



IN THIS ISSUE, YOU'LL FIND:

[Online and Print Versions of CAC Annual Crop Estimate Survey Available](#)

[Use of ProgGibb LV Plus® Plant Growth Regulator Increases Total Yield and Fruit Size of Hass Avocados](#)

[Avocado Inspection Committee Recognizes Two Producers and Seeks to Fill New Vacancies](#)

[Aid Available for Growers Affected by Wildfires](#)

[Rebates Available for Costs Associated with AMI Installation in Oxnard Area](#)

[Bayer Bee Care Award for Young Beekeepers](#)

[Tickets for Multi-sensory California Avocado Pop-up Museum Now Available](#)

[Market Trends](#)

[Weather Outlook](#)

Calendar

For a listing of industry events and dates for the coming year, please visit:

<http://www.californiaavocadogrowers.com/commission/industry-calendar>

Safe Food Alliance Produce Safety Training Sessions

The Safe Food Alliance and the California Department of Food and Agriculture (CDFA) are offering a Produce Safety Training session for produce growers, buyers and others interested in learning about produce safety, the Food Safety Modernization Act Produce Safety Rule, Good Agricultural Practices and co-management of natural resources and food safety. Registration required. [More information available here.](#)

April 17

April 17

Time: 8:00 a.m. – 5:00 p.m.

Location: Farm Bureau Office, 420 South Broadway, Escondido, CA

California Avocado Society Seminar: Old and New Smart Agriculture

The guest speakers for this seminar are Khaled Bali, director and irrigation/water management advisor at UCCE- Imperial County/UC Desert Research and Extension Center; and Tim Spann, California Avocado Commission research program director. [More information available here.](#)

April 17-19

April 17

Time: 1:00 p.m. – 3:00 p.m.

Location: Cal Poly Crop Science Bldg, located at corner of Highland and Mt. Bishop, San Luis Obispo, CA

April 18

Time: 9:00 a.m. – 11:00 a.m.

Location: UC Cooperative Extension Office Auditorium, 669 County Square Drive, Ventura, CA

April 19

Time: 1:00 p.m. – 3:00 p.m.

Location: Fallbrook Public Utility District Board Rm., 990 East Mission Rd., Fallbrook, CA

CAPCA Spring Summit

CAPCA's 2018 Spring Summit will cover the following topics that might be of interest to California avocado industry members: Key issues for the Southern California region (including shot hole borer), Healthy Schools Act, and insect control with biopesticides. Registration required. [More information available here.](#)

April 24-25

April 24

Time: 12:30 p.m. – 6:30 p.m.

Location: Pechanga Resort and Casino, 45000 Pechanga Parkway, Temecula, CA

April 25

Time: 7:00 a.m. – 5:00 p.m.

Location: Pechanga Resort and Casino, 45000 Pechanga Parkway, Temecula, CA

Produce Safety Alliance Training

To help avocado growers and related industry members comply with the mandatory Produce Safety Alliance training, CAC, in partnership with California avocado handlers, has scheduled two Produce Safety Alliance trainings exclusively for California avocado growers. Registration required. [More information available here.](#)

April 24 & 26

April 24 (SOLD OUT)

Time: 8:00 a.m. – 5:00 p.m.

Location: San Diego County Farm Bureau, 420 S. Broadway, Escondido, CA

April 26 (SOLD OUT)

Time: 8:00 a.m. – 5:00 p.m.

Location: Museum of Ventura County, 100 E. Main Street, Ventura, CA

CAC Marketing Committee Meeting

May 9

May 9

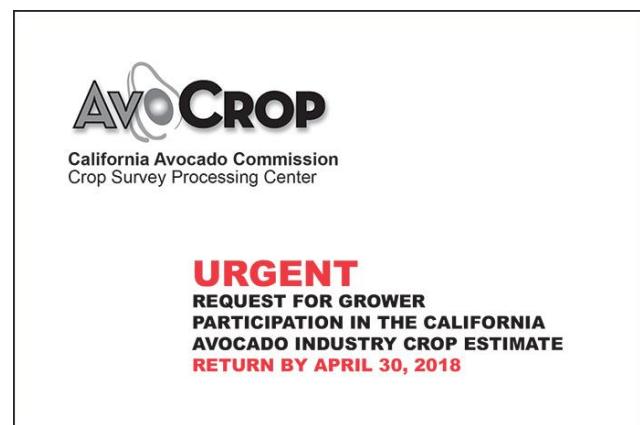
Time: 10:00 a.m. – 12:00 p.m.

