big year for stockpiling. How those stockpiles are constructed and managed can impact nut quality and grower returns.

The following are best management practices for stockpiles developed by UC research and industry experience. Don't place stockpile(s) where water will accumulate. On a high spot or on a slope are the best locations. Carefully check nut moisture from across the row (in the shaded and exposed parts of the orchard floor) ahead of windrowing and pickup (upper and lower parts of the windrow). When stockpiled, nuts should be dry: kernels at or below 6% moisture, hulls less than 12% moisture and whole nuts (in hull) less than 9% moisture. Stockpiles should be oriented N-S to avoid excessive moisture and mold found on the shaded (north) side of an E-W oriented stockpile and flatten humps on the ridgeline of the stockpile resulting from separate elevator stations while building the stockpile. Use white on black tarps (white facing out) to cover stockpiles if wet weather is forecast. Remove the tarps in dry weather to allow moisture to escape the stockpile and recover the stockpile if rain or increased humidity threatens. Finally, More information on stockpiles at: almonds.com/sites/default/files/grower_stockpile_management_best_practices_from_abc_2014%5B1%5D.pdf

## Dust management:

Wherever possible, take steps to minimize harvest dust. Reducing dust is a safety consideration on public and private roads in addition to being a chronic health hazard/environmental contaminant. Make sure your employees

know that you are concerned with dust and show them how to operate equipment to reduce dust generation, especially near roads and property edges. Adjust sweeper head heights to 0.5" off the ground wherever possible so that the equipment isn't digging into the orchard floor and moving that dirt into the windrows. Slow harvester speed near field edges to reduce dust and point blower spouts into the orchard when sweeping near roads and neighbors. Find more control suggestions and materials in English and Spanish: almonds.com/almond-industry/orchard-management/harvest/dust-reduction.

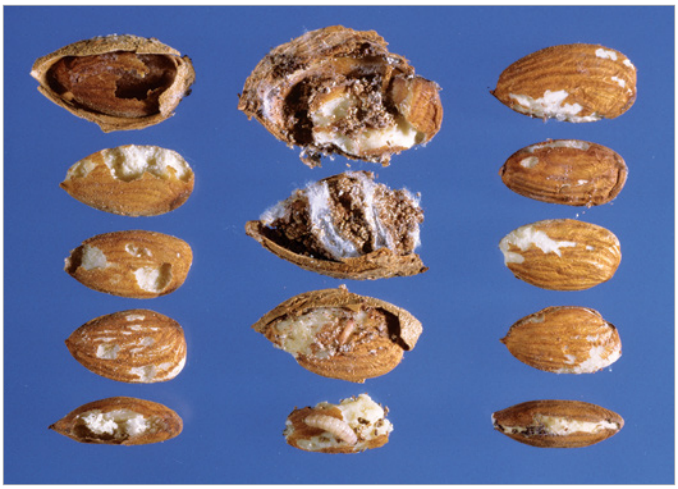
**Harvest samples** help with planning for the rest of harvest (particularly the Nonpareil harvest samples) and for next year from all varieties. A harvest sample consists of 500 whole nuts (hull, shell and kernel) from each variety in an orchard, taken between shake and windrowing. [It is important to take the samples at this time, as field/huller/processor practices remove at least 50% of damaged nuts so processor reject sheets underestimate nut damage.] Depending on the need for immediate information (for example, should the pollinizer varieties be sprayed for NOW after Nonpareil pickup?), harvest samples can be cracked out immediately or kept in the freezer until after harvest and then cracked out. The results help evaluate the crop protection program in the orchard this past year along with irrigation (shrivel) and certain nutrient levels (low boron nuts are gummy). Knowing what production/protection issues harm nut quality is worth the extra effort to sample and process this end-of-season sample. Some commercial consulting companies offer expert harvest sample analysis for a fee.

## Pest management:

- **Navel orangeworm:** Timely harvest is a very effective way to reduce NOW damage, especially under high pressure from this key pest. [On the orchard floor, the nuts are virtually invisible to the female moths.] Timely harvest ahead of the 3rd and 4th NOW generations—usually in August and September—helps reduce NOW damage at no extra charge to growers. NOW flight data from different blocks, based on egg or female moth traps, is critical to knowing generation timing. Also, cracking out Nonpareil field samples gives growers and PCAs a sense of how much worm pressure faces the pollinizer varieties. The added expense of spraying pollinizers may pay off under high NOW pressure.

