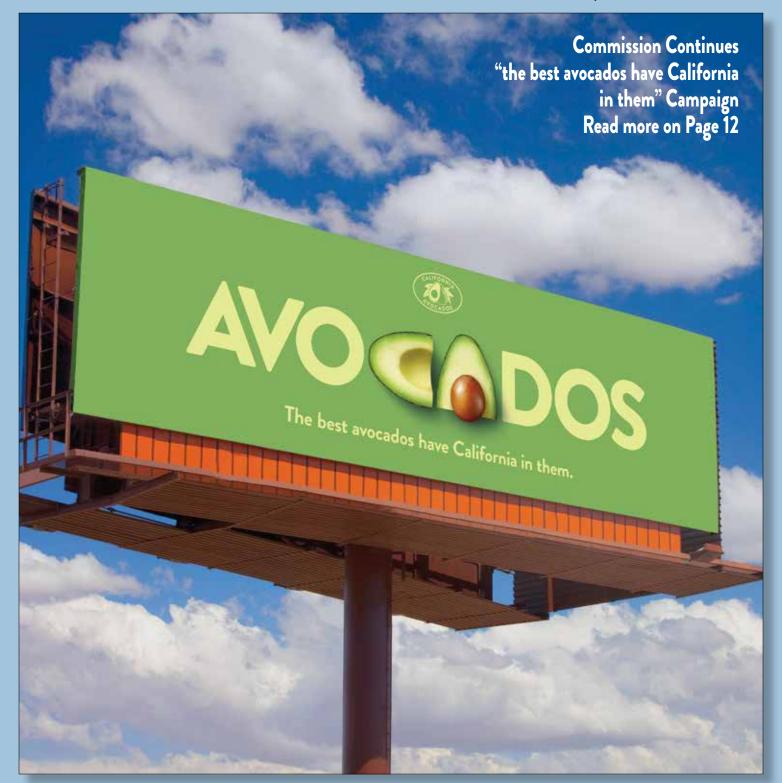
From the Generative Summer 2022

The Latest News from the California Avocado Industry





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From the Grove

Volume 12, Number 2

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Summer 2022

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Chair's **Report**

s the cost of fertilizer and diesel lead all of our farming costs higher, I am so grateful the avocado pricing has been strong and remarkably stable this year. Through May, the average price per pound for California fruit approached \$1.75. AM-RIC prices in June and the supply forecast for July suggest the average price for the season will very likely climb higher from there. The nominal average price per pound has never been this high. After adjusting for inflation, \$1.75 would be the third highest average price in 10 years and the fifth highest average price in 25 years.

I appreciate that not all growers will be impacted by this strong pricing equally. Growers with heavy crops should realize healthy profits, while growers with light crops won't have sufficient revenue to feel reprieve from higher cultural costs. We may never find the key to fully modulating the alternate-bearing tendency of this tree and we certainly won't reign in Mother Nature's indiscriminate freeze, heat and wind events, but we work with what we have and harvest when the size-structure, field quotes and mitigated risk seem optimal.

This year, we collectively got right to it and haven't slowed down. In May, the AMRIC handlers forecast the total California crop to be 286 million pounds. Historically, crops around this size have been approximately 63% picked by the Fourth of July. Over the past four years, on average the crop was 67% picked by this point. This year, based on the May crop estimate, we have already picked approximately 80% of the total crop. Certainly, no two seasons are alike, but this season has been exceptionally strong, stable *and* early.

The crop estimate will be further refined by mid-July based on another survey of the AMRIC handlers, but it is clear that California will wind down much earlier than planned. California Avocado Commission Vice President of Marketing Jan DeLyser and her team have already made some adjustments to the marketing plan and are ready to do more as necessary. For example, some consumer media originally slated for August has been shifted forward to July and some late summer foodservice and retail promotions have been canceled altogether. We are highly focused on effectively and efficiently marketing your fruit but also saving money wherever we can.

In the Spring issue, I reported the Succession Task Force was nearing the end of the process to bring forth a recommendation to the Board and that CAC would soon likely have a new President. In May, the Board did interview and extend an offer to a candidate with an exceptional resume and highly relevant experience, but in the end, we were unable to agree on terms of employment. Also in May, with gratitude



Rob Grether

for his many years in the saddle at CAC, the Board accepted Tom Bellamore's letter of resignation. I wish him well and many more long rides in retirement on the open range of Colorado.

For the time being, CAC does not have a President, but we are certainly not leaderless. The Board has full confidence in the CAC team to execute our business plan, support our growers and maintain our high standing with customers and consumers through this interim period. The Executive Committee also will be meeting more frequently to support management and monitor the overall administration of the Commission. The Succession Task Force also is back to work with the recruiters from Boyden and remains highly committed to identifying CAC's next President.

Enjoy the rest of your summer and these high prices—well, the high avocado prices, anyway.

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lssues Watch

By Ken Melban Vice President of Industry Affairs

Increasing our Engagement

he external pressures on California farming are daunting. With input costs continuing to rise (e.g., water, labor, fuel, fertilizer), and operators coping with a prolonged drought, farming in California's already burdensome regulatory environment is becoming even more difficult.

As the California Avocado Commission enters a new chapter, strategic efforts are underway to increase our engagement on issues impacting California's avocado farmers. We are collaborating with other commodity groups to join forces and increase the visibility of the agricultural industry. The Commission is actively pursuing opportunities to engage in discussions with elected officials and policy makers on the challenges California agriculture is facing. We are committed to sharing our story with all audiences on a broad range of issues - from water and labor availability to the value California's avocado groves provide in protecting the environment through sustainable practices.

While a strong advocacy effort does not necessarily guarantee success, it does create an environment wherein our industry may at least have a shot at having our voices and concerns heard. Hopefully, that hearing translates into listening when decisions are made that impact the California avocado industry. By voicing our concerns and our contributions, we hope those who are crafting legislation, casting a vote, and developing and implementing policies will pause and consider: "How will the California avocado industry be impacted?"



CAC Vice President of Industry Affairs Ken Melban (I) and IFPA CEO Cathy Burns meet with congressional staff.

As in-person meetings begin to reconvene, the Commission has ramped up our involvement and presence. In May, the International Fresh Produce Association (a new organization created by the United Fresh Produce Association and Produce Marketing Association merger) hosted a Public Policy Forum in Washington, D.C. The Forum brought together more than 250 agricultural leaders representing both private companies and commodity associations.

As a member of IFPA's Government Relations Committee, the Commission representative met with officials and elected leaders concerning the status of the Farm Workforce Modernization Act. The Act was passed by the House in March 2021, and now sits with the Senate. We strongly voiced (yet again) the critical need for a solution to agriculture's aging workforce and the need for a guest worker program that supports the needs of specialty crops, like California avocados.

We held multiple meetings with key Senate staffers to deliver the message that agriculture labor issues must be addressed, and the opportunity is now. Of course, with the almost equal partisan divide in the Senate — and the required 60 votes to pass legislation success will only come with some level of bipartisan support.

A meeting of the Specialty Crop Farm Bill Alliance Steering Committee also was convened in D.C. in May.