Location: CAC Board Room, 12 Mauchly, STE L, Irvine, CA

Online and Print Versions of CAC Annual Crop Estimate Survey Available

To help California avocado growers remain competitive, the California Avocado Commission (CAC) is conducting its annual grower crop survey. It is important California avocado growers complete the survey as it enables the Commission to fine tune crop estimates, predict the harvest flow to market and understand growers' farming practices in light of global market pressures, weather incidents and water pricing.

The 2018 annual crop survey has been mailed to all producers on record. **The deadline for completing the survey is Monday, April 30, 2018.**



Pre-season estimates for 2018 indicate a crop volume of approximately 375 million pounds. When completing the survey, please provide your best estimate concerning your grove's production.

Growers may submit their survey responses [online at the California avocado growers website](#). They also may complete the postage-paid survey they received and return by mail. Simply fold the form so that BUSINESS REPLY MAIL shows on the front. As another option, the form may be faxed to 619.445.3346.

If you need assistance estimating your avocado crop, visit CAC's [avocado crop estimation instructions](#). If you did not receive a crop estimate survey, or have questions regarding the form, please contact April Aymami at aaymami@avocado.org or 949.341.1955.

Use of ProGibb LV Plus® Plant Growth Regulator Increases Total Yield and Fruit Size of Hass Avocados

As of March 27, 2018, foliar application of GA₃ (ProGibb LV Plus®, Valent BioSciences, Corp.) to 'Hass' avocado trees in commercial orchards has been approved. Dr. Carol J. Lovatt, emerita professor of plant physiology at the University of California – Riverside, recently completed research concerning the effectiveness of ProGibb LV Plus® on avocado fruit size and yield. A summary of her research — including best practices — follows.

Application Best Practices

ProGibb LV Plus® should be applied as a foliar spray when 50 percent of the trees in a block are at the cauliflower stage of inflorescence. If a grower cannot make an application at this time, it is best to apply the spray later, rather than earlier in order to ensure effectiveness.

The spray should be applied like a pesticide spray — full canopy coverage with a focus on the inflorescences. Those applying the spray should avoid spraying to run-off.

The ideal dilution for ground application is 12.5 fluid ounces of ProGibb LV Plus® (25 grams active ingredient [gai]) per 100 gallons of water/acre. For aerial application, use 12.5 fluid ounces (25 gai) in 75 gallons of water/acre. According to the research, the ideal application rate is 25g GA₃ per acre; higher and lower doses were less effective. The pH of the water used should be adjusted such that the final pH of the spray solution is between pH 5.5 – 6.0.

Dr. Lovatt utilized organosilicone surfactant Silwett L-77® or Widespread Max® at a concentration of 0.05 percent as a wetting agent. Similar pure organosilicone type surfactants would be acceptable as wetting agents. It is important to note that until additional research can be conducted, other materials should **not** be included in the ProGibb LV Plus® spray solution.

Effect of ProGibb LV Plus® (GA₃)

Dr. Lovatt's research team tested the effect of ProGibb LV Plus® on fruit size and yield for both ground and aerial applications. Overall, the research team noted that GA₃ had no negative effects on 'Hass' avocado fruit quality.

Ground applications were tested in March at groves located in Corona, Irvine and Somis, California. The tests were run on Duke 7 clonal rootstock trees at the cauliflower stage of inflorescence development. Each of the groves reported net increases in total yield and large/commercially valuable size fruit. The results were as follows:

Table 1. Effect of GA₃ (25 g ai/acre) applied at the cauliflower stage of inflorescence development on yield and fruit size (pounds/tree) of 'Hass' avocado trees in Corona, CA.

