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Valley Center, CA

An afternoon with Mike Sanders and Bob Lucy, Modern Industry Pioneers

An idea sprouted that the reflections of industry pioneers, Mike Sanders (Founder, S&S Grove Management in Escondido, CA) and Bob Lucy (Managing Partner, Del Rey Avocado, Fallbrook, CA) would make an interesting article for the CAS yearbook. Mike and Bob entered the California avocado industry over 40 years ago and they continue to grow and sell avocados every day. This article



Bob Lucy 'left' at early grower meeting

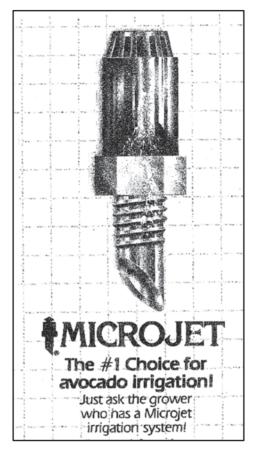
captures two longtime friends sitting down and talking about memorable moments, events and characters that they have encountered since they entered the burgeoning industry in the early 1970's. *

Life and Taxes

Sanders felt that the single most important variable which set off the rapid development of so many groves in the early 1970's was the revised tax law of 1972, without which the avocado industry may never have taken off. The tax revisions allowed investors and nurserymen to expense 100% of their planted trees, irrigation systems, seedlings, and farm equipment in the first year. This change planted big investors, passive speculators and new partnerships in the industry. The native hillsides of Escondido, Pauma Valley, Highland Valley, San Pasqual Valley, Ramona, Fallbrook, Bonsall, and Valley Center were literally set ablaze to clear land for new avocado developments. To this day, Lucy's wife, Susan, still thinks back to the 70's every time she smells smoke.

Growing Pains

With investors anxious to take advantage of the tax benefits, groves were developed at a frenzied pace. Speed and efficiency were key objectives in early development. The fastest and cheapest way to install irrigation systems was to install drip irrigation. However, it only took a few years before growers realized the dripper method was not a sustainable water delivery method in the rapidly draining soils being farmed. The growing trees couldn't get enough water or adequate water distribution in the root zone. When Rainbird developed their "TP 10" sprinkler, it immediately made a huge difference in tree vigor. This sprinkler had a large distribution pattern, used less water than other sprinklers of the day, and according to Lucy, "the trees loved it." The only downside was that they were high-maintenance sprinklers which had to be cleaned regularly. Shortly after the TP 10 came out, micro errors sprinklers became standard, many of which you can still find in groves today. These low maintenance sprinklers provided excellent distribution, with few or no moving parts. They were versatile, allowing growers to adjust heads for heavy or sandy soils via simple inserts. Of course, these innovations were combined with previous innovations. Bill Frey would often remark on the impossibility of avocado hillside development atop San Diego's granite foundation without the flexibility of PVC pipe and Poly Hose. It's easy to take efficient irrigation for granted these days, but a lot of trial an error in the early days was required. As the adolescent industry's growing pains subsided, the juvenile growing pains began. Sanders noted: "We started making a lot of avocados - and then that became the problem."



Microjet Sprinkler

Chutes and Ladders

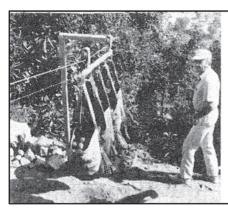
During this frenzy of grove development, many groves were established with few or no road systems. Sanders recalled that the absence of roads was not problematic for most growers... until it was time to harvest! At that point, many frustrated growers became creative: Donkeys were saddled with side bags to haul the fruit up. Chute systems were installed to allow fruit to roll downward. Pulley systems were installed to bring full bags up the hills. Some growers toyed with mechanical

ladders such as the Afron Tower. Monorail systems were even installed in some groves.