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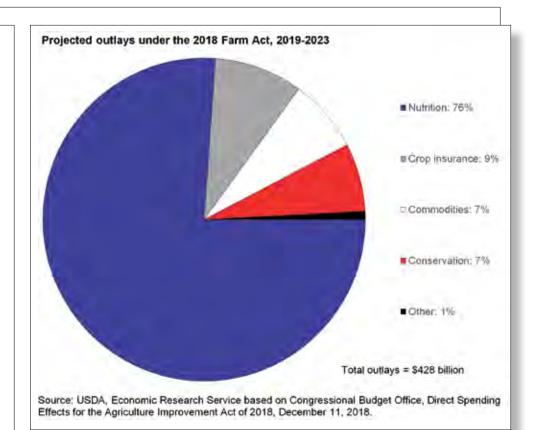
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Handlers

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To contact a CAC representative, please visit: CaliforniaAvocadoGrowers.com/Commission/your-representatives



The Committee is comprised of selected specialty crop representatives, both private sector and association leadership, with the goal of ensuring the next Farm Bill (2023) will address specialty crop needs. As a member of the Committee, I provided input on the benefits California avocado growers have received from the current Farm Bill. Examples included Market Access Program funding, Specialty Crop Research Initiative funding and Tree Assistance Program funding. One area that has brought challenges for California avocado growers is under TAP, specifically whether Extreme Heat is a covered event. Freeze events are covered, and in previous years of extreme heat the Commission, on behalf of impacted growers, has argued successfully for the inclusion of extreme heat. The decisions by the United States Department of Agriculture have been inconsistent, however, so we are working to ensure extreme heat is specifically called out in the next Farm Bill's TAP.

The Farm Bill, known as the Agri-

culture Improvement Act of 2018, consists of 12 titles governing a wide range of policy areas related to food and agriculture. The Congressional Budget Office projected the total cost of the 2018 Farm Act would be \$428 billion over the 5-year period 2019-2023. Nutrition programs account for about threefourths of this total, with projected outlays for crop insurance, conservation, and commodities representing nearly all the rest.

The Committee is focused on maintaining and even increasing funding for specialty crops (roughly around \$800 million annually), and we have identified the five following focus areas: Healthy Americans; Competitiveness and Sustainability; Trade and Foreign Competition; Research and Innovation; and Natural Resources and Climate.

If you have an issue you believe the Commission could help the California avocado industry address, please feel free to contact me at kmelban@avocado.org.

From Your Commission

By April Aymami Industry Affairs Director

2022 California Crop Update

s part of the California Avocado Commission's crop estimating efforts, an annual mid-season crop estimating survey is conducted among growers and handlers during the month of April. We would like to take a moment to thank the growers and handlers for their participation in CAC's recent round of surveys.

Through the grower and handler surveys, the Commission is able to collect the most up-to-date volume information and anticipated harvest timing. Both sets of surveys collect volume information, as well as variety distribution. Additionally, the handler survey requests each organization provide harvest projections for the remaining months of the season. The results of these surveys are used to inform the industry of the projected total crop that is expected to come to market and serve as a guide that helps shape the timing of CAC's marketing efforts.

Utilizing the results of both the 2022 grower and handler mid-season surveys, the Commission has updated the 2022 California crop estimate to 286 million pounds - which consists of 272 million pounds Hass, 8 million pounds Lamb-Hass, 5 million pounds GEM and 1 million pounds of other varieties. This updated volume is a 20-million-pound reduction from the December 2021 handler pre-season estimate of 306 million pounds. The decrease in volume mostly comes from Hass (19 million pounds), however a slight reduction to the Lamb-Hass volume also has been made (1 million pounds).

This year the grower survey represented a response rate of more than 40% of California's producing acreage and an estimated yield of 6,087 pounds per acre. The estimated yield by county shows two-thirds of the production from northern growing regions, with one-third coming from the southern region. Detailed results are included in this article, with a summary below of the top five counties' average yield per acre and the percentage of the 286-million-pound crop estimate each represents:

- Ventura 42%
- San Diego 29%
- Santa Barbara 15%
- San Luis Obispo 8%
- Riverside 4%

	C1.C1	Estimate	Response		
Variety	CAC Acres	Lbs/Acre	Lbs (MM)	% 42%	
Hass	44,014	6,141	270.29		
Lamb-Hass	1,617	5,019	8.11	33%	
GEM	628	6,723	4.22	64%	
Other	457	3,774	1.72	29%	
Total	46,716	6,087	284.34	42%	

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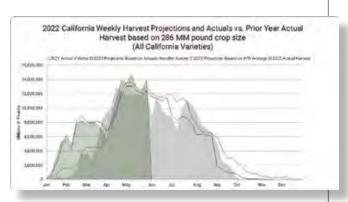
	Hass Only			All Varieties		
County		Estimated Yield			Estimated Yield	
	CAC Acres	Lbs/ Acre	Lbs (MM)	CAC Acres	Lbs/ Acre	Lbs (MM)
San Diego	12,367	6,220	76.92	13,358	6,048	80.78
Riverside	4,410	2,803	12.36	4,474	2,786	12.46
Orange	900	4,010	3.61	937	3,851	3.61
Ventura	16,070	6,940	111.53	17,303	6,955	120.34
Santa Barbara	5,950	6,928	41.22	6,134	6,799	41.70
San Luis Obispo	3,730	5,820	21.71	3,817	5,860	22.37
Minor Counties	587	5,013	2.94	693	4,455	3.09

Once a total crop volume is determined, CAC utilizes the information provided by handlers to develop monthly and weekly harvest projections. Using the updated crop volume of 286 million pounds, along with the volume that was harvested through April 2022, the table above represents how handlers estimated the remaining crop would be harvested on a monthly basis.

In early June, the Commission's Marketing Committee met and discussed the results of these surveys. While there was support for California's crop projections over the next few months, there remain some questions as to how much fruit has yet to be harvested and when California's season will wrap up. With this in mind, CAC will conduct another survey of handlers in early July to get a better understanding of the total volume remaining at that time. The Marketing Committee will meet again in late July to discuss the survey results, ensuring that CAC's marketing efforts are aligned with when California fruit is in season.

-	2022 Mid-Season California Crop Harvest Projection					May 2022 Handle
Month	Hass	Lamb	Gem	Other	Total	Survey Hass Distribution
Jan	7,700,000		•	178,700	7,878,700	2.8%
Feb	27,700,000		*	156,200	27,856,200	10.2%
Mar	32,000,000		66,500	51,000	32,117,500	11.8%
Apr	47,000,000	900	1,756,700	55,400	48,815,000	17.3%
May	48,000,000	13,700	1,897,400	25,800	49,936,900	17.6%
Jun	44,000,000	195,800	1,054,100	215,800	45,465,700	16.2%
Jul	37,000,000	4,236,600	181,600	159,100	41,577,300	13.6%
Aug	23,400,000	2,354,800	37,300	55,100	25,847,200	8.6%
Sep	4,900,000	1,026,000	4,400	56,200	5,985,600	1.8%
Oct	300,000	170,800		9,800	480,600	0.1%
Nov		1,400		7,100	8,500	0.0%
Dec				29,800	29,800	0.0%
Total	272,000,000	8,000,000	5,000,000	1,000,000	286,000,000	100%

Monthly volume projections based on AMRIC handler survey.



Four-year average and AMRIC handler harvest projections with actual 2021 and 2022 harvest overlays.

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Commission Continues "the best avocados have California in them" Campaign

his season the California Avocado Commission built on its successful advertising campaign "the best avocados have California in them." Ads feature visuals that accentuate the "CA" in the middle of the word "avocados," and audio and other ads call out the play on words in their taglines. Consumer media is targeted to avocado shoppers in California and the West who are willing to pay more for premium brands and to avocado "superusers," "mega-users" and "ultra-users." Using a creative mix of advertising vehicles, the California avocado media plan will achieve more than 257 million impressions supporting this year's harvest. "Consumer research has shown that the campaign is very effective at building awareness for the California avocado season and maintaining brand preference among targeted consumers," said Jan DeLyser, California Avocado Commission vice president marketing.

