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Peaches ready to harvest
Photo by Matthew Malcolm

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ORCHARD VIEWS

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Hope - Rising from the Ashes of Despair...

It seems these days that we live in a world rife with disasters. You can not read a newspaper or turn on the news without witnessing some level of doom being inflicted upon somebody. Hurricanes are raging to the east leaving people without power and some without homes. To the south the earth shakes and buildings fall as quakes ravage cities. To the west enormous waves swallow shorelines and the inhabitants of island nations. In the north untimely storms bring early winters or cut into spring damaging trees and crops. Midwest tornadoes take out a city block and leave one house untouched. Where there is not too much rain flooding the landscape, drought dries the earth and

prevents crops from being planted and brought to harvest across the world. All around us there are firestorms destroying neighborhoods and businesses while damaging crops and killing livestock. Yes, it does seem that we live in a world filled with disasters and despair.

While the aforementioned are predominantly brought upon us by nature's fury, disasters also come by way of the hand of man. Man's inhumanity to man brings pain, suffering and even death through every means of violence. Hate is encouraged by those who should be calling for love. Such feelings of ill are brought about by prejudice, by the unrighteous use of power, and even by those who would call for tolerance

while being intolerant of anyone that disagrees with them. There just does not seem to be an end to the signs of times that beset us in the 21st-century.

Recently I was hospitalized due to extreme abdominal pain. I have had my bouts with pain in life and don't quickly run to the emergency room, but this was something else. When the pain passed the threshold that I could tolerate, I asked my sweet wife to take me where I could have some relief. I had a glimmer of hope that somehow the doctors would know what to do so that my pain could be reduced and I could feel better again. Although in anguish, I invested in that hope that I might be able to go on and not crumble. Hope is

The Malcolm Family...Dan, Monica, Danny & Hyun Jin & Mina, Matthew & Brianna & Matthew Jr, William & Marina, Hyrum, Simin, Joseph, Hanieh, Lucy, Laura, Danica, Jodie and Kellie.



such a wonderful thing. Hope helped me move through that day and a myriad of tests until doctors could provide me with needed relief.

I think of the hope of a farmer. Farmers above all people are people of hope. How could you farm without hope? A farmer must take a seed, a cutting, a plantling or a small tree or vine and plant it in the earth. These are small things to have hope in. Yet the farmer does just that. He relies on the sun that will shine to warm the soil and stimulate growth in the seed or the roots in the soil that he cultivated. He waters those seeds and roots that they may receive the needed moisture that allows them to grow and to take on greater mass and substance. He places nutrients in the soil around the roots that they may feed and become stronger. Then, he repeats all of this again over and over again as his plant grows into something bigger,

something that produces a crop that will provide food to those who need. A farmer above all others has hope, and that hope is rewarded with harvest. That hope brings forth fruit.

When we have hope and seek to take that into action, faith, great things can be done, great things can be accomplished and miracles can happen.

Hope and faith to action can bring forth fruit in every aspect of our lives. Hope and faith can take us beyond the raging storms of life. Hope and faith can give us the energy and fight to rebuild our dreams when they have been dashed by the disaster of the day. It is by hope, and the faith that we put in it, that a fire which brings death and destruction can also refine and help us to become stronger and able to build upon ashes something that is truly marvelous and perhaps even better than what we had before. It is that kind of hope, that kind of faith, that can move mountains, whether

by Godly power or the industrious hands of one of God's sons or daughters turning hope into action by faith.

I am grateful for hope. This is one of the great God given gifts that we have received. As hope provides the glimmer of light that precedes the dawn of a new day, faith to action will take us into that day of miracles, beyond the disasters, beyond ill feelings, and beyond debilitating trials, and lead us into the glorious light of the full day. It is my prayer that in you hope will spring forth and triumph over all things to bring you joy and happiness. May your Thanksgiving be a day filled with good cause for gratitude, your Christmas a realization of all of your sweetest hopes, and may you go into the New Year with the faith to make it all that it can be. These, my friends, are our hopes and prayers for you. Thank you for being who you are and for all that you do.