Treatment	Total fruit	Net increase (%)	Large fruit (213-354 g/fruit)	Net increase (%)
lb fruit/tree				
GA ₃	74.7 a ^z	84	34.3 a	128
Control	40.6 b		15.0 b	
P-value	0.0997		0.0657	

^z Values in a vertical column followed by different letters are significantly different at specified P-values by Duncan's Multiple Range Test at the P-values indicated. (From the work of Salazar-García and Lovatt, 2000).

Table 2. Effect of GA₃ (25 g ai/acre) applied at the cauliflower stage of inflorescence development on yield and fruit size as pounds and number of fruit per tree in an alternate bearing 'Hass' avocado orchard in Irvine, CA.

Treatment	Year 1 yield			
	Total fruit	Net increase (%)	Valuable size fruit (178-325 g/fruit)	Net increase (%)
GA ₃	92.2 a ^z	70	67.9 a	65
Control	54.2 b		41.2 b	
P-value	0.0029		0.0037	
GA ₃	215 a	76	141 a	70
Control	122 b		83 b	
P-value	0.0042		0.0026	

^z Values in a vertical column followed by different letters are significantly different at specified P-values by Duncan's Multiple Range Test at the P-values indicated. (From the work of Lovatt and Salazar-García, 2007; Zheng et al., 2011)

Table 3. Effect of GA₃ (25 g ai/acre) applied at the cauliflower stage of inflorescence development at on yield and fruit size of ‘Hass’ avocado trees in Somis, CA. Percent net increase reflects the benefit of GA₃ at 25 g ai/acre relative to the untreated control trees.

Treatment	Total fruit	Net increase (%)	Valuable size fruit (178-325 g/fruit)	Net increase (%)	Large fruit (213-354 g/fruit)	Net increase (%)
lb fruit/tree						
GA ₃	408.1 a ^z	10	379.4 a	13	294.1 a	16
Control	372.6 b		335.3 b		253.3 b	
P-value	0.0626		0.0252		0.0626	

^zValues in a vertical column followed by different letters are significantly different by Fisher’s Protected LSD test at the P-values indicated.

Overall, ground application of GA₃ resulted in a net increase of 3,905 lb/acre, with a net increase of 4,851 lb/acre of commercially valuable size fruit (packing carton sizes 60+48+40; 178-325 g/fruit) and a net increase in large fruit (packing carton sizes 48+40+36; 213-354 g/fruit) of 4,488 lb/acre.

Aerial applications were tested on groves located in Pauma Valley and Carpinteria, California. Together, the aerial applications demonstrated that GA₃ increased fruit set (fruit retention) by 55 percent into the last week of August and fruit size by 6 percent through mid-August.

Ultimately, Dr. Lovatt’s research indicates that use of GA₃ could result in substantial increases in net dollar return per acre to the grower due to increase in yield and commercially valuable size fruit. In addition, growers whose avocado groves are not suited to ground applications (groves located on slopes or in high-density formations) can benefit from the efficacy of utilizing aerial applications. In summary, ProGibb LV Plus® is “vital to the California avocado industry to increase grower income per acre to help sustain the California avocado industry.”

Avocado Inspection Committee Recognizes Two Producers and Seeks to Fill New Vacancies

Two producer members of the Avocado Inspection Committee (AIC) were formally recognized on March 27 for their years of service to the avocado industry. Peter Changala and Will Carleton have both served as AIC members for eight years. The AIC makes recommendations to the California Department of Food and Agriculture (CDFA) secretary on all matters pertaining to the California Avocado Inspection Program, which provides uniform inspections of avocados. In honor of their service, Steve Patton, CDFA Inspection and Compliance Branch Chief, presented both California producers with a resolution from CDFA Secretary Karen Ross commending and thanking them.

