

THE HAY STACK

February 14, 2019

6th Annual Fungicide Trip A Success!

Warmerdam Farms and Packing

John Warmerdam (classmate of Greg's at UC Davis in the late nineties) gave us a tour and explanation of his packing house and farm. He considers himself a farmer, but their facility packs over \$55 million of cherries, plum cherries, kiwi and pomegranates a year (they pack for other farmers, not just their own production). In order to secure a niche market, Warmerdam's grow golden kiwi and plum-cherries (a hybrid of, you guessed it, cherries and plums!) Their golden kiwis are grown on 40 acres UNDER a tent (sun permeable) in order to maintain high humidity levels. Golden kiwis are sold at \$35-\$70/18# box. Cost of production is \$30/box.

Warmerdam's electric bill can run upwards of \$80,000/month for their enormous refrigerators keeping their fruit cold. They also can keep thousands of pounds of fruit ripe longer by putting them in CO2 rooms; the lack of oxygen and pumped in fungicide keeps the fruit sellable far longer.

Their main focus is on cherries and they'd recently made a \$6 million dollar investment in a state of the art cherry sorter. It takes 120 employees to run this efficient line, without the more modern machine it took 160 employees at a slower pace to pack cherries. The machine takes thousands of pictures of EACH cherry in order to sort out blemished cherries (which is easy to spot) and soft sided cherries which will spoil quicker (hard to spot with a human eye, but the machine can detect those and kick out those cherries). At their busiest, Warmerdam's payroll exceeds 1,000 employees per week. Walmart is their most fussy customer on quality and a huge buyer of their cherries. While we were there, John was watching his orchards with nervousness. He had hired a helicopter at \$1,000/hour in order to stir the air above his cherry trees. Freezing temps will cause the cherries to abort their blossoms. Helicopters are used at cherry harvest when rain threatens to split the cherries, the helicopter hovers over the tree to dissipate the rain off.

Cherry/Kiwi Facts:

- * \$20-\$30,000 value per acre cherries
- * 30% of CA cherries exported to Asia
- * 75-85% of cherries are packed. Remainder are defects sold for juice, frozen or cattle feed
- * Shelf life of cherries 2-3 weeks
- * \$40/ton cherries' value for poor fruit.
- * \$16,000/ton value for the 1st cherries of the season
- * 40 years is the lifespan of a cherry orchard
- * Cherries are sprayed 5-6 times/year insecticide and fungicide

Verwey Dairy

The Valley Ag Fungicide crew visited Verwey Dairy on our trip. The dairy was established in 1959 when the original owner came over from Holland. They now have the third generation working the ranch/dairy.



The new dairy was built in 2003. It is a 4,400 head facility with an 80 cow carousel that has a runtime of 6 ½ minutes. They will milk 2 ½ times a day [some



cows 2 times/day; some cows 3]. Milk production is 40,000 gallons a day with an average of 10 gallons per cow. In order to get the cows off the carousel they are sprayed with water. If they want to take another spin around the carousel, they are allowed to ride it again. The animals are well cared for. Caretakers whistle and whoop to move them, no whips are used.



The cows are 100% artificially inseminated with sexed semen in order to raise the most heifers possible. 85% success rate on breeding heifers. Verwey's raise all their replacement heifers on site. There are 700 bottle calves being fed for up to 3 months. This farm also grows wheat, corn, alfalfa and almonds with alfalfa making as much as 8 cuttings a year.

Oranges are used in the dairy's rations. 14 lbs/head/day. The oranges have no effect on the milk's flavor but garlic and onions do so those aren't used ever in a ration.



To start a new dairy takes more than ten years in California. The amount of paperwork to file in order to be compliant is excessive. John Verwey's neighbor calls his dairy the "Decade Dairy" because it took ten solid years to get paperwork finalized to be in compliance to start!



This is a picture of their farm. It was beautiful! Designed by a golf course creator in 2008 when the US economy slumped and he didn't have any golf courses to work on!

- * **Holstein bull calves are worth \$20/head; heifer \$230**
- * **Blemished oranges for feed worth \$15/ton!!**
- * **Almond shells used for calf bedding**
- * **Milk currently worth \$14/cwt; cost of production is \$12.75**
- * **Milk processed locally in Fresno**
- * **56 employees to milk 4,000 head and farm 2,300 acres wheat, corn and almonds**
- * **8 tankers/day pick up milk**
- * **21,000 gallons of milk storage at their farm.**
- * **\$0 value of a jersey bull calf**

Warmerdam Packing and Farm Pictures:



Touring Warmerdam Packing, the blue machine we're standing around is the \$6M machine!



Kiwi trees under the sun shade. 40 acres to be precise.



New cherry trees planted this year. Each tree (a stick at this point) costs \$7.50.



A sweet, anonymous couple donated matching t-shirts to our group. The shades are rolled up over the cherry trees to prevent frost damage.



Arlo and Maurieva Lykken enjoying Warmerdam's farm.



John Warmerdam explaining cherry packing in his 400,000 square foot facility

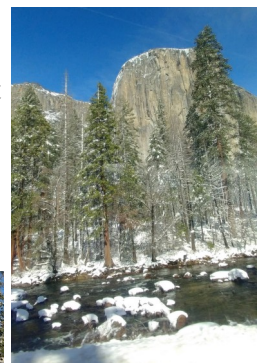


Plenty Of Time For Fun.



Yosemite was on our radar for Sunday night of our trip. Due to the park receiving multiple feet of snow and roads into the park closing, our group hunkered down in Oakhurst, California for an additional night. Oakhurst is nestled in the foothills of Yosemite so it was prettier than staying by the interstate in Fresno! This day gave our guests time to nap, swim or play cards. Pinochle