  Resistance management is critical to maintaining some insecticide control potential for NOW. Do not apply the same pesticide chemistry to two consecutive NOW generations. For example, if Altacor® was used on the second generation of NOW, do not treat the third generation with Besiege® or Minecto® Pro, as both products contain an insecticide with the same mode of action as Altacor® (IRAC group 28). Check with your PCA regarding materials, PHI and efficacy. [PHI is measured from shake, not pickup date.]

  Finally, look for NOW damage as nuts go into stockpiles and fumigate as needed as NOW can feed and grow within stockpiled nuts.



*Ants—Navel orangeworm—peach twig borer damage. (UC IPM photo source)*

- **Mites:** Late mite flareups can mean partially defoliated trees at harvest, slowing nut drying on the orchard floor unless nuts aren't quickly conditioned. Partial defoliation can also mean reduced flower development (and crop) for next year.

  Late season mite control may be more challenging this year due to limited product availability resulting from supply chain issues. If weekly monitoring (protocols at: www2.ipm.ucanr.edu/agriculture/almond/

webspinning-spider-mites/) shows control is necessary, consult with your PCA about selecting a miticide that delivers effective control while preserving beneficial insects and mites. Those beneficials will provide some or substantial control after the miticide wears off. A table showing the impact of a range of insecticides and miticides is available at: www2.ipm.ucanr.edu/agriculture/almond/Relative-Toxicities-of-Pesticides-used-in-Almonds-to-Natural-Enemies-and-Honey-Bees/.

- **Spray coverage:** Late season insecticide and/or miticide sprays require good coverage to deliver effective pest control. Even for large sprayers with powerful fan(s), slower sprayer speeds (around 2 MPH) are needed to deliver good coverage throughout large, mature trees with branches pulled down by an average to heavy crop. Higher spray volumes (150-200 gallons per acre) delivered better NOW control than lower volumes (for example, 100 gpa) especially under high pest pressure in multiple trials by UC, USDA and private researchers. Spraying when temperatures are cool (<80°F) and relative humidity is up (>40% RH) will reduce spray evaporation and improve coverage.
- **Ants:** Smokey skies in 2020 contributed to slow nut drying and increased ant damage in many orchards. With the continued drought and fire threat that comes with those conditions, it is a good idea to pay close attention to ant control, where needed, this year. If spring or early summer monitoring showed ant control was needed but not applied consider

applying Extinguish® or Clinch® at least 4 weeks ahead of harvest for best results or Altrevin® closer to harvest. Product and application details impact ant control efficacy and should be understood and followed for best results. For bait to work, ants must be attracted to it. Wet or old (opened 1-2 weeks) material is not effective as a bait. Check with your PCA for materials, rates and timing details. More information is available at: www2.ipm.ucanr.edu/agriculture/almond/Ants/.

- **Weeds:** Eliminating weeds with postemergence herbicides followed by preharvest close mowing of dead weeds reduces orchard floor trash and helps with nut drying. Traditionally this has meant a glyphosate (Roundup®, etc.) burndown followed by mowing. With the growing number of glyphosate resistant weeds, an additional herbicide (Rely®, etc.) is commonly tankmixed with glyphosate when following this approach. Check with your PCA regarding PHI and rates.

## Nutrition:

Take a July leaf sample from each orchard as a final report card on your nutrition program for the season. Check out the new UC protocol on leaf sampling in the Nitrogen BMP publication from the Almond Board of CA Nitrogen Best Management Practices from the Almond Board of CA (almonds.com/sites/default/files/2020-12/ABC_Nitrogen_8.5x11_vmags.pdf). Decisions that commit hundreds of dollars per acre are made using results of leaf sampling. The person sampling should be trained and trusted. Make sure chloride and sodium are included in the analysis list so possible buildup of these toxic elements is monitored.

Set a date with your PCA/CCA to evaluate the entire report, postharvest, and plan a fertility program for 2022. In the short term, spot check the leaf N levels.

If your July nitrogen (N) leaf levels are good (2.5% N or higher), late season N fertilizer should not improve yield in 2021 compared to no additional N, based on field trials and experience. If you are considering adding fertilizer N soon after harvest, double check irrigation water nitrate levels before fertilizing. To calculate the pounds of N/acre-foot of irrigation water, multiply ppm nitrate nitrogen by 2.74. If the lab sends your irrigation water analysis results as ppm nitrate, multiply by 0.62 to get lbs N/acre-foot of water. See Table 1 (pg. 5) in Nitrogen Best Management Practices from the Almond Board of CA (see link above) for a chart showing lbs N/acre from ppm water N and water volume.