This season's consumer media campaign began in March and continues through August. Customer-specific programs run throughout the season and will continue as the season winds down. Social media and search advertising continue to run year-round to maintain brand awareness and consumer engagement.

"The Commission plays a two-fold marketing role: helping

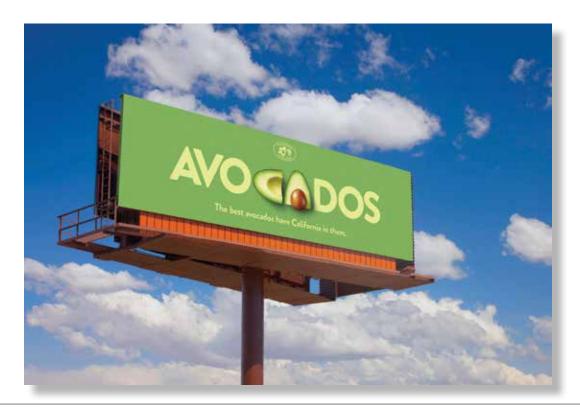
secure distribution of California avocados with customers and then encouraging targeted consumers to go buy the fruit where it is available. This advertising support uses a range of media to reach and motivate those consumers," said DeLyser.

The California avocado ads are being shown on video streaming channels such as Hulu and YouTube and on services such as Tremor video. Audio advertising on iHeart radio, Spotify and Pandora also features visual components. Digital advertising using services such as GUMGUM reaches CAC's targeted consumers, as does custom content on providers such as The Kitchn and Food52.

With consumers out and about again, the Commission is utilizing the mobile directions app Waze to direct avocado shoppers to retail store locations on their routes where California avocados are in distribution. Outdoor advertising in California from May through July features billboards and wallscapes in Los Angeles, Orange County, San Diego and San Francisco. Volta charging stations in 155 high-traffic locations, including some in the parking lots of supermarkets that merchandise California avocados, remind shoppers on their way into stores to add the fruit to their shopping carts.

Social media marketing continues on CAC's Facebook, Instagram, Pinterest and YouTube channels, and to reach younger avocado shoppers CAC now has a presence on Tik-Tok (see article p. 14). The Commission's influencer marketing program, which works with influential content creators, recipe developers and dietitians, complements the California avocado creative media plan and social outreach.

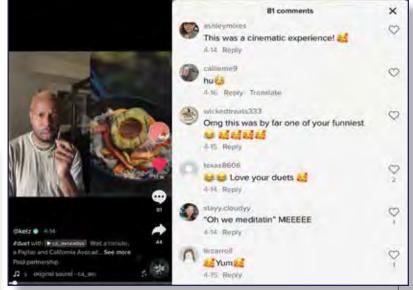




CAC Expands its Social Media Reach with Season-long Posts and a New TikTok Channel

ocial media outreach is one of the Commission's most effective means of engaging with targeted consumers, creating a sense of anticipation for the California avocado season, sharing relevant and engaging content, and driving brand loyalty and affinity throughout the year.





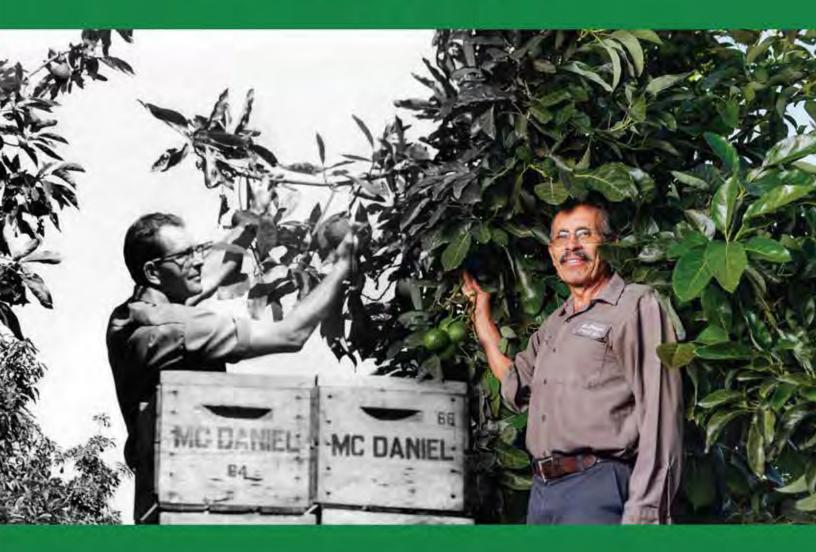
The Kelz duet of the Commission's Redwood recipe video generated positive consumer comments.

On April 6, the Commission launched its TikTok channel to engage with a younger consumer base that flocks to the videocentric social network. To drive excitement for and awareness of the newly launched California avocado TikTok account the Commission partnered with Kelz, a social media influencer with more than 5.8 million followers. Kelz, who focuses on reviewing recipe videos, is known for his candid and entertaining reactions to recipe content. Kelz shared a video review of a California avocado fajita recipe on his TikTok channel, sparking excitement for CAC's newly launched TikTok account.

The Commission's first TikTok post featured an Avo-Zen video on April 6, with two subsequent Avo-Zen videos shared later in the month. On April 7, the Commission released its Road Trip recipe "Redwoods" video and a week later Kelz posted a duet of the same video on his personal TikTok platform. The collaborative duet with Kelz has yielded more than 106,000 views and more than 12,900 engagements to date.

The Commission's first California avocado TikTok video focused on an Avo-Zen moment.





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Through May, CAC's TikTok posts yielded 2,700 views and 400 engagements and its followers had grown to 223. Starting in June the Commission began using paid TikTok support to amplify its in-season messaging during the peak season and grow its fan base.

The Commission's established social media channels — Facebook, Instagram, Pinterest and Twitter —also feature content to keep California avocados top of mind throughout the year. Posts are customized for pre-season and in-season time periods and focus on California avocado in-season messaging, recipe content, how-to content and merchandise support. Since February, now-in-season messaging and compelling visuals



These posts inspire consumers to try new California avocado recipes tied into cultural moments like National Pizza Day.

of California avocados have been shared regularly on social. While the fruit is in season, shared posts and those promoted through paid media encourage consumers to look for California avocados in stores and explore the Store Locator landing page to easily locate California avocados nearby. In summer, Twitter ads will drive key in-season messaging.

Recipe content is regularly shared across all social platforms and is tied to key selling points or cultural moments that in-



The Commission showcases California avocado merchandise in relevant cultural conversations to drive interest and sales of the branded items.

spire consumers to seek out California avocados and expand their use of the fruit in a variety of meals and snacks. The Commission also shares how-to video tutorials that provide consumers with useful and valuable advice concerning handling and preparing California avocado dishes.

To drive traffic to the California avocado merchandise shop, the Commission partners with influencers and uses regular paid and nonpromoted social content to creatively showcase the merchandise with



Two examples of in-season social media messaging encouraging consumers to seek California avocados in stores.

lifestyle posts that appeal to targeted consumers.

Since the beginning of the 2022 fiscal year, California avocado social content has yielded more than 6.9 million impressions (paid and non-paid), 39,000 link clicks, 25,000 video views and more than 45,300 social engagements across Instagram, Pinterest and Facebook. Twitter content has secured an additional 193,000 impressions, 830 engagements and 665 link clicks. Additional results will be reported in the Mid-August edition of the GreenSheet.

Through its social media programs the Commission reaches targeted consumers on the various platforms they prefer to engage with. In doing so, CAC builds awareness of California avocado availability, emerges the brand in key cultural moments, and builds loyalty and demand for the fruit.