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Harold McClarty grows about 2,000 acres of Stone Fruit in Kingsburg, and he reads California Fresh Fruit Magazine. "I enjoy learning about others growers I see on the cover, reading their stories and how they run their farms."



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Bridging the Gap Between Farmer & Consumer

Rodin Farms Providing Fresh Produce & Ag Education

By Theresa Oliveira Drumonde, North Valley Correspondent

Marie Rodin enjoys helping customers at a farmers market.



baskets in the winter. Yet, what is most impressive is the fact that the business is truly a family affair for Antoinette Rodin and her family.

She explained how family members work together to bring the fruits of their labor to local customers. “The love of farming has passed down through generations,” she said. “Rodin Family Farms first started in 1942, by my grandparents Ante and Florence Rodin. My father Tony Rodin later took over the farm.” As Rodin grew up, her and her sisters, Angela and Marie helped on the farm. Their parents Tony and Francy instilled in them a strong work ethic, and a true appreciation for the land and how to be good stewards of it. Farming on the outskirts of Modesto, the largest city in Stanislaus County, Rodin has seen farms paved over as the city has grown. Seeing the need to bridge the gap between agriculture and a growing base of consumers that knew very little as to where their food came from, Rodin opened the fruit stand in

(continued on page 18)

Nestled on the corner of Claribel and Oakdale Roads in Modesto is an agricultural gem known as Rodin Farms Fruit Stand. Started in 1992 by Antoinette Rodin, the fruit stand has expanded over the years to include not only fresh fruit, but also: local honey, pollen, dried fruits, a huge variety of flavored nuts both raw and roasted (flavored), and baked vegetable chips. The fruit stand also makes five flavors of their own almond butter and sells 25 different varieties of flavored almonds. During the fall, customers can visit the fruit stand’s pumpkin patch, and enjoy picking out Christmas Trees, homemade evergreen wreaths and gift



Antoinette Rodin opened Rodin Farms Fruit Stand in 1992.



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Lake County Enjoys Strong 2017 Pear Harvest

Scully Packing Reports Quality Crop with Some Labor Issues

By Elizabeth Larson, Northern California Correspondent

Despite a winter of heavy rain followed by a hot summer and ongoing labor shortages, the summertime pear harvest in Lake County was a strong one, with top-quality fruit and solid prices.

"It was a good harvest, I'm happy to report," said Toni Scully, whose family owns Scully Packing, which includes the two remaining pear packing sheds



Toni & Phil Scully, Scully Packing Co.

in the county. Lake County, situated north of Napa County, has for decades been known for its pears, particularly Bartletts, although it also has small acreage for bosc, comice, red, Asian pears and French butter pears. While the county has increasingly become known for its wine grapes – particularly the quality of its Cabernet Sauvignon and Sauvignon Blanc – pears remain a staple of Lake County agriculture.

The most recent crop report available noted that pears remained the No. 2 crop in Lake County, valued at \$26 million in 2015. Crop reports for the last several years have shown consistency in both acreage and value. For about seven

years, the county's pear acreage has held steady at just over 2,000 acres. Scully said the last acreage report estimated 2,034 acres of pears in Lake County.

Like the rest of California, Lake County experienced a winter marked by heavy rain and flooding. Even so, for the most part, Lake County's pear growers had top-quality fruit and a good harvest, Scully said.

Diane Henderson, a fourth-generation pear grower who has 63 acres in the Big Valley area of Kelseyville, said the 2017 crop was a big one. Growers experienced some weather damage from spotty hailstorms earlier in the year. "Some people were hit and others

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weren't," Henderson said. However, she noted that the storms didn't end up causing serious damage, and the trees were beautiful, loaded with fruit. "The quality actually ended up being quite good," she added.

Henderson said there was high sugar in the pears early and no early ripening on the trees. "It gave us a longer picking season, which we needed," she shared. "Since harvest, the pears have also stored well."

Scully noted that this year, Lake County produced 38,400 tons of pears, compared to 34,000 tons in 2016. "That's a good, normal crop, on the high side," she said. In terms of the fresh pack, Lake County packed 871,000 36-pound equivalent boxes, while in 2016 it packed 600,000 of those same boxes. Overall, Scully said Lake County packed more than one million package of pears this year, including Bartletts, boscs, red pears and French butter pears.

