

# EMERGING TIMES

...growing toward the future

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## CALIFORNIA



## DiMare's coast-to-coast operations focus on quality



By **Juan David Castro-Anzola**  
PGIM Real Estate Finance

**C**lass 8 began our impressive California tour by visiting the farm operation of a well-known multistate grower – DiMare. We learned about the farming practices used at the 80-acre organic farm where tomato planting was taking place. While the majority of the tomatoes grown in California are

sent for processing, DiMare's farm was growing organic tomatoes for the fresh market.

Growing tomatoes in California is very much different than growing them in Florida. California's optimal weather with cool foggy mornings and overall drier conditions limits the development of pests, fungus and weeds. The number of sprays are a fraction of what Florida growers need to apply. Installation of plastic is not necessary to fight weeds there. Water, on the other hand, is precious, and conservation

methods continue to be a key priority for DiMare's managers.

The farm manager showed us two methods of planting for this farm. The conventional method uses a tractor with six workers on the back, placing the plants through a rotator system. Two additional workers follow the planters to make sure no space is without a tomato plant. The automatic planting machine uses air and water pressure for planting and is more efficient because it can plant close to 15 acres per day versus 10 acres with the conventional method. With this automatic method, the team includes one driver, only three workers planting on the back of a tractor, and two other team members walking behind to fill in the missed spaces. DiMare's workers understand the importance of doing a perfect job during planting. The quality of the fields before and after planting was impeccable.



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# Mission Ranches owner shares hardships of growing leafy greens



By **Chris Campbell**  
Lipman Family Farms

**B**rent McKinsey gave a great presentation during our tour of Mission Ranches. Mission Ranches is a grower member-owned operation with operations from Gilroy to King City. They produce a variety of red and green romaine lettuces, celery, broccoli, kale, spinach and spring mix. Owners of the company have been farming since before the company formed with their members in the 1980s. They have had partnerships with other companies such as Earthbound Farms before they were acquired by White Wave Foods.

Mission Ranches follows the west coast growing season from the valley to Yuma, AZ. When the time comes to move growing locations, they move all their equipment. They break down the equipment, load up the tractors and



move them to the production location for the next season. They get everything up and running in three days.

McKinsey shared the many hardships

they are facing right now, from high labor costs, high land costs, the mountain of restrictions regarding the lettuce industry, and local regulations. Counties are restricting where you can house workers by regulating the building codes. The current hourly rate for domestic labor is \$12 an hour and overtime pay is required after 55 hours or 9.5 hours in a single day. By 2022, the minimum wage will be \$15 an hour with a 40-hour workweek.

They transplant crops that can't be directly seeded with about 18 months of seed on supply. They spray most of their crops at night, machine harvest most crops, and grow organic commodities as well as conventional. It was great to hear the perspective from another grower and the challenges they face.







## Gilroy: The Garlic Capital of the World



By **Brittany Hubbard**  
S&L Beans

**C**hristopher Ranch, family owned and operated since 1956, is the largest grower, packer and shipper of fresh garlic in the United States. The Christopher family has been farming fresh heirloom garlic in no other place than the "Garlic Capital of the World," Gilroy, CA, for more than 60 years. The ranch grows, ships and packs about 200,000 pounds of garlic a day and about 100 million pounds a year.

We were thrilled to find out that third-generation Christopher Ranch farmer Ken Christopher was our tour

guide. We got a personalized tour of their many packing facilities. As we walked around the grounds, the smell of fresh garlic filled the air, and as a garlic lover I was in heaven. Each facility packs and ships the garlic in different forms: peeled, roasted and chopped in jars, bags and vacuum sealed. One of the many things that we learned was that no part of the garlic goes to waste. Even the skin is processed and given to

the local cattle farmers for cattle feed.

As a part of a family-owned and operated South Florida farm, I appreciated seeing and learning about Christopher Ranch's strong family values and legacy. Garlic harvesting is not something seen in Florida agriculture. Between the history we heard about and the detailed packing facility tour, it was a new adventure that we enjoyed tremendously.





## Public flocks to fourth-generation Gizdich Ranch

**C**lass 8 visited a variety of stops on our three-day California production trip, including the Gizdich Ranch in Watsonville. This is a family-owned, fourth-generation farm, originally purchased in 1937 by Vincent Gizdich. It was a total of 10 acres at that time. In 1959, Gizdich retired and his son Vince took over management.