Grower Profile

Michelle Voisenat: Passion Grows from Need

By Tim Linden

ichelle Voisenat was a busy and stressed, but happy, corrections officer for the Sheriff's Department of San Luis Obispo County when health problems gripped her mother and stepfather and she had to step in and take over the family's avocado growing operation.

It is a story with sad undertones but seven years later Michelle has emerged as a fulltime and full-fledged avocado grower, driving a tractor, managing 16 acres of avocados and doing a good enough job to bring in sufficient revenue to upgrade the operation and produce very respectable yields. It all points to a very bright future for Creekside Avocados LLC in Morro Bay, CA.

Michelle's parents, Steve and Barbara Erden, purchased the Morro Bay property in the mid-1970s, when Michelle was about 8 years old. She and her two sisters grew up on the ranch. (Mr. Erden was her stepfather but throughout the interview, Michelle referred to him as "Dad".)

"My dad and my uncle put in the avocados sometime in the 1980s," she said, noting that the ranch at one point included 60 acres – three parcels of 20 acres each. Steve Erden and his siblings each owned a parcel and did farm together for a time, though now the groves are managed separately.

"My dad wanted me and my sisters to have different careers, so he didn't share a whole lot about the farming operation," Michelle recalls.

She admits to being a "surf bum" without a clear career path as she exited her teen years. Her extended family owned several small businesses in Morro Bay, including a restaurant and a gift store. And in fact, Steve and Barbara were in the bail bond business as well as being avocado growers. "I worked in the family businesses. I worked in the restaurant as a hostess, busboy and dishwasher."

It was a connection from her family's bail bond business that led Michelle to take a test to join the correctional staff at the county jail. "I finished #3 out of 180 applications," she recalls. At 21, she was hired and began working in the women's jail. "I stayed there 30 years, and was promoted up to sergeant, which was my position when I retired."

The job had its stress points, but Michelle liked it. She was a correction officer, but she was also part psychologist, drug therapist, teacher and confidant.

In 2014, Steve Erden became ill, went into the hospital and never fully recovered. He died in early 2015 at age 67. Barbara Erden fell ill later that same year and died at age 72 in November of 2015.

When her dad first became ill, Michelle stepped in and helped her mom run the operation. After her mother passed, Michelle and a ranch hand shared the duties. In 2017, Michelle retired from the Sheriff's Office and took over complete management of the ranch. "I had a lot of mentors that helped me out and told me what to do," she said. "The first year, I have to admit, we had a horrible crop."

Michelle and her two co-owner sisters, Melissa Voisenat and Ashley Erden, briefly discussed selling the ranch but instead they decided to devote their time and energy – and all the revenues – into improving the property and upgrading the business. Michelle said it has been an uphill battle. Her parents didn't share much about the operation nor did they write it down. Michelle has relied on a cadre of local avocado experts to tell her what to do and when to do it.

The property has three wells, but it had no holding tanks. "That's the first thing we had to add," said Michelle. Over the last few years, Creekside has added a couple of holding tanks, a filtration and fertigation system, and automated the irrigation system. "I got tired of turning the system on and off all the time," Michelle said.

She and Ashley live on the property while Melissa, who serves as chief financial officer, lives in Fresno as part of the Fresno County Sheriff Department. Ashley is in college heading toward a master's degree in sociology. She is not actively involved in the operation but may well be in the future as Michelle has designs of turning Ashley's soon-to-be-husband into the farm manager so she can do a little traveling and enjoy retirement.

But that's going to have wait a bit. Michelle still has work to do on the ranch. A pruning project has been in the works over the last three years with the final six acres pruned about 18 months ago. Michelle began the pruning work herself but found it to be very strenuous and eventually hired workers for that task. She has also hired laborers for some weeding and of course, the crop is harvested by picking crews. But for the most part, Michelle has been working the ranch these past six years.

When she first inherited the ranch, she actively sought others in the industry who could give her advice. Michelle singled out Ken Warren, a local pest advisor and farm manager, as being a game-saver over these last few years. He has been quick to help and offered Michelle great advice on many farming tactics. "In the beginning, Ken asked me 'What do you know about avocados?' I told him I could make great guacamole, and that's about all I know."

Michelle reiterated, "My dad taught us nothing. He was passionate about farming and was a beekeeper, but he did not pass any information on to us. He wanted us to do something else."

Michelle added that San Luis Obispo County UC Farm Advisor Mary Bianchi has been a great help, as has Tim Spann, research project director for the California Avocado Commission for the past decade.

"My sisters and I decided we would put every penny back into the ranch, and that's what we have done," Michelle said. "It's only been the last couple of years that I have taken anything out at all."

She said the most critical need was the addition of the holding tanks as they needed a much easier way to irrigate the groves. Pruning was equally important as the trees had gotten out of control.

As those projects have moved toward completion, Michelle



said Creekside has had a couple of very good years. Last year, the ranch harvested about 185 bins of fruit on what was effectively nine acres of bearing acreage. Michelle revealed that because of the pruning effort and terrible winds, about half the acres did not produce much of a crop.

As she spoke to From The Grove in early June, the trio of owners was trying to decide when to pick this year's crop. "The prices have been really good," she said. "We have been keeping the fruit on the trees to let them size, but we are getting close to picking."

She added that her local expert, Job Popoca, has estimated that she has about 80 bins of fruit this year. "He has been very accurate in estimating the last couple of years," she said, adding that she is currently waiting for the rest of the trees to flower to get an idea of what next year's crop will yield.

While the three sisters get together on a regular basis to discuss the upcoming projects and make joint decisions about everything related to the ranch, Michelle said she is given a lot of leeway when it comes to on-farm decisions such as when to harvest.

Michelle said when she can slow down and start turning over some of the day-to-day work to her future brother-inlaw, she is going to travel. She loves the ocean and still enjoys surfing and paddleboarding. Michelle has spent time in Baja California and Costa Rica surfing and would like to do a few more of those trips within the next several years. But she has caught the farming bug. "It took me about six months to like the job, but I do love it now. And I love Morro Bay. My house sits on the ranch and I have an open view of Morro Rock and no traffic in front of me. I love it."

She added: "It's been challenging but also very rewarding. 🥑



The California Avocado, Cheese and Charcuterie Board with California Avocado Goat Cheese Dip with Crispy Prosciutto was demonstrated during the class.

Charcuterie Board Cooking Class Embeds California Avocados in Immensely Popular Food Trend

reative California avocado meal preparation sessions with media members and influencers provide the California Avocado Commission with unique opportunities to share key messages that differentiate the brand while showcasing the versatility and healthful benefits of the fruit. Having evaluated current consumer trends, the Commission identified an opportunity to demonstrate the ease with which California avocados could be incorporated into on-trend decorous and delicious charcuterie boards by hosting a virtual cooking session on March 31.

The event was hosted by Los Angeles-based food stylist and charcuterie board expert Meg Quinn who is known for her beautifully designed charcuterie boards, entertaining skills and preference for fresh, locally sourced produce. She was joined by Erica Domesek, founder of the do-it-yourself lifestyle brand P.S.-I made this..., who served as moderator. The virtual program inserted California avocados into an immensely popular food trend — charcuterie boards — while providing a unique and interactive cooking experience for the 16 media attendees, dietitians and brand advocates and four retail contacts.

Prior to the virtual cooking session each participant received the necessary fresh ingredients, including California avocados, as well as a gift box filled with a California avocadosbranded apron, wine glass and wooden serving board to use as they cooked alongside Meg from their home kitchens. With all the ingredients and tools at hand, the participants joined Meg in preparing one of her unique recipes: California Avocado, Cheese and Charcuterie Board with California Avocado, Cheese and Charcuterie Board with California Avocado Goat Cheese Dip with Crispy Prosciutto. They also prepared her Chocolate California Avocado Dip recipe while Meg showed how to build a California Avocado and Fruit Board. Attendees also were provided with a recipe for Honey Citrus California Avocado Dip.