Peter Changala and Will Carleton’s AIC terms will end May 2018. As a result, the AIC is seeking two producer candidates to fill these seats. There also are two vacancies for active avocado handlers and the term of office is two years. AIC members do not receive compensation, but are eligible for reimbursement of travel expenses.

Interested individuals should complete the [Prospective Member Appointment Questionnaire](#). In addition, nominees must secure a letter of recommendation from the industry.

Applications should be sent to Thomas.osborn@cdfa.ca.gov or mailed to:

Thomas Osborn
CDFA Inspection and Compliance Branch
1220 N Street
Sacramento, CA 95814

For more information, contact Sam Santander at Samuel.santander@cdfa.ca.gov or 760.743.4712.



Steve Patton, CDFA Inspection and Compliance Branch Chief, presented retiring AIC producer members Peter Changala and Will Carleton with a resolution from CDFA Secretary Karen Ross commending and thanking them for their service.

Aid Available for Growers Affected by Wildfires

The United States Department of Agriculture (USDA) has announced it will distribute up to \$2.36 billion to farmers and ranchers affected by hurricanes and wildfires. California growers who were affected by the recent wildfires are encouraged to sign up for the 2017 Wildfires and Hurricane Indemnity Program (2017 WHIP). Sign ups will begin no later than July 16.

The 2017 WHIP program will provide disaster assistance according to the following principles:

- Eligibility will be available to producers in counties designated as presidentially-declared disaster areas due to wildfires or hurricanes
- Compensation will be determined based on a producer's individual losses
- Producers who purchased higher levels of risk protection (crop insurance and noninsured crop disaster assistance program) will receive higher payments
- Producers can receive advance payments up to 50 percent
- Recipients will be required to obtain future risk protection

The USDA's Farm Service Agency will provide additional information at a future date. Growers can contact their [local USDA service center](#) for more information.

Rebates Available for Costs Associated with AMI Installation in Oxnard Area

According to an ordinance passed by the GMA Board of Directors in February 2018, all pumpers must equip their flowmeters with Advanced Metering Infrastructure (AMI) telemetry by December 31, 2018. To help offset installation and equipment costs, pumpers may apply for rebates and/or participate in a pilot Water Market program that will qualify them for a larger rebate. The rebate funds are courtesy of a grant from the Natural Resources Conservation Service.

An [online application](#) is available for the Water Market and Advanced Metering Infrastructure System Incentive. To qualify for a rebate, operators must be in compliance with all GMA regulations and have no surcharges, unpaid fees or fines. Operators can check their well's compliance status by [logging into their FCGMA account](#).

Operators are encouraged to apply early. The first 100 wells enrolled will qualify for a \$2,500 rebate, with \$2,000 and \$1,000 rebates available for wells 101 – 400 and 401-700 respectively. Those approved for the program will be contacted by Ranch Systems to select from two solar-powered AMI models that provide online access to well data. The monthly service fee will be waived for the first year; after that, operators will be responsible for the \$22/month service fee. Operators may choose to install other AMI telemetry, but it must meet specified [performance criteria](#). Rebates are only available for AMI equipment obtained through Ranch Systems.

Oxnard and Forebay Basin operators also can participate in the Water Market pilot program and become eligible for an additional \$1,000 rebate. The Water Market is a voluntary exchange or transfer of a set water allocation between a willing buyer and seller.

For more information, review the [fact sheet](#) or contact GMA at fcgma@ventura.org or 805.654.2014.

Bayer Bee Care Award for Young Beekeepers

Bayer is hosting a nationwide [Bayer Bee Care Young Beekeeper Award](#) for beekeepers between the ages of 12 - 18. Entrants will have the opportunity to win \$3,000, \$2,000 or \$1,000 to support their honey bee-focused school or community initiatives, or to help fund their college tuition.

The award is open to any student under 18 who has the approval of a legal guardian and the approval of a sponsoring mentor (apiarist, grower, community leader, teacher, school official, etc.).