By **Jake Brown**  
Tater Farms



Vince Gizdich talked to us over lunch about this transition and what he did to get the farm to what it is today. He said that he saw what some farms in Florida were doing at the time and decided to open up his farm to the public. He turned it into a U-pick operation for apples, olallieberries, strawberries and boysenberries. The farm is now 100 acres, and you can't even find a parking place.

In addition to the U-pick operation, Gizdich and his family have a pie shop, a gift shop and an antique shop on the

property. Kids can play on the playground and families can have lunch or enjoy a piece of homemade pie at the picnic tables. The Gizdich family certainly adapted their farm to meet the demand of the customers. It is awesome to see the passion that they have for farming and for people.



## Eat your heart out at Ocean Mist



By **Josh Griffin**  
Grimes Produce  
Company

**I** was flabbergasted when Aaron Gomes at Ocean Mist, who works in production, told us that the company receives 75,000 boxes of produce into their facility on a slow day and as many as 120,000 on a busy day – an annual total of roughly 40 million boxes. Ocean Mist handles 30 different commodities with 100 different package styles, and has been doing so since 1924.

Their facility resembled a beehive. There was constant movement with product being received and shipped back out all day, every day. Every case received is grown by Ocean Mist on

their 4,400 acres. Their gigantic facility has 25 dock doors where 10 to 30 full truckloads of produce are shipped every single day. Their slogan is "Eat Your Heart Out," and working with that much produce, you can certainly do that! Everywhere I looked was a model of efficiency from the "room and row" pallet racking systems to their 12-pallet forklifts taking incoming produce off farm trucks in one single motion.

We were able to tour the field as well, where Omar Tostado – part of the new

generation of Ocean Mist farmers – explained the need for new talent as the older generation of farmers were beginning to retire. He talked about the need to take care of their field workers in order to keep them employed and to attract newcomers. They always provide shade for their workers while in the fields, and they halt production when temperatures reach a certain point. That showed me that they really care for their employees and the future of their company for many generations to come.





# Driscoll's gets creative to counter rising costs



By **Chris Campbell**  
Lipman Family Farms

**J**esus Camacho met us on Driscoll's Sheehy Ranch and described the tabletop strawberries they are experimenting with. Tabletop strawberries grow about three feet off the ground in what resembles a gutter. The raised beds allow workers to pick more efficiently and reduce body strain. Driscoll's uses coconut coir for the plant to grow in, and they deliver water and fertilizer through drip irrigation.

They are trialing different types of berries for quality, taste and disease resistance. They also are reusing the plant media to see what effect the reused material has on disease and yield. Results so far show quality is better than open ground, with reduced disease pressure and no fumigant use. However, there are higher capital costs for the raised structures.

Also on this tour stop, Emmett Linder met us at Driscoll's Butler Ranch, where they are working on what's known as Enterprise Transformational Initiative. ETI is their approach to growing more raspberries in less space, more efficiently, with reduced input and labor costs.

With changes in hourly pay, overtime

restrictions, a labor shortage and aging workers, Driscoll's must get creative to stay profitable. Harvest costs for raspberries are 60% of the total production costs. At the ranch they are trialing different varieties and production techniques. They are using drip irrigation systems with different rates of fertilizers and irrigation frequencies. In some trials, they are recycling the water. On this ranch, they let growers trial varieties to find what works best for individual growers. Driscoll's gave a wonderful tour, and the experience will definitely be remembered.







## Automated harvesting displays benefits of technology in the field

**E**LDP Class 8 kicked off Day 2 with a romaine field tour in Salinas led by Martin Ramirez of Automated Harvesting. Martin and his 22 harvest crews handle upwards of 15 million pounds of fresh produce per week, consisting mostly of romaine, iceberg lettuce, cabbage and celery. Just one year ago, Ramirez was operating with only five crews. This rapid growth is evidence of Automated Harvesting's efficiency and dedication to innovation.



By **Cooper Hopkins**  
Hundley Farms

Automated Harvesting uses two harvesting methods: a conventional hand crew and an automated harvester that uses water knives. With the endless labor issues industrywide (arguably nowhere more prevalent than in California), Ramirez and his team have recognized the need to maximize their per-person production in the field. He estimates that a 26-person conventional romaine crew will produce 500 pounds per person, compared with an automated harvester with 12 people that can see production of up to 700 pounds per person.