Not only did participants learn how to artfully design a charcuterie board with various vibrant and fresh ingredients, but Meg also demonstrated how to safely cut and peel an avocado as well as how to create a show-stopping avocado rose. As moderator, Erica answered participants' questions throughout the virtual session, shared fun California avocado facts and encouraged attendees to look for the California label when shopping for avocados. To broaden the reach of the virtual experience, Meg shared her California avocado charcuterie recipes and stunning photos with her 249,000 Instagram followers.

Those who attended the virtual charcuterie board session included representatives from California-based retail chains as well as writers and content creators for a wide range of media outlets. The attendees represented Edible Sacramento, Esquire, TimeOut NY, Good Housekeeping, LIVESTRONG, Martha Stewart Living, PureWow, Real Simple, Refinery29, The Kitchn, Thrillist, We Like LA, Where LA, Travel & Leisure, FreshPlaza, PMG Magazine and AndNowUKnow. Attendees were eager to share their impressions of the virtual Califor-



On Instagram, Meg Quinn celebrated her partnership with the California Avocado Commission, as well as her California avocadoinspired recipes.

nia avocado charcuterie board session with their followers on social media. Comments included, "Easily the best avo I've worked with!" and "Such a great event!" One lifestyle freelancer gushed, "This is truly amazing omg" in reference to the California avocado rose. A success across the board (pun intended), the event also helped cultivate media relationships and encouraged reporters and influencers to keep California avocados top of mind for any upcoming relevant stories and content.

By inviting credible, third-party influencers to the event the Commission was able to expand its reach to various lifestyle and foodie consumer audiences in an authentic manner. By

> Event moderator Erica Domesek, left and host Meg Quinn, right. Both showed off their California Avocado aprons that are available for purchase on Shop.CaliforniaAvocado.com.



The Chocolate California Avocado Dip created especially for the virtual cooking session and CaliforniaAvocado.com.

sharing their charcuterie experiences with their audiences on social media and via their publications, the attendees helped build awareness of the fruit's seasonality and inspire their fans with unique California avocado menu ideas. The event secured nearly 19 million consumer public relations impressions and an additional 170,000 trade impressions from articles in And-NowUKnow, Fresh Plaza, PMG, Supermarket Perimeter and The Packer.



California AvoTech

By Mark S. Hoddle Department of Entomology, UC Riverside

Avocado Lace Bug is Continuing to Spread in California

vocado Lace Bug was first described based on specimens collected from avocados growing in Florida in 1908. Adult bugs (Fig. 1) and immature stages, referred to as nymphs, live and feed on the undersides of leaves. Lace bugs have needle-like mouthparts that are used to puncture leaf tissue, which enables feeding bugs to suck up the juice contained within perforated cells. This feeding damage results in necrotic brown islands (Fig. 2) that typically form within the central regions of the leaf. It's possible that feeding damage is exacerbated by opportunistic pathogenic fungi, like Colletotrichum spp., which may enter the leaf through feeding wounds and then proliferate thereby causing more damage.

Female ALB lay eggs (Fig. 3) on the undersides of leaves, often in clusters or trails that are usually covered in a black "tar" like substance, which could be an excretory waste product. This covering may help protect eggs from desiccation or attacks by natural enemies.



Figure 1. An adult avocado lace bug on a U.S. penny. Photo credit: Mike Lewis, UC Riverside

Where Did California's ALB Come From?

In 2004, reports of unusual damage to avocado leaves on backyard trees in the Chula Vista and National City areas of San Diego County were being reported. In response to these phone calls and emails, Dave Kellum (San Diego County Entomologist with the Agricultural Commissioner's Office), Guy Witney (California Avocado Commission), Gary Bender (UCCE Farm Advisor), and Mark Hoddle (UCR Entomology) got together to investigate. This field trip resulted in the first collections of avocado lace bug, Pseudacysta perseae (Hemiptera: Tingidae), in California. A significant concern was that this pest, which is very destructive in parts of México and the Caribbean, would invade commercial Hass avocado orchards, cause substantial damage, and require management. Curiously, in urban areas in San Diego, this pest preferred infesting the avocado variety Bacon and reports of infestations on Hass were rare. ALB colonies used for experiments described below were maintained on Bacon as we couldn't rear ALB on Hass.

Where and how ALB got to California in 2004 was a mystery that needed investigating, and molecular analyses - similar to those seen in TV programs like CSI - were used to figure out where the invading ALB population may have originated. Phil Phillips (UCCE Ventura County) and Mark Hoddle undertook foreign exploration efforts throughout the presumed native range of ALB (i.e., Southeastern U.S. states, the Caribbean, and México). There were two goals to these collecting trips: (1) collect ALB eggs to rear out parasitoids for possible use in a biological control program in California, and (2) collect adult ALB for DNA analyses to figure out where the population in California had come from. Phillips and Hoddle made extensive collections of ALB throughout México, the Caribbean, and parts of Central America. Colleagues provided additional specimens from Florida, Texas, and South America for use in DNA analyses.

The molecular work was done by Paul Rugman-Jones in Richard Stouthamer's Lab at UC Riverside and the results strongly suggested that the invading ALB population in San Diego County had likely originated from



Figure 2. Avocado lace bug feeding damage on a Hass avocado leaf. ALB feed on the undersides of leaves. Photo credit: Mark Hoddle, UC Riverside



Figure 3. Avocado lace bug eggs are often covered with a black protective substance. Photo credit: Mark Hoddle, UC Riverside

Nayarit in México, and more specifically, possibly Las Vivosas, which is part of the Mexican "Riviera," a popular destination for tourists. We speculated that a small ALB-infested avocado tree may have been purchased at one of the commonly seen roadside stalls, put in the back of an RV, and driven approximately 1,300 miles up the Pacific Coast to San Diego County where the tree was planted in a residential backyard and its associated ALB hitch hikers were unintentionally cared for.

Another interesting find from the molecular work was the possibility that ALB was not native to the Southeastern portion of the U.S., eastern México (e.g., Yucatán), and the Caribbean as originally thought. ALB may be invasive in these areas too, possibly having originated from native populations in western parts of México. As for the biological control program, unfortunately it didn't get off the ground, as no natural enemies, specifically egg parasitoids, were found attacking ALB eggs in the areas surveyed.

Management of Avocado Lace Bug

Research by Eduardo Humeres, Frank Byrne, and Joseph Morse in the Entomology Department at UC Riverside indicated that several insecticides were effective at killing ALB. Imidacloprid, for example, applied through chemigation to the soil, provided good control of this pest. Small scale trials indicated that contact insecticides like fenpropathrin, a pyrethrin mixture, petroleum oil, and potash also killed ALB. Interestingly, abamectin and spinosad did not appear to have significant negative impacts on ALB. Natural enemies associated with ALB in California avocado orchards include predatory adult and larval thrips, primarily Franklinothrips orizabensis (Thysanoptera: Aeolothripidae), and lacewing larvae, *Chrysoperla* sp. (Neuroptera: Chrysopidae). Laboratory trials indicated that these natural enemies would attack and feed on ALB nymphs. However, their impacts in orchards have not been studied and it's unknown if natural enemies can provide sufficient levels of biological control for suppressing damaging pest levels. Another group of natural enemies, predatory phytoseiid mites, should be studied to determine if they can attack and feed on ALB eggs.