California avocado growers are encouraged to share this information with young beekeepers they may know. Applicants can register [online](#). The deadline is May 15.



The 2018 Bayer Bee Care Young Beekeeper Award is in recognition of the next generation of beekeepers 12-18 years old and their efforts to give back to their communities through beekeeping. Young, outstanding individuals have created unique projects on their own or with their local communities to promote and protect bee health for years to come. Each entrant has a chance to earn a \$3,000 (first), \$2,000 (second) or \$1,000 (third) prize, which can be applied toward continuing their beekeeping efforts or a college scholarship.

Applications open on March 15, 2018, and entrants can apply online by May 15, 2018.

Visit www.BeeHealth.Bayer.us for more information.



Bayer is hosting a nationwide Bayer Bee Care Young Beekeeper Award for beekeepers between the ages of 12 - 18.

Tickets for Multi-sensory California Avocado Pop-up Museum Now Available

Beginning in June, California avocado fans will have the opportunity to immerse themselves in a multi-sensory exhibition that explores the Golden State's favorite fruit from seed to skin. The [CADO](#), which will debut in San Diego at the South Promenade of Liberty Station, is a mobile 6,700 square-foot pop-up experience comprised of 16 custom-built and interconnected shipping containers. The California Avocado Commission is title sponsor of the pop-up museum.

In major cities across the United States, immersive, instructive and artistic pop-ups have become a growing trend, with visitors posting their favorite pop-up photos to Instagram and other social media channels. With that trend in mind, The CADO features seven distinct rooms with large-scale California avocado-centric interactive art installations. Visitors begin their journey through a mid-century styled lobby, travel through an ombré-colored hallway that replicates the hue of California avocados and can touch avocado-textured walls in the Ripe Room. Fans also can listen to how California avocados make the journey from grove to grocer (via vintage Walkmans®), enjoy the aura of an actual California avocado grove and sample California avocado dishes from local San Diego restaurants.

Tickets must be purchased in advance and are available now at <https://www.thecado.co/tickets>. General admission tickets are \$27, with children under 3 free. Families are encouraged to participate in "Family Wednesdays" which offer kid-focused tours and discounted pricing of \$22 (adults 13+) and \$12 (kids 12 & under).

The CADO is located at 2850 Roosevelt Road, San Diego, CA, 92106. It will be in San Diego beginning in June for a limited time and will be open Tuesday – Saturday (10:00 am – 8:00 pm) and Sunday (11:00 am – 7:00 pm). The CADO will provide kid-friendly tours on Wednesdays from 9:00 am – 11:00 am.

For more information, visit:

- Web: <https://www.thecado.co/>
- Instagram: <https://www.instagram.com/thecado.co/>
- Facebook: <https://www.facebook.com/TheCADO.co/>



The CADO features quintessential California-centric imagery of the Golden State fruit.

California Market Trends

To view all market trend graphs, including "Weekly Volume Summary," "Weekly Avocado Prices" and "U.S. Avocado Supply," please visit: <http://www.californiaavocadogrowers.com/industry/market-statistics>.

California Avocado Commission Weekly Volume Summary (Pounds)

	Week Ending 4/08/2018	Season-to-Date (since 11/01/2017)	2018 Year to Date
Hass	11,329,575	64,996,163	64,346,175
Lamb	0	6,754	6,754
Other (Greens)	105,650	943,746	657,867
California Total	11,435,225	65,946,663	65,010,796
Florida	0	397,265	165,110
Chile	0	11,638,216	1,511,965
Mexico	46,764,116	973,948,263	622,805,499
Peru	0	0	0
Other (Imports)	480,000	23,560,000	14,220,000
Import Total	47,244,116	1,009,146,479	638,537,464
USA Total	58,679,341	1,075,490,407	703,713,370

Sources:

California = CAC (AMRIC)
 Florida = Florida Avocado Admin Committee
 Chile = Comite de Paltas, Chile
 Mexico = APEAM
 Peru = ProHass
 Other Imports = USDA AMS website