Afron Tower

At the time, few growers used bins and most fruit was harvested into wooden field boxes. Lucy recalls the superior quality of fruit harvested into bins vs. field boxes. The fruit was beautiful as it suffered far less scarring and bruising in the larger containers (Though, Lucy admits he still finds himself estimating fruit on trees by the box at times.) As the packers made the conversion from field boxes to large bins, it became obvious that adequate road systems were necessary. While developing



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Pulley System

600 acres at Rios Canyon, Sanders decided to build bin trailers to maximize manpower. The trailers carried up to 4 or 5 bins at a time and allowed a single operator to service many harvesters. Roads significantly improved the ease of harvest and gave growers a competitive advantage over others who had to spend more money on harvesting.

This realization brought about the emergence of an early character of avocado development. Sterling Loux was making roads and covering water pipes for the soon to open San Diego Wild Animal Park at the same time that Mike Sanders was developing the Beacon Hills Ranch. Sterling offered to cut the roads for the grove. As Beacon Hills became an early prototype of proper grove development, Sterling began carving hillsides all over the county. By all accounts, Sterling was nothing less than an artist. He understood the terrain and the needs of the growers - sometimes better than the growers themselves. These were no easy hillsides, but Sterling was fearless and confident. While developing a high and steep mountain in Pauma Valley, Lucy admonished Sterling to stay safe. Lucy feared Sterling might roll the dozer over himself. Sterling saw the threat differently, responding, "Hell, I'll starve before I hit the bottom."

Lucy and Sanders also saw the use of dozers to clear land taken too far. It was easier and cost less to clear land with dozers, and in the rush to develop groves faster and cheaper, many took this route. This was particularly evident in Rancho California where grove development was proceeding unchecked. It was just too simple to push brush into canyons and cover it with soil. Land cleared by dozer also looked magnificent because it hid some of the natural eyesores that hand-cleared land might

exhibit. Just as beauty is only skin deep, it became quickly evident that thin soils and lack of topsoil made for a poor growing foundation. Inconsistent and inferior tree growth was painfully apparent when compared to groves cleared by hand. There was no feasible way to undo this and growers just had to hope for the best. But Sanders recalls a second blow being dealt to many of these hastily developed groves. This rapid buildup also caused an insatiable demand for nursery stock. Nurseries popped up all over the place to meet the demand for trees, but unfortunately some operators grew their trees into *Phytophthora cinnamomi* contaminated soils. This unintentional mistake went undetected until many previously uninfected groves were now infested with Phytophthora root rot, thus scattering the disease among vast areas of previously disease free land.

Battles

Lucy recalls the theme of "what's going to put us out of business?" Would it be root rot, labor, imports, or water?

A cure for rapidly spreading Phytophthora topped the grower's "most wanted list" for years. Fortunately, California wasn't alone with this problem as other producers around the world also sought a solution. Finally, Jan Toerein's work at Westfalia in South Africa provided a major breakthrough for growers worldwide. His findings on Alliette (and later on Phosphorus Acid) finally gave growers a control option for the situation.

Another battle was labor. The inability to find a legal workforce simply required growers to use undocumented workers. Not only did legal workers refuse the work, they proved incapable when they tried. Aside from their willingness to work, most undocumented laborers had a deep connection with agriculture. While it was not the grower's preference to rely on a workforce that could be taken away in the blink of an eye; their empathy with the trees provided a silver lining. Prior to the 1986 Immigration Reform and Control Act (Simpson Mazzoli), the INS concentrated on agricultural operations. Sanders felt they were easy targets because it was easy to spot workers on the cleared hillsides. Workers were chased on foot for what seemed like miles and Sanders always felt they would have made better Olympians than officers! But when Simpson Mazzoli gave these workers legal status, the INS officials began focusing their efforts on the border and factories. Thus the passage of Simpson Mazzoli transformed whole rural towns as apartments and housing went up everywhere. It equally transformed the industry.

The large labor pool allowed growers to grow and harvest their crops more carefully than ever before. Close attention could be paid to cultural details. The flow of harvested fruit was managed more precisely. Picking was done when the time was right, not when the crew was available. This type of care was simply impossible in the past.