What's Happening with Avocado Lace Bug Now?

There is a standing joke amongst applied entomologists that the best way to quickly solve an invasive pest problem is to get grant money to research control solutions. Sometimes, after going to a lot of trouble to get research funds, the pest problem unexpectedly fizzles out, and as the joke goes, voilá, problem solved! This is what happened with ALB in San Diego County. As research into management options was being conducted in anticipation of the pest moving out of urban areas, it turned out that ALB didn't spread rapidly and there were no reports of infestations in commercial Hass orchards. Consequently, the ALB program ended when the grants finished as there was no urgency to continue this work.

This situation changed in 2017 when reports of ALB damage in commercial Hass orchards was being reported by growers and Pest Control Advisors in the Oceanside-Bonsall-Fallbrook (San Diego County)-Temecula (Riverside County) area. Emails with photos supported observations that ALB was causing leaf damage and field collections confirmed this. Around the same time, reports of ALB infestations of backyard avocados in Culver City and Long Beach in Los Angeles County were received and confirmed by field inspection. So, the questions now were, "Where did these new infestations come from?" "Had the San Diego population finally started moving after about 13 years or so of doing nothing?" "Why was ALB now infesting Hass?"

Molecular analyses by Rugman-Jones and Stouthamer indicated that these 2017 ALB infestations had a different genetic fingerprint to the original San Diego infestation from 2004. The new populations were genetically more similar to ALB from the eastern areas of the pest's distribution (i.e., Southeastern U.S., eastern México and the Caribbean). We currently think these new more aggressive ALB populations infesting Hass may have originated from Florida. So, it looks like California has been invaded twice by ALB, the first time was around 2004 with bugs from México and the second time was around 2017 with bugs from Florida.

And the Spread Continues ...

In 2019, the first reports of ALB infesting avocados were reported from Oahu Hawaii, a significant range expansion for this pest. It is unknown how ALB made it to Hawaii. The most obvious explanation would be an accidental introduction, most likely via infested avocado cuttings or plants.

In May 2021, the first active ALB infestation in a commercial Hass orchard in Carpintera, Santa Barbara County, was reported. The spread of ALB northwards out of Los Angeles County into Santa Barbara County also may have occurred via the movement of infested plant material. Additionally, research by Paloma Dadlani, an M.S. student in the Hoddle lab at UC Riverside, has resulted in some preliminary evidence from sticky card monitoring in commercial Hass orchards, which indicates that ALB adults may engage in "flight" and have the potential to disperse aerially.

What's Being Done Now for Avocado Lace Bug in California?

With support from the California Avocado Commission, the research program into ALB has been resurrected. Work is currently investigating the phenology of this pest in commercial Hass orchards in Oceanside-Bonsall and surveys for natural enemies associated with pest populations are underway. In the lab, we are investigating the effects of temperature on ALB egg and nymph development and survivorship rates, and adult longevity and egg laying by females. These data may help us understand if heat waves and Santa Ana winds can knock back ALB populations, which we should be able to corroborate via the phenology studies in orchards. Also of interest is understanding what has happened to the original ALB population in Chula Vista-National City. Has this population been replaced by the more aggressive Florida strain of ALB? Also we want to figure out what is going on in Hawaii. Was Hawaii invaded by the original San Diego ALB population from México? Did California accidentally export the more aggressive Florida strain to Hawaii? Or, importantly, from California's perspective, did the Hawaii population come from somewhere else and does it now pose an invasion risk to California avocado growers? Molecular studies are planned to answer these questions and as our research progresses there will be a lot more to report and to read about.

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The official logo for the 10th anniversary of California Avocado Month (June 2022)

Celebrating 10 Years of California Avocado Month

en years ago, the California Avocado Commission first observed June as California Avocado Month. This year, to continue celebrating the decade-long tradition, the Commission hosted an in-person California avocado grove open house at Rancho Santo Thomas in Valley Center, Calif., on May 14 for local media and influencers, as well as trade media, to learn about the premium attributes and competitive advantages of California avocados.

During the open house, attendees experienced first-hand what it takes to grow California avocados. They experienced picking California avocados directly from the trees, observed different growth stages of the trees, watched a grafting demonstration and learned about grower sustainability practices and the packing house process. Additionally, attendees learned about different California avocado varieties and were able to taste an assortment of innovative, delicious dishes featuring California avocados. A longtime brand advocate of California avocados, Brandon Matzek of "Kitchen Konfidence," even hosted a special interactive avocado rose tutorial.

In addition to driving awareness of and excitement for the 10th anniversary of California Avocado Month, the event helped cultivate media relationships with local Californiabased reporters and influencers, as well as trade contacts, and encouraged them to keep California avocados top of mind for upcoming relevant stories. The news about California Avocado Month also was shared in press releases and a mat release, which were distributed to national and regional media outlets.



The Produce Reporter's Pamela Riemenschneider picking California avocados directly from the tree with the help of grower Mike Sanders during the grove open house.



Grove open house guests learning about the grafting process from the Maddock Nursery team.



Influencer and Living Well Brand Advocate Liz Shaw from @ShawSimpleSwaps captures content in the grove.



Attendees enjoyed an interactive avocado rose demonstration at the grove open house.

As of May 26, the releases had generated more than 238 million impressions.

As an ode to the past decade, the Commission enlisted the culinary talents of Southern California-native, Chef Nyesha Arrington, to create two delicious and seasonal recipes prominently featuring California avocados: California Avocado Crab & Tuna Stack and Grilled California Avocado & Peach Salad. The recipes also were shared with open house attendees in the form of recipe cards they could use for their next summer soirée, further encouraging incremental usage. Arrington has been praised throughout her career for using farm fresh, locally and responsibly sourced ingredients, which made her the perfect partner to craft customized dishes for this celebratory anniversary.

Over the past decade, the Commission has celebrated California Avocado Month with avocado fans across the Golden State through various activations designed to communicate California avocado seasonality, as well as encourage consumer demand. California Avocado Month support also has come from the Commission's brand advocates, trade media outreach, retail and foodservice promotions and additional grower and board member participation in events. Here's a look at some key activities from the past 10 years.

- 2012 This year, several California city and county governments officially designated June as California Avocado Month, including the city of Los Angeles, city of Santa Monica, Placer County and San Diego County
- 2013 In partnership with the Commission, chefs Erik Tanaka of Seattle and Lisa Schroeder of Portland shared their love of the fruit's rich flavor and creamy texture by featuring California avocado dishes on their restaurants' menus throughout the month of June
- 2014 CAC continued to partner with chefs across the country to promote and feature California avocado specials in their restaurants, including chefs in Chicago, Florida, New Jersey, New York, Seattle, Texas and more
- 2015 California Avocado Month kicked off with an artisan chef media dinner in June at celebrity chef Curtis Stone's Maude restaurant in Los Angeles. Media representatives from *L.A. Magazine, DineLA* and *Huffington Post*, as well as influential bloggers, enjoyed a 10-course avocado-centric meal that showcased the versatility of California avocados in various dishes
- 2016 The Commission executed several consumer-focused programs for the fourth anniversary of California Avocado Month, including:



Jan DeLyser and California avocado grower Rick Shade pose for a picture at CAC's 2018 California Avocado Month event at Grand Central Market in downtown Los Angeles.