"Organic Bartletts and regular boscs account for 5 percent of Lake County's pack, while the bulk of the county's pack is conventional Bartletts," Scully explained. "Lake County produces about 25 percent of the California's overall Bartlett pear crop. But because of our high quality, we produce 37 percent of the statewide fresh pack."

On the pricing side, Scully shared that the numbers have been good. "Demand and prices have remained strong," she said.

An ongoing issue for all growers and packing sheds revolves around the need for workers. "We did have a shortage of labor this year," Henderson acknowledged. "Labor continues to be a big, unresolved problem. Finding

pickers in the fields and workers for the sheds has become an increasing challenge. The scarcity of labor does have an economic impact on us because we can't pick the way we want to pick. That includes not being able to go out and pick orchards twice in order to allow fruit to mature and maximize profits."

She said that they are hopefully watching some proposals now before Congress. "Meaningful immigration reform is long overdue," said Scully. In Lake County, the pear industry is helped by a special state law allowing pear packing plants to employ 16 and 17 year olds for up to 10 hours per day during the short peak harvest season in the late summer months when school is not in session.

The latest renewal of the bill – SB

702, the Lake County Teen Employment and Training Act – was written by State Sen. Mike McGuire and signed by Gov. Jerry Brown in September 2016. This bill extends the exemption for Lake County until January 2022, and keeps in place a number of stringent requirements for employers to receive the exemption, including annual audits and a report from the state labor commissioner to the State Legislature, according to McGuire's office. The Lake County Office of Education also oversees the work permits.

Despite the challenges, "It was a nice orderly harvest," said Scully. "Everything was tight, from labor to trucking, but we got the job done. It was a good year for our pear industry and we are happy."



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Advances in Cytospora Canker Management

By Franz Niederholzer, UCCE Farm Advisor, Colusa & Sutter/Yuba Counties



Pychnidia, the diagnostic sign of cytospora infection (little white dots)

Cytospora canker infections of scaffold and branch bark have been reported in prune orchards in California's hot, inland valleys for over half a century. The "story" on *Cytospora*, as I learned it in the 1980s and 90s, was of an opportunistic fungus that entered trees through aboveground wounds – sunburn, bacterial canker, insect feeding, etc. (though not pruning wounds). Considered "a weak pathogen

of healthy tissue", it spread more readily in water stressed trees in the fall, and tended to function best at warmer temperatures. *Cytospora* symptoms often appeared in the height of summer when trees were stressed by combinations of low potassium nutrition, high temperatures, sunburn, and/or low soil moisture.

Historically, this was an economic problem in older trees, where the slow



Cytospora damaged prune tree

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growing fungi can eventually kill branches and even whole scaffolds, compared to younger, more vigorous trees. There were no effective pesticides registered for control as of just a few years ago and growers were advised that best management practices were to keep the orchard healthy (water, nutrition, etc.) and cut out and burn damaged wood. Failure to manage *Cytospora* canker aggressively in a prune orchard could lead to lost bearing surface/yield potential. However, prune production in California changed in the last 20

years and so has the *Cytospora* “story”. Statewide, prune acreage is down by more than half since 2000, with older orchards making up the majority of remaining acres along with interplanting of young trees within older blocks.

Recent crop disasters and rising costs have led to reduced pruning in many blocks, leaving more standing dead wood – often a source of *Cytospora* spores -- in many orchards. Coincidentally, in the last decade, UCCE farm advisors fielded an increasing

(continued on page 16)



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Cytospora Canker

(continued from page 15)

number of farm calls about canker damage in prunes, including aggressive cankers found in young trees. Analysis of samples sent to Dr. Michailides' lab at UC Kearney, revealed that *Cytospora* was the only pathogen consistently isolated from the cankered wood samples in every one of seven seasons (2006-2013).