The advantage of technology is best exemplified in the cabbage harvest, where a 25-person conventional belt can be matched by only five people on an automated unit. That is 5-to-1 per person production. Looking at comparisons like these, it is easy to see how innovation is one of the best ways to ensure a company's future given the labor uncertainties that lie ahead.

## Western Growers turning to tech companies and startups

**W**estern Growers Center for Innovation and Technology in Salinas is an incubator for technology companies and startups that focuses on three particular issues: labor, water quality/quantity, and food safety for California, Arizona, and Colorado fresh produce farmers.



By **Tyler Jacoby**  
Terra Feed

Our host, director Dennis Donohue, is the driving force for business development at the center and was previously a grower in Florida and mayor of Salinas from 2006 to 2012. Donohue left an indelible impression on our group with his infinite wisdom and prophetic advice that "as young leaders you have an obligation to help your community and use the technology available to do so."

Three innovators/company collaborators at the incubator were Trace Genomics, Crop Tracker and GroGuru. Trace Genomics receives soil samples from farms and applies a proprietary soil DNA extraction and sequencing process to index and quantify soil microbes to offer recommendations for future soil treatments. CropTracker is a recordkeeping software that helps track labor, production costs, spray records, harvest, packinghouse and many other details of a farming operation. GroGuru developed a soil sensor that measures soil moisture, soil salinity, and soil temperature.

This technology will help Western Growers focus on the water quality/quantity priority as it pertains to the Sustainable Groundwater Management Act and their goal to become completely "water-neutral." Learning about a multidisciplinary effort to address the challenges facing agriculture was educational, and I look forward to see how these technologies will continue to develop into the future.



# Strawberry fields ... forever? Understanding challenges facing the strawberry industry



By **Cathleen Conley**  
A. Duda & Sons

**S**tanding among 104 acres of lush strawberry fields in Salinas, Darwin Reich, director of California operations for Wish Farms, lowered his voice and delivered a somber sentence: “The strawberry industry is in trouble.”

In 2018, the California strawberry industry overproduced by roughly 25% per week, contributing to its worst financial year in decades. And as Reich cautioned, it doesn’t appear that 2019 is going to fare much better. Growers are battling the difficulties of being short on fruit, not filling orders and selling at prices that can’t support the farms.

Labor costs add another financial complication. Agricultural workers in California make a minimum wage of \$12 an hour and can work 55 hours per week before hitting overtime. By 2022, this will change to a \$15 minimum wage and 40 hours of work per week before overtime kicks in. A further challenge to the labor issue is lack of affordable worker housing – a hurdle that makes hiring H-2A labor unfeasible.

Growers must also contend with fruit-damaging lygus bugs, which ruin roughly 10% of crops annually, as well as diseases like Fusarium wilt and charcoal rot, both of which kill plants if left untreated. Wish Farms combats these threats with bug vacuums – priced at \$45,000 a pop – and fumigation techniques.

With roughly four out of every five strawberries grown in the United States coming from California, they are still a significant commodity in the state. However, if real changes are not made soon, such as introducing more automation to address labor shortages, the strawberry industry will continue to face issues that may make long-term sustainability difficult.





# Chopped, sliced or diced? Taylor Farms Foodservice can do it all in one day



By **Tiffany Dale**  
**Florida Strawberry**  
**Growers Association**

**I**n just six days, Taylor Farms can provide more than 15 million pounds of product to their foodservice customers. Whether it is iceberg lettuce, tender leaf mix or a chopped salad mix with carrots and cabbage, they can do it all. Taylor Farms is an industry leader with over \$3 billion in annual sales.

At 1 a.m., the harvest is underway. Then 150 truckloads of product are delivered to the Taylor Farms Foodservice facility so that processing can begin around 7 a.m. The product is hydro-cooled to 35 degrees and then taken inside the facility to be processed. Sanitation begins every day around 2 a.m. and continues until 7 a.m. Processing then takes place from 7 a.m. until 2 a.m. the following morning. This cycle continues from Easter through Thanksgiving.

Then a major move occurs. The whole Salinas facility packs up and

moves to Yuma, AZ. Using more than 150 trucks to haul the equipment and materials, the facility is disassembled and reassembled within about 56 hours and will operate from Thanksgiving through Easter.