- Partnering with a popular "foodie" website Food
 52 to promote a stream of California avocado
 recipes, nutrition information and photos
 throughout the entire month of June
- o Partnering with renowned Chef Jessica Koslow of Sqirl, a Los Angeles-based restaurant known for locally grown and seasonal ingredients, to create a California avocado-inspired recipe
- o Hosting a "Dinner en Green" for San Diegobased bloggers and RDNs with Valley Center, California avocado growers Mike Sanders and Chris Ambuul in their Rancho Santo Tomas avocado grove



Jessica Hunter, now CEO and co-owner of Del Rey Avocados, shares her background and experience in her third-generation family business with media and influencer attendees at Portland's Pine Street Market in 2018.

- 2017 The Commission's activities included a sponsorship of the venerated Grand Central Market in Los Angeles, which turned 100 years old. For the entire month of June, 11 market vendors featured California avocado dishes at their restaurants, and CAC hosted a media preview at the venue in late May
- 2018 CAC partnered with two acclaimed chefs to honor the fruit's versatility and peak availability with unique recipes and month-long menu specials found exclusively at Los Angeles' Grand Central Market and Portland's Pine Street Market. Media events were held in advance, where the Commission's board members Rick Shade and Jessica Hunter were in attendance to share the grower story
- 2019 The Commission partnered with vendors of the Little Italy Food Hall in San Diego to offer special, one-of-a-kind California avocado dishes for the entire month. CAC kicked off the monthlong celebration with a media event at the food hall in May, which was attended by guests from *Travel + Leisure, San Diego Family Magazine* and *WHERE San Diego*, as well as trade media attendees
- 2020 CAC planned to kick-start the monthlong celebration with an in-person media and influencer preview event in May. When the event was cancelled due to COVID-19, the Commission specially delivered a stunning eightcourse California avocado-centric meal – created by Vespertine Chef Jordan Kahn – to 18 top Los Angeles media and influencers, including those at *Eater LA, Parade, Sunset Magazine* and *POPSUGAR*
- 2021 The Commission hosted a quintessential summer event that embodied California culture – a drive-in movie night at Brea Mall where guests enjoyed a Southern California classic, Angels in the Outfield, in a pandemic-safe environment
- 2022 To kick off the 10th anniversary celebration of California Avocado Month, the Commission hosted an in-person California avocado grove open house experience in Valley Center, for key media and influencers to learn about the premium attributes and competitive advantages of California avocados. CAC also secured a proclamation from the county of San Luis Obispo officially declaring the 10th anniversary of California Avocado Month 6

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Better Growing

By Tim Spann, PhD Spann Ag Research & Consulting

Avocado Flowering: The Effects of Drought and Above Average Temperatures

s every California avocado grower knows, the Western United States is in the stranglehold of the longest megadrought since 800 A.D. Some researchers predict this megadrought — a drought lasting 20 years or more — will continue until 2030. While this has obvious implications for agriculture in California, I want to specifically focus on avocado flowering.

What Induces Flowering in Avocados?

Several studies have documented that low temperatures (50-60 °F) induce flowering in Hass and Fuerte avocados. However, other environmental factors — low soil moisture, low light intensity, nutrient deficiency — are known to influence flowering in other tree crops. But how these factors influence flowering in avocado was unknown until recently.

Before getting into the details, let's review where avocado flowers form. Avocados flower on the previous summer's growth. In California, the transition of the vegetative buds on summer flush growth to floral buds begins to occur in late summer as the extension growth of the summer flush is ending. At this point, the summer shoot terminal vegetative bud begins to transition into a floral bud, followed by the transition of lateral vegetative buds into floral buds progressing down the shoot away from the terminal. As the development of these buds progresses, the summer growth flush transitions from vegetative to floral and passes a point known as an irreversible commitment to flowering. In California, this occurs from late October through November.

To understand what environmental factors were playing a role in this transition from vegetative buds to floral buds, a group led by Dr. Carol Lovatt at UC Riverside conducted a controlled environment study using containergrown 3.5-year-old Hass trees grafted onto Duke 7 rootstock. For five months, the trees were grown in a greenhouse under what the team described as optimal growing conditions (OGC) - 14hours of light using supplemental lighting, 86 °F day/68 °F night temperatures, 80% relative humidity, and wellwatered (soil volumetric water content 20-25%). After five months, the trees were randomly assigned to one of four treatments:

- OGC as described
- Low temperature (LT) with 10-hour day length at 58 °F day/50 °F night, irrigation the same OGC
- Low soil moisture (LSM) with conditions the same as OGC but soil moisture



reduced to 8-12% volumetric water content

•Low light intensity (LLI) with conditions the same as OGC but light reduced to 15% of the OGC treatment using shade cloth.

The trees were kept under these modified treatment conditions for eight weeks before returning all the trees to OGC for six weeks of observation. Throughout the trial, buds were collected for gene expression analysis and the trees were monitored for flowering.

At the start of the eight-week treatment period, all the terminal buds on actively growing shoots were vegetative and shoots continued to grow veg-

Developmental fate of buds of Hass avocado trees subjected to 8 weeks of low temperature (LT), low soil moisture (LSM) or low light intensity (LLI) and then transferred to optimal growing conditions (OGC) for 6 weeks or maintained under OGC for 14 weeks.

Treatment	Floral shoots (number/tree)	Vegetative shoots (number/tree)	Quiescent buds (number/tree)
LT	25.2	0.3	4.5
LSM	0.0	0.2	29.8
ш	0.0	0.0	30.0
OGC	0.0	0.0	30.0

etatively for the first four weeks under all the treatment conditions. After four weeks of treatment, shoot extension and leaf expansion slowed in the LT treatment trees. Trees under the LLI conditions developed larger leaves than those in other treatments. And trees in the LSM treatment began to develop symptoms of water-deficit stress, including shoot tip browning and leaf necrosis.

Gene expression data showed that expression levels of the flowering gene FLOWERING LOCUS T only increased in LT treated trees, which also saw an increase in the expression of flowering genes APETALA1, and APETALA3. This corresponded with visual floral development that only occurred in the LT treated trees.

This work demonstrated that floral induction in Hass avocado is promoted by low temperature, which induces flowering gene expression, and warm temperature following the low temperature induction period leads to flower development.

What Does This Mean for Avocado Growers?

This research demonstrated the necessity for low temperatures for good

floral induction in Hass avocados, and likely most if not all other Mexican \times Guatemalan hybrids, and that drought stress cannot be used in place of low temperature as it can in citrus. Therefore, in warm winters such as the one we just had, which are usually associated with dry conditions, California avocado growers could expect to see reduced flowering.

Going forward, growers need to ensure they are providing sufficient irrigation during the summer to support the summer growth flush. This will maximize the flowering potential of the trees by ensuring there is adequate growth with many buds available to potentially transition to flowers for the next spring's bloom. This will be especially critical during heat events as transient water stress caused by these events can cause the summer growth flush to stop. Thus, growers need to be especially vigilant to ensure their trees are well-irrigated leading into, during, and following heat events. Also, holding fruit late into the season reduces summer flush growth, so early harvesting will become more critical to help ensure good flowering potential.

Likewise, winter irrigation also

is important. During the winter, flower development is taking place and if drought stress occurs during that timeframe it can hinder winter development and therefore reduce flowering in spring.

Also, in addition to inducing floral development, it is likely that cool winter temperatures serve to synchronize the tree and lead to a more condensed bloom. Thus, following warm winters, bloom is likely to start sooner than normal and extend over a longer period. This will make practices like using gibberellic acid to enhance fruit set more difficult to time. Also, when bloom extends over a long period there is a greater risk that fruit set from late bloom could be exposed to early season heat events and those young fruit are more likely to drop.

This article summarizes work found in: Acosta-Rangel, A., R. Li, P. Mauk, L. Santiago, and C.J. Lovatt. 2021. Effects of temperature, soil moisture and light intensity on the temporal pattern of floral gene expression and flowering of avocado buds (Persea americana cv. Hass). Sci. Hort. 280:109940. https://doi. org/10.1016/j.scienta.2021.109940.