California Avocado Society Weekly Newsline* Avocado Prices – April 10, 2018

California Hass	Organic #1 (Field Price Per Lb)	Conventional #1 (Field Price Per Lb)	Conventional #1 (Carton Price)
#32's	\$1.54-\$1.62	\$1.34-\$1.46	\$38.75-\$41.75
36's	\$1.54-\$1.62	\$1.34-\$1.46	\$38.75-\$41.75
40's	\$1.54-\$1.64	\$1.36-\$1.46	\$39.25-\$41.75
48's	\$1.58-\$1.74	\$1.36-\$1.46	\$39.25-\$41.75
60's	\$1.36-\$1.44	\$1.08-\$1.18	\$32.25-\$34.75
70's	\$1.06-\$1.20	\$0.88-\$0.96	\$27.25-\$29.25
84's	\$0.58-\$0.70	\$0.58-\$0.68	\$18.01-\$20.21

*To subscribe to the Weekly Newsline, please contact the California Avocado Society at (949) 940-8869 or www.CaliforniaAvocadoSociety.org.

Weather: 30-Day Outlook For California's Coastal & Valley Areas

Summary- Most rains focus on the SierraNV (rain and snow), and N California as far S as the Bay Area. Troughs and fronts alternate with periods of warm dry upper high pressure from April 13th through the 26th. Our CFSDailyAI system suggests some showers in the central and N SierraNV from April 28-30th, then into S California on May 1-2. Another rain with some TSTMS is suggested in the SierraNV from May 5-9.

Support continues in the mid-latitude Pacific sea surface temperature field for high pressure near 145 160W 37-43N and a trough near 135-128W.

Warm sea surface temperature anomalies persist off to W and SW of San Diego. This will tend to provide moisture for upper lows troughs, and fronts that develop or move mainly into central California/SierraNV.

In the Near Term – April 13-27... In the southern California avocado growing areas, from San Luis Obispo County to San Diego County, the cold sea surface temperature anomaly off N California may increase the risk of cold nights in the normally coldest valleys on about April 13-15th, and 19-22nd. The storm track will be migrating gradually further north, so rains of consequence in SOCAL are unlikely.

During the periods of troughing, a coastal eddy and cool days with morning drizzle are more likely this time of year. Cool days with best chance for drizzle would be April 23-24, 28th – May 1.

Summary – April 27 – May 9... In the southern California avocado growing areas, from San Luis Obispo south, a cool period with showers is suggested for May 1-2, followed by a warmer period from the 3-4th as the low moves east. The next period of showers or deep marine layer with coastal drizzle occurs about May 6-10th.

Seasonal Outlook / *La Niña* Update...May 10 – September... This report is longer than usual. However, the Aug-Sept period deserves special coverage.

A basically normal pattern of minimal rainfall occurs during this period for California as a whole. There is no significant anomaly of precipitation indicated until the Aug-Sept period. During Aug and Sept, the effects of the warmer than normal sea surface to the W, SW, and S of SOCAL may produce higher risk of rainfall from tropical waves in general, including tropical cyclones.

The positive rain anomaly is currently indicated by both CFSv2 and NMME in Sept for W Mexico, Baja California, and SOCAL to Arizona, as a general trend.

Keep in mind, however, that rains into California from tropical cyclones are sensitive to movement and behavior of cutoff upper lows near central and S California. Cutoff lows behave and move erratically. All that can be said at this point is that if sea surface temperatures continue warmer than normal through the summer, we will have a warm and humid Aug and Sept period. There will be more ambient moisture available to produce rains, if upper lows develop. Warmer than normal sea surface off Baja California would provide additional moisture and energy to maintain tropical cyclones that move northwestward near Baja California during the normally active Aug- Sept period.

In general, summers such as this, with warm sea surface temperature anomaly, tend to have more interruptions in the normal marine layer, resulting in hot periods near the coast and coastal hills.

...Alan Fox, Fox Weather LLC...