While the fight against imports raged with intensity for many years, most fears turned out to be unwarranted. Lucy felt that the import fears were summed up succinctly by an associate a few years back. The California Avocado Commission was giving a presentation on grower pricing. It was 2011 & the prices had never been higher. During the presentation, a fellow packer leaned over & playfully whispered "Bobby, why didn't we let these folks in 30 years ago!"

Sanders and Lucy agreed that the number one issue they faced in the development days was no different than today: water. Sanders recalled that when he first came to Escondido in 1972, Escondido Mutual Water Company was in a decade-long battle with the local water boards over water rights in the San Luis Rey River. Lucy recalled Arizona suing to get its water allocation, stating it was for cotton growers, even though it all went into housing and golf courses. Both watched all of Orange County removing groves and farmland and "re-planting" with housing.

They recall thinking that the peripheral canal being voted down was a huge mistake at the time, and to this day lament at being proven right. Additionally, a new state requirement mandated that all water in San Diego had to be filtered. Local agencies had to purchase filtered water or filter it themselves, and this nearly doubled the cost. It was a huge issue in Ramona and Highland Valley where Sanders and local growers formed the Ramona Agricultural Association. They succeeded in installing a dual pipeline system that brought unfiltered water into Highland Valley at sustainable prices. Lucy is still actively involved with the Rainbow Municipal Water District.

Water was a big issue in surprising ways, as avocado development ventured into formerly non-agricultural areas, destined for housing. Sanders clearly remembers the day he went into the Padre Dam Municipal Water office in east San Diego County to make a simple request, not unlike what he had done many times previously in various water districts. He simply wanted to start meter service for a 6" meter. This prospective meter was to service phase one of the 600 acre Rios Canyon grove, which was already deep into the development process. The roads were in, the irrigation system was in, 10000 trees were soon

to be delivered and it was time to test the system before planting. The clerk told him he needed to pay a connection fee before they turned on the water - standard enough. However, in this district, 2" was the largest meter size they had available & the cost was \$2,500. Sanders figured a six inch meter equaled about the volume of eight two inch meters & the cost would be roughly 20K - expensive, but doable. The clerk agreed and ran it by her manager. The manager, however, calculated that a 6" meter would serve the equivalent of 4800 households. 4800 times a \$1,250 household connection fee came to a mere \$6 million dollars, a bit more than he had in the account. This difference of five million, nine hundred and eighty thousand dollars took nearly two years of negotiations to resolve. It included expensive engineering studies and featured men such as Ralph Pinkerton and George Soares in developing a reasonable solution. The fee for a 6" meter was finally settled at \$60,000.

The Prettiest Girl

Many avocado varieties were sent to market while little attention was paid to the quality of fruit or consumer satisfaction. Hass generally brought higher prices and had wonderful flavor, but there were still a lot of heavily producing Zutanos in the ground. At one point, Lucy asked a packer why he didn't graft the Zutanos over to Hass. To this, he got the reply "She's not the prettiest girl on the street, but she makes the most money." The industry was in the midst of tremendous turmoil and widely varied opinions.



Early on, growers were paid a flat rate per pound for all their avocados. Higher returns for quality never made their way back to the growers. Sanders and Lucy recall the advent of cup sizing and field packing changing this. As Giumarra got into the avocado packing business in the early 1980's, they simply wanted a percentage of the return. Sanders thought this would be an excellent opportunity to increase grower returns, so he started field packing fruit by size and quality. The returns to the grower were significantly higher. Great and sub-par growers alike all took notice. Soon, packers had to adjust to this fruit accounting as the new norm, and began competing to get the best fruit from the best growers. Our dearly departed friend and advocate, Len Francis, addressed the topic with the passion needed for the industry to prosper.

A Recurring Theme: Growers Unite!

Growers, demand 20 cents a pound minimum.

It should be 30 cents, but it isn't. It will be 15 cents or even as low as 10 cents, if we as growers don't demand it.