By Tim Linden

Handlers' **Report**

Solid Pricing Expected to Last

hough the volume of fruit from California that will be marketed in the late summer/early fall is uncertain, the very good, season-long farmgate pricing is expected to prevail until the last avocado is picked, packed and shipped.

Rob Wedin, executive vice president of sales, Calavo Grown, said demand for California fruit remains very high and he is not anticipating that is going to change as the season progresses. Through the week ending June 3, Calavo Growers Inc. had harvested about 55% of its expected California volume. During June, the company is budgeted to harvest another 17-18% followed by 15% of its total California volume in July. If those expectations come to fruition, the company will only have about 12% of its local volume left.

Wedin noted that Calavo skews more heavily toward production in the north, so he observed that California had most likely picked a greater percentage of its total volume by early June. And in fact, the numbers bear that out. By that early June date, California had harvested about 180 million pounds of fruit. The California Avocado Commission recently revised its total estimate downward to 286 million pounds from the original 306-million -pound forecast early in the season. That means about 63% of the volume had been harvested by June 3.

With only a bit more than onethird left to be marketed over the summer, the result should be a continuation of the strong market.



The Calavo executive said a solid June/July market is almost a certainty. As he spoke to *From the Grove* in early June, Wedin reasoned that México's always-robust supplies were in decline and there just isn't enough available fruit over the next couple of months to fill the demand. Throughout the first six months of the year, he noted that supply was typically in the 45-50-million-pound range per week and demand outpaced that. That supply/demand equation is not expected to significantly change this summer.

Supplies from México throughout May averaged less than 30 million pounds per week. California has been trending downward since it hit its peak week of 15 million pounds in late April. The state's growers are not expected to ship more than 10 million pounds

during any week once the calendar switches to July. While Peru's volume will continue to climb, Wedin does not believe Peruvian exporters will ship enough fruit to alter the current demand situation. In addition, he noted that Peru's fruit is typically priced differently than avocados from California and México. Peru has long relied on program sales to some of the nation's largest retailers to establish its pricing model. This year, Peru's shipments to the U.S. market are expected to increase by almost 30% and there will undoubtedly be more Peruvian fruit on the open market. That could be a factor, but Wedin does not expect it will create significant downward pressure on California pricing.

Avocado officials in México have reported that there is a good-sized





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summer crop as well as a lot of fruit on the trees for the 2022-23 season, which runs July through June. Nonetheless, Wedin said California fruit should still offer excellent returns as long as it lasts. He said the market has maintained very strong FOB pricing for many months. The most sought after fruit sizes were regularly in the mid-\$50s per carton FOB while sales in the \$60s and beyond were not rare.

The 2022 California avocado season has been a very interesting one as the very strong early pricing led to more marketed fruit in the first few months than expected. This gave growers great returns on their early production, but it also meant a lot of fruit was picked early, which has the effect of reducing overall tonnage. It was a recent survey of growers and handlers (reported on page 8 of this issue) that led CAC to reduce its overall estimate.

Keith Barnard, senior vice president of sourcing and sales, Mission Produce, did articulate the crop reduction and cause for *From the Grove*. "The 2022 mid-season crop estimate for California avocados is currently projected at around 286 million pounds of fruit, which is a slight increase from the 2021 crop," he said. "This year, growers have been harvesting smaller fruit before they reach their peak size potential, which is mainly driven by the high pricing across all sizes, including small fruit."

He added that "California growers have experienced excellent returns year-to-date, which has encouraged them to pick earlier than normal this season."

The early picking did impact the size curve but not the pack presented to retailers. "California fruit quality has been excellent this year and the industry expects this to continue throughout the season," Barnard said.

CAC Board Member Gary Caloroso, who is regional business development director for The Giumarra Companies, Los Angeles, echoed the sentiments of the other two handlers quoted in this story. "Returns have been very good all season," he said. "Unfortunately, we didn't have the size curve we were hoping for, but growers still got very good prices."

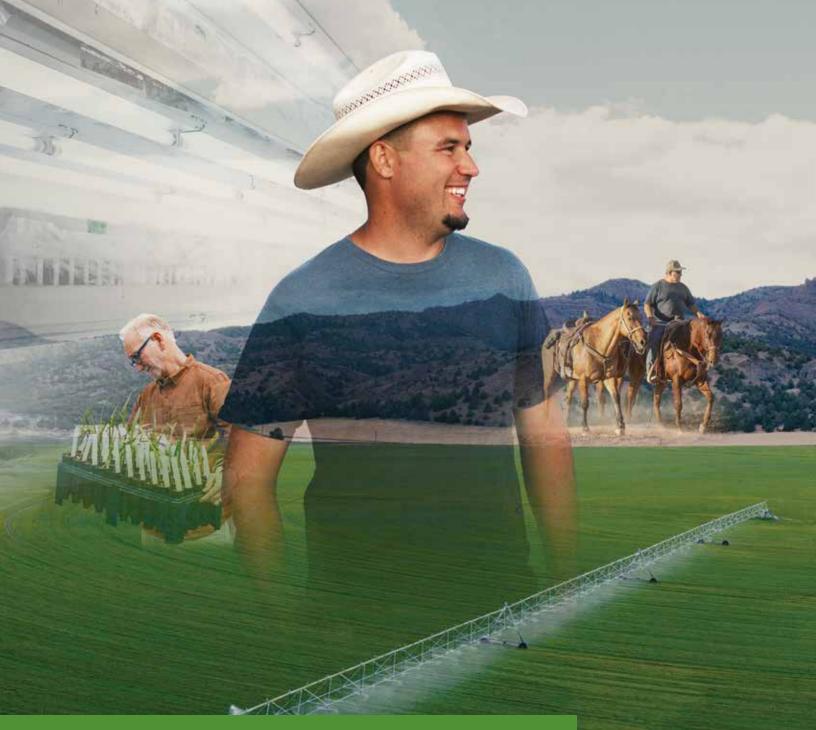
He said demand for California fruit remains very strong. He expects Giumarra to have supplies until Labor Day, though its late fruit will be limited. "We do not have as much fruit in the far north (San Luis Obispo County) this season as we have had in the past," he said. Like the others, Caloroso does not expect imported fruit to severely impact the current price structure for California. As noted, México's volume is currently in decline and the Giumarra executive does not expect supplies will reach the point that the market drops precipitously. While growers in the Mexican state of Jalisco have gained access to the U.S. market, the expectation is that the volume will grow gradually and not be impactful this summer.

"The forecast is that Jalisco will ship about 150 million pounds to the U.S. market over the next 12 months," Caloroso said. "Currently, they send about one-third of their fruit to Europe, one-third to Canada and one-third to Japan. They will have to take some of that fruit and switch it to the U.S. market."

The fact that Jalisco growers already have customers for their fruit should naturally limit shipments to the U.S. In addition, both Caloroso and Calavo's Wedin said the process of certifying all that fruit, from the grove through the packinghouses, for U.S. shipment is laborious and time consuming.

Wedin said logistically the United States Department of Agriculture must increase its staff in México to handle the certifications and that is taking time. "We don't expect that a lot of Jalisco fruit will be sent to the U.S. this summer," he said.

Peru has estimated that it will increase its exports to the United States this summer to a reported 250 million pounds compared to about 190 million pounds in 2021. Shipments are expected to hit their peak from early July through mid-August, with as many as 20 million pounds during their top week. During that specific late July week, California is projected to have only about 15% of its crop still on the trees.



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