In 2013, the California Dried Plum Board began funding Dr. Michailides' lab to do research into canker infections in prunes to determine 1) how trees are infected by cankers and 2) develop management tools to reduce or eliminate canker infection. Since 2013, Dr. Michailides' lab group has documented that 1) prune trees can be infected by *Cytospora* fungi at recent pruning wounds, 2) *Cytospora* was the major pathogen spore isolated from rain samples from prune orchards the last two winters, and 3) at least one commercially available fungicide (Topsin-M), sprayed on pruning cuts between pruning and rainfall, consistently reduced incidence of *Cytospora* cankers on pruning wounds.

Both Topsin-M & Rally now have 2EE labels for application (spray or paint-on) to pruning cuts on prune. Growers are still advised to keep the orchard healthy to minimize *Cytospora* infection, as well as cutting out and burning damaged wood. There now is



Cytospora damaged (at the pruning wound) interplanted prunes



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the additional option to spray or paint Topsin-M and/or Rally after cutting out damaged wood. [Note: additional research on *Cytospora* in almonds and other stone fruit is being conducted by Dr. Florent Trouillas (UCCE Plant Pathology specialist) and his lab, but not reported here.]

Dr. Michailides' research has also discovered some tough realities about *Cytospora* on prune. Pruning wounds made in early March on 1-2 year old shoots remained vulnerable to *Cytospora* infection until September, although the average canker severity rating declined from 3.5 (0 = no canker; 5 = dead shoot) to 2.25 in that time period. The infection vulnerability was tested at optimum conditions (wounds sprayed with water + disease spores and covered with a plastic bag for 48 hours to maintain high humidity). Further work is needed to understand

the risk of infection under natural conditions from spring through summer and management changes (timing of pruning) that could avoid *Cytospora* infection.

In addition, Dr. Michailides' lab has found *Cytospora* fungi in young shoot tissue where infection symptoms are not visible. These so-called latent infections may be sources of damaging infections

later in the year or life of the tree. More research is needed to understand what changes/shifts *Cytospora* from a harmless fungal hitchhiker in/on prune shoot wood to a killer pathogen. **CFF**

Bacterial Canker Experience in the Sacramento Valley

By Richard P. Buchner UCCE Farm Advisor Emeritus

For several years, canker development and tree damage have been problematic for prune production in the Sacramento Valley. The two most commonly isolated pathogens are the fungus *Cytospora leucostoma* and the bacterium *Pseudomonas syringae* responsible for bacterial canker. *Cytospora* infects damaged wood in the upper canopy resulting in wood death from the top downward. Bacterial canker has a blast phase and a canker phase. During the blast phase, flowers and spurs are killed but fortunately the disease does not extend very far into the infected shoot. Presumably infections are walled off or otherwise halted therefore limiting damage. The canker phase is much more serious resulting in scaffold and/or tree death. Infection is thought to occur in the fall or winter with symptoms visible in the early spring. Cankers appear as slightly sunken areas most often on the primary scaffolds at the main branch points with gumming and oozing at cankers. Cutting the bark back with a sharp knife will reveal reddish brown dead tissue. When bacteria completely girdle the branch, the affected branch dies.

Bacterial Canker is a much-studied disease that is still poorly understood. It is primarily a problem on young trees. The physiological condition of the tree seems to be extremely important in disease expression. Freezing temperatures are not required but the disease is frequently associated with cold winters or colder portions of orchards. That may explain why we have seen so much damage on prune in the Sacramento Valley. Back in 2013, minimum temperatures for Red Bluff were below freezing from



Dec 3 to December 18 with lows in the 23 to 25 degrees Fahrenheit range. In addition, trees most likely did not have the opportunity to achieve full dormancy going into the cold resulting in tissue damage and infection.

Bacterial canker symptoms have been fairly common in the years following 2013. *Pseudomonas* bacteria and other pathogens live/survive on the outer surfaces of plant tissue waiting for an injury or other opportunity to invade. In addition, research suggests that bacteria can be present inside tree tissue without causing symptoms. These features make it challenging to craft an effective disease control strategy. Dormant treatment with copper

materials, reported to be effective in other parts of the world, have not proven beneficial in California prune orchards. For the most part we are counting on the tree to defend itself. Rootstock selection, replant issue management, ring nematode control, proper nutrition and irrigation management and other cultural practices that favor tree health usually help but provide no guarantees. Historically, replanting on Lovell rootstock was one possibility but other vigorous rootstocks may also impart scion resistance to bacterial canker. Our rootstock experiments planted in 2011 may provide additional future choices in rootstock selection, which could help with disease management. **CFF**

Rodin Farms

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1992. Not only did this provide an outlet for her to sell her family's produce, but it also provided an opportunity for her to visit with customers, sharing with them the importance of agriculture.