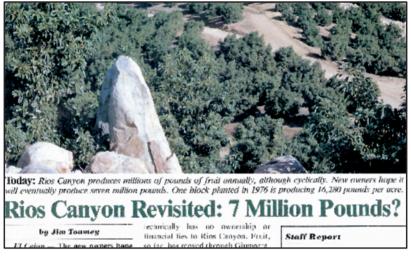
As growers, we can legally demand a minimum price for our fruit. Our independent packers cannot—it is against the law.

I have talked with buyers (chain stores, etc.), they have no qualms with nine dollars a box (20 cents-plus to the grower). The main reason they pay less is because they don't have to pay more—we give to them, hoping they'll give us something back. What would you do if you were prepared to buy 1000 boxes at \$10 a box, and the phone rings from

Len Francis' column in "Avocado Grower's Magazine"

With A Nice Set

A tax friendly environment, advances in irrigation technology, increased grower knowledge, and maturing acreage brought on a boom in production.



Soaring Production

In the seven years from 1974 through 1980 the average crop was 182 million pounds at an average return of \$0.39 per pound. In the next seven years from 1981 through 1987, the average crop was 422 million pounds at an average return of \$0.25. Was this a mid-life crisis or was it time for last rites?

The industry was not unified on much of anything. Not until late 1980's did Hass supplant all others as "the Avocado". This important move brought the grafting business into the spotlight. Most notable were the Lypps family who grafted tens of thousands of greenskin varieties over to Hass in the ensuing years. This valuable service kept growers in business without having to replant their trees. The highly skilled Lypps family got their growers back into production faster than



ordinary grafters, and they also helped the previously inconsistent avocado fruit form a strong, unambiguous impression in consumer minds.

This wouldn't be enough. A whole slew of improvements were needed across the board. While retail and wholesale demanded higher quality fruit, and growers demanded higher returns, somebody had to pay for it all. Organized marketing was a must. The AMRIC system was hatched. Dry matter testing supplanted oil content testing as Halowax oil supplies vanished.



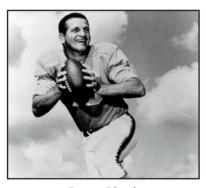
Tenuous exchanges between growers and packers may have brought the worst out of the individuals at times, but these years of reckoning brought out the best in the industry.



Conflict

A referendum was passed requiring growers to pay for unified marketing of their fruit. Ralph Pinkerton was retained to oversee marketing, quell disputes and plot a course. Fruit ripening was born out of these difficult times through the vision Gil Henry and Vic Tokar. Pre-Ripening allowed retailers to put avocados on ad for specific purposes and weekends which caused tremendous shifts in pricing. Rob Wedin of Calavo quipped "consumers got the cake instead of the cake mix."

Famous personalities were retained to advocate the fruit. George Blanda of the Oakland Raiders attended PMA as a representative. Actress Angie Dickinson was retained to combat the perception that avocados were fattening and showed instead that they were sexy. But, according to Lucy, the allure of industry leaders like the Henry's and Ralph Pinkerton ('Pink') moved the market more than anything. "Gil Played the Piano and Pink was just fun". The Avocado Advisory Board put on legendary functions at the Balboa Bay Club. At events like the Produce Marketing Association, the avocado guys threw the party you wanted to be at. And if you wanted your product to be promoted, it sure helped to have the best party." From 1988 to 1994, grower returns were 238% higher than the previous seven years and the industry remained largely stable thereafter.





George Blanda

Angie Dickinson

On this day, with Mike (Sanders) and Bob (Lucy), it was obvious these two were anxious to get back to work. Their phones rang regularly through the discussion, and all the while they politely declined each call. Concluding, Bob casually mentioned that someone tried burning down his packing house the night before and he "had to go get that straightened out." What a perfect way to end the chat. Growers that couldn't withstand the early industry challenges have moved on. The visionaries and stalwarts that fought through those challenges have earned their reward. Bob Lucy and Mike Sanders still spend every day growing and selling avocados. Their greatest reward is living an avocado life. Thanks guys!

^{*} Chris Ambuul, recent past President of the California Avocado Society, and current CAS Director, listened attentively to the discussion and provided the text and pictures.