Demand has shifted from lettuce, romaine and cabbage to an increase in tender leaf mix. Over the last year, Taylor Farms Foodservice has invested in 11 robots in their facility to help bag and pack product more efficiently. The average age of their employees continues to increase, and in order for Taylor Farms to stay in front of the competition curve, robotics have been essential. Despite the use

of robots, there were no layoffs, and the facility is still able to operate with 100 fewer employees.

This stop on our trip is one that was quite eye-opening to the capabilities of processing and distribution of fresh produce.







# Don't fight them. Educate them.



By **Juan David Castro-Anzola**  
PGIM Real Estate Finance

**O**ur California tour included a visit to the Grower-Shipper Association of Central California, an organization that represents agribusinesses and shippers in the Salinas Valley.

Chris Valadez, the new president of the association, and Jim Bogart, the retiring president who served the association for more than 40 years, teamed up to provide an overview of the organization as well as the leadership program structured by their members. They said the farm sector continues



to be under-represented in the political arena. There is a need to create new strategies with other agricultural groups to build a better coalition that supports key policies for the agricultural industry. In addition, Valadez emphasized three main points:

- 1) Focus on what can be accomplished;
- 2) Focus on educating individuals who

do not clearly understand the issues that affect agricultural operations;

- 3) Focus on improving the ag life for all.

The farm sector remains a key target for politicians and some organizations that do not really understand its intricacies. Rather than fighting them, it is important to educate the other side with strong arguments and stories that can help clear misunderstandings. This is a long but necessary process if we want to have a viable, competitive and healthy agricultural sector.

The association structured a leadership program similar to FFVA's Emerging Leader Development Program to mentor and engage future generations of leaders in agriculture. Bogart said this valuable program will connect leaders that can advocate for the ag industry for years to come.







## DUDA remains dedicated to the consumer



By **Brittany Hubbard**  
S&L Beans

A tour of western agriculture in Salinas isn't complete without a visit to DUDA Research Center. We were greeted by Dr. Larry Pierce, director of celery breeding and research, as well as fourth-generation DUDA leader Sammy Duda.

We got to see the many aspects of what takes place at the research center. DUDA is known as a world leader in celery production, innovation and research. We started off in the lab, where the research begins. We then headed down to where the rest of the magic happens. Walking into the seed storage vault was a sight only few can say they have seen. About 60,000 acres of celery seeds filled the icy cold walls and shelves from floor to ceiling. I now understand



the reason why Pierce referred to the seed vault as "the heart and soul of DUDA." With every amount of research or work done, all information and varieties, whether they were used or not, are kept at the research center.

We then toured another laboratory where we learned about a machine that detects and tracks the ingredients and amount, such as sugar, which helps with what kind of flavor you get from that celery variety. This extensive data

not only helps them know what is in their celery; it also helps consumers know what they are eating, which is what they want.

Walking through the halls and seeing the many patents they own, and learning about the extensive research and time that they devote, shows the dedication to consumer tastes. That is what sets DUDA apart from their competitors and makes them a world leader in what they do.

## Innovation and teamwork to achieve excellence

Founded in 1923, D'Arrigo is a California-based grower of lettuce, broccoli, broccoli rabe, cauliflower and many other vegetables. It's a family business since its founding. Andrea and Stefano D'Arrigo emigrated from Sicily. Stefano brought broccoli seeds from Italy with him and decided to plant them on the West Coast.

In 1927, the company trademarked "Andy Boy" as the first-ever brand of fresh vegetables in the United States.

Their operation is headquartered in the Salinas Valley,

known as the "Salad Bowl of the World." The company aims to take advantage of the climate in the Salinas Valley and grow unusual fruits such as cactus pear and dragonfruit. Also, the company looks for ways to optimize their operations by partnering with other companies such as Driscoll's (berry growers).

In 2017, D'Arrigo initiated a solar power system that should provide a total of 5.5 megawatts and gave them the capability to lower their utility bill and to sell any additional power not used. The company says, "We are harvesting sun power for electricity."



By **Carla Aurora de Jesus Rojas**  
Southern  
Gardens Citrus





# T&A: A history of excellence, innovation that keeps growing



By **Justin Newsome**

**F**orty million boxes of vegetables shipped from 35,000 to 40,000 production acres per year: those are the staggering numbers that Brian Antle gave us when explaining the scope of the Tanimura & Antle operation. Romaine and iceberg lettuce are the specialties, but the operation also produces artisan lettuces, broccoli, cauliflower and onions. The operation was founded in 1982 and has

Three Star Seed and Plant Tape USA as subsidiary companies.