Harvest is the time to assess orchard boron (B) status and hulls, not leaves, are the tissue to sample. Take a hull sample for B analysis from windrows across the orchard just before pickup. A sample from each variety is a good idea. With more groundwater used around the Central Valley this year, hull B levels may be up in many blocks. These hull B lab results are important in planning a postharvest B nutrition program this fall and, perhaps, into next year.

## Fall/winter planning:

Consider a fall planted cover crop to improve rainfall capture (penetration) this winter and spring. This will help leach salts deeper in the soil and increase profile water storage this winter. The general target timing is to have the seed planted by the end of October, but planning before harvest will help get the job done later this year. Information on cover crop best management practices is available at: almonds.com/sites/default/files/2021-06/ABC_CoverCropBMP_8.5x11_vmags.pdf

Make plans to attend the Almond Board conference Dec 7-9, 2021 in Sacramento. Information at: almonds.com/about-us/programs-and-events/almond-conference

*Best wishes for a safe and successful harvest!*

**Franz Niederholzer, UCCE Farm Advisor, Colusa and Sutter/ Yuba Counties**

# CLASSIFIED ADS

## WANTED

3-axle Dump truck with steel sides (diesel).

Call (209) 614-2632

## WANTED

Used walnut chain for Johnson pickup machine.

Call (209) 838-2108

## WANTED

1930-36 cars or pickups and 1932 Ford pines winterfront grille insert also 1930-1934 Ford running chassis.

Call (925) 872-0980

## WANTED

Gasoline Memorabilia: Old gas pumps, gas signs, oil signs, car signs, and old cars and pickups.

Call (559) 485-9496

## FOR SALE

Flory 7 ft sweeper head, Series 77. Good condition. $8,000 OBO.

Call or Text (209) 605-2603. Manteca area.

## FOR SALE

Qty 2 6656 Flory Sweepers: 6½ ft head, Kubota diesel. Field ready. $29,500 each.

Call (209) 599-7108

## FOR SALE

Walnut stakes, 3/4", 10' long, used sucker rod, pallets of 10 or 200 up to 5600 available. $2.50 each, Escalon area.

Contact (209) 652-5164

## FOR SALE

Model B Case tractor circa 1946-50, peach trailers, Almond Roller, Brush fork, Lift for bins, Levee maker, Ridger, Propane tank, Long camper shell, hose pull with sled, International Tractor with front end loader, water pressure tanks, almond bottom dump trailer, windows.

Contact Ann at:
(209) 632-4346 for more info.

## FOR SALE

Tree Stakes for Almonds. 1000's of used steel stakes to keep your almond trees growing straight:

- 3' @ 75 cents each
- 4' @ $1.00 each
- 5' @ $1.25 each

Please call (209) 969-0526

## FOR SALE

(2) Johnson's pickup machines, $5,500 each or reasonable offer.

Call (559) 485-9496

## FOR SALE

REARS 500 gallon Power Blast sprayer with 33" fan. Purchased in 2016 new. Used 13 times. Maintained per manufactures recommendations. Asking $20,000 OBO.

Call (209) 604-7444

## FOR SALE

- Rears Orchard Sprayer
- Disc, Springtooth
- Rainbird and Toro Low Impact Sprinklers

Call (559) 268-3087

## FOR SALE

- R & L Easy lift Elevator. 10' Height 12" cups. In pieces. FREE!
- Jessee 500 Air leg 32" belt, no motor. FREE!
- 11ft. Orchard float w/ Hydraulic wheels CALL for pictures & pricing.
- 4 Stage sizer, good condition. $4,000
- 60 H.P. Sturdavent Shell Fan with motor. Complete. $1,500

Contact Ron Piazza at:
(209) 678-0788

## FOR SALE

- OMC Shaker Mono Boom Walnut Pattern. $350
- Rear end Housing for OMC Shaker Mono Boom Shaker – make offer
- 2 Main Boom Arms to hold up Shaker Head. $3,000 OBO

For more information call:
(559) 485-9496

## FOR SALE

Flory Almond Harvester, self propelled, Model 5100 and 3-carts, kept inside, good condition, new fan, urethane lined volute and trash discharge, priced to sell.