Although, the Modesto area is still surrounded by farmland, Rodin saw the need to spread agriculture awareness and she realized it was also a market opportunity for her family's livelihood. She wanted the fruit stand to be a place where families would come together and return time and time again. Over the years, she has expanded to compliment the seasons, with the fruit stand being open year-round. With a growing number of consumers turning to whole foods and farm fresh ingredients, Rodin is happy to be able to provide produce from her family's farm to their tables.

The fruit stand has been a vital part of the farming operation, so much so that Rodin's sister Marie opened a store in downtown Modesto called Rodin Ranch Farmers Market three years ago. She features flavored almonds, almond butter, etc., along with other local fruits and treats. While the fruit stand and store have been a great success, Rodin says the farming side of the business is what keeps the business moving forward. As mentioned earlier, the farming operation is truly a family affair. Having four sons—Anthony (20), Vito (19), Junior (17), and Sonny (11), all of which are involved in the farming operation and love agriculture according to Rodin, she is confident the farming legacy her grandparents started will continue for future generations. Using the right farming practices will help ensure that happens.

As with any aspect of production agriculture, Rodin Family Farms has seen challenges along the way, but solid farming practices have kept the business thriving. With canning peaches and almonds as their main crops, Rodin Family Farms also grow white and yellow peaches and nectarines, apricots, French prunes, pluots, plums and grapes all of which are farmed conventionally, but with great care to protect the environment. As Rodin pointed out, farmers are true caretakers of the land and in order for it to produce a healthy crop it must be taken care of properly. She believes that what you put into it, will determine what comes out of it, and for that reason great care is given to the land.



Junior Rodin hopes to carry on in his mother's footsteps and continue the family farming operation.



A variety of fruits, almonds, pumpkins and Christmas trees are grown on the farm.

As for pests in the area, squirrels seem to be the biggest challenge. While many growers and farmers were devastatingly impacted by the drought these past few years, Rodin shared that they were pretty lucky to have their own wells. "We were even able to share some water with our farmer neighbors," she said. To use water efficiently, Rodin said the farm uses drip irrigation and some flood irrigation of certain orchards.

While Rodin noted that her family has always been mindful of their farming practices, part of the reason for the longevity of the business, she did say that farming near the city has prompted them to be even more careful. "We want people to see that we are considerate and careful," she said. "We try to do our spraying and harvesting early in the morning and not at the busiest time of day. For the most part, the people who have moved near us realize we were here when they moved in, but we try to do our part by putting up signs when we use certain products and not make a lot of dust during high traffic times."

Aside from the day-to-day operation of the fruit stand and farming operation, Rodin is also active in promoting agriculture through Agriculture days at her sons' schools. She enjoys talking about the industry she loves and sharing her passion with young people, with the hope that it will give them a stronger appreciation for agriculture. Her father Tony shares her sentiment and knows the importance of promoting agriculture. As a delegate for the California Peach Association, he sees first-hand the need to increase awareness and promotion of their products.

One of the things that Rodin has noticed from dealing with customers first-hand both at her fruit stand and at farmers markets with her sister Marie, is that many people aren't aware of growing seasons. "I'm always amazed at how many customers think you can get the same produce all year round," she said. "Right now we are done with corn, but people still come in and ask why we don't have it. I explain that you can buy produce year-round in grocery stores, but that it isn't grown locally when you find it out of season."

Providing customers with local produce and other specialty items all sourced locally is something that Rodin truly enjoys. As the season for giving thanks nears and farmers share the bounty of their harvests, Rodin said she and her family are blessed to be able to carry on the farming legacy that her grandparents started many years ago. There is no doubt, Rodin Family Farms' customers are grateful as well.





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