Tanimura & Antle runs all aspects of the farming operation, including the housing of a significant portion of their employees. On the same property as the main office and packinghouse lies Spreckels Crossing. The facility consists of 100 fully furnished units specifically to house their field labor force. The new complex has been filled with domestic workers who appreciate the affordable housing. The company has also created an employee stock option plan. Antle explained that this has been instrumental in creating ownership among the employees and in driving efficiencies and savings.

We also met Hunter Smith, director of agronomy for Plant Tape USA, for a field demonstration of how this innovative technology works. Plant Tape is a fully automated planting system that requires 80% less labor than a traditional planting system. Seeds are germinated and grown in small pockets along a “tape” that is unwound as the planter moves throughout the field. Any crop that can be transplanted is compatible with Plant Tape technology. Tanimura & Antle has owned Plant Tape for five years and continues to grow its footprint. This new technology is the latest development for a company with a history of excellence that keeps growing.





# Kirk Williams Ranch displays the diversity of California agriculture



By **Cooper Hopkins**  
Hundley Farms

**O**n the final afternoon of Class 8's trip to California, the group made one of the most anticipated stops of the week at Kirk Williams Ranch in Soledad. That's because Kirk Williams Ranch grows crops that Florida farmers are not accustomed to: avocados, wine grapes and lemons.

The group was fortunate enough to be hosted by owner Kirk Williams as he explained the advantages of growing those crops in that region of California. California is the nation's largest producer of avocados. Williams manages 1,100 total acres, the vast majority of which is in lemons, but his 300 acres of avocados and wine grapes were more than impressive for the class.



He explained how their good water and very fertile ground are ideal for growing these types of fruit trees, which are all hand-harvested for fresh market. As Florida farmers know, though, nothing is guaranteed. Even in the seemingly perfect California climate, hard freezes are still a serious risk in that area. So Williams uses tactics such as wind turbines to mitigate cold

temperatures, giving his crop the best chance of survival.

Seeing the wine grapes was especially well-timed and appropriate. It gave the class a perspective on the efforts that go into growing a crop to produce California wine, just like the wine that the group enjoyed to cap off a phenomenal tour of California agriculture at their next and final stop.





# Pessagno Winery: A memorable final stop for Class 8



By **Cathleen Conley**  
A. Duda & Sons

**A**fter three busy days of visiting farms, processing plants and more, Class 8 eagerly anticipated the final stop of our California journey: Pessagno Winery in Salinas.

Owned by third-generation Monterey County farmer Ray Franscioni since 2014, Pessagno Winery creates unique and popular wines that originate from grapes grown in the Santa Lucia Highlands as well as other local regions across Monterey and San Benito counties. The dominant grape varieties grown in the Santa Lucia Highlands are pinot noir and chardonnay, followed by Riesling, syrah and pinot gris.

For more than 20 years, Franscioni has been a farmer and grape grower in the region, adding to his family's rich farming history in the Salinas Valley, a history that began with a settlement in the area in the early 1890s. The Franscioni family produced its first vintage wine in 2003. Since then, in addition to buying Pessagno Winery, they have developed three of their own labels: Puma Road, Lilia and Pedregal.

Class 8 toasted the finale of their California journey with a tasting that included chardonnay, pinot noir and other varieties for which the region is known. Surrounded by mountains and vibrant green vineyards, it was a picturesque spot to enjoy the last of our California travels. It was evident at this stop, perhaps more than at any other, that we are no longer just colleagues but also new, lifelong friends.







## ELDP News

- 1 Dan Bott (Class 4)** has joined PGIM Agricultural Investments as farm manager for the Eastern Region for Capital Agricultural Property Services. He is located in the Orlando office.
- 2 Juan Castro Azola (Class 8)** and his wife are proud to report the birth of baby Luca, who was born May 25. He was 19¾ inches and weighed in at 6 pounds, 14 ounces.
- 3 Leigh Ann Wynn (Class 5)** was named chair of the new Farm Credit of Central Florida Advisory Committee.
- 4 Alison Sizemore (Class 8)** and Brett Smith were married on April 20 in Lake Alfred.
- 5 Philip Grigsby (Class 7)** and his wife, Emily, welcomed baby daughter Esther Robin Grigsby on July 6. She weighed 6 pounds, 4 ounces.
- 6 Andrew Bryan (Class 6)** became engaged to Jana Williams on July 6.