Call Todd at:
(559) 960-7678

## FOR SALE

'48 Ford Tudor Del. Sedan. All original mechanics. Can be driven anywhere at highway speeds. New interior, plus other nice updates. Black with wide white tires. Call for details – owner too old to drive. $14,500.

Call (209) 847-3196

## FOR SALE

Antique 1946 OS6 International Tractor. In running condition; $900.

Call 209 658-4521

## FOR SALE

2008 8 Channel Satake Ultrascan. $60,000

- Includes platform, Infeed dump hopper, Anex C-style bucket elevator with 50/50 split buckets
- Stainless steel hopper over chutes has been modified to prevent plugging and bridging of product
- Machine is currently set for 2 passes (4 channels each) and can be run as a single pass (8 channels)
- Walnut Setting (can be converted to Almonds)

Please contact Nina at:
(209) 609-6689

## FOR SALE

Beautifully restored to original 1931 Ford Roadster Pickup, $18,000 or best offer.

Call (925) 872-0980

## FOR SALE

Amarillo Irrigation Well Gear Head with PTO shaft. $1,000. Used very little.

Call (209) 620-4924

## FOR SALE

Antique 1946 OS6 International Tractor. Running condition. $900.

Call (209) 658-4521

## FOR SALE

2200 lb./hr. almond hulling plant. Two lines, Fadie huller and separator deck with three air-legs. Pre-cleaner 15 ton/hr. with midstate pre-cleaner, H8 Foresberg de-stoner, and Agsco de-twigger. Complete with pit, elevators, cyclones, and 190 ft. hull auger. Sell all or part. Open to offers.

Contact Gale Langum at:
(209) 612-4830

## FOR SALE

- 1 x 4 x 8' DF tree props bundles of 200. $50 ea.
- 1 x 4 x 10' bundles of 200. $60 ea.

Barn stored in Merced. Call Dan at:
(209) 777-3292

## FOR SALE

Used Precleaner. $150,000. Items include: pit liner and auger; pit elevator; cross conveyor; stick reel; 2 sand screen elevators; 2 sand screens; 2 foresberg P8 destoners; 2 detwiggers; bottom auger flighting; bin elevator; cross bin auger; misc air ducting; misc steel spouting.
Does not include: mac baghouse and all connected items; mac baghouse blower; mac baghouse clean air pump.

Contact (209) 358-1759

## FOR SALE

- Tractor trailer, 10'x6'-6". 22.5 tires. Crank up ramps. $4,500
- Enviromist Sprayer. 6'-6" spray band. Brand new. Never used. Cost $2,500. Sell $1,250.

Call (209) 537-9491. Ceres.

## FOR SALE

'48 Ford Tudor Del. Sedan. All original mechanics. Can be driven anywhere at highway speeds. New interior, plus other nice updates. Black with wide white tires. Call for details – owner too old to drive. $14,500.

Call (209) 847-3196

## FOR SALE

- KCI bank out cart - $13,000
- KCI drive over elevator - $8,500
- KCI dump cart - $5,000

Contact Ian at (559) 286-5709

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**Editor: *Blue Diamond Growers***
**P.O. Box 1768, Sacramento, CA 95812**

**Or contact BDG Communications**
**Email: communications@bdgrowers.com**

Unless advised otherwise, ads will run two consecutive issues. To guarantee placement, classified listings must be submitted by the 10th of: January, March, May, July, September & November.

## FOR SALE

- John Deere low profile 5100ML with exact cab tractor
- 12' V Risimo flail mower
- 8' V Risimo flail mower
- PBM 500 gallon weed sprayer with electric valves (new, never used)
- Durand Wallon 500 gallon tree sprayer
- 12' Domries orchard leveler float

Contact Joe at (209) 404-3326

## FOR SALE

1948 Ford Club Coupe, Columbia Rear End, beautiful green, $25,000. Twenty milk cans, with lids. 1700 almond stakes, 1"x4', 25 cents each. Four Model A 16" original wheels. Heavy Duty Ripper, 3 shanks, $2,500. Water Tank, 150 gal. also includes a frame with wheels, new tires, and gravity flow, $1800; used one season. Interested?

Call Arby at: (209) 505-0555
or text (209) 602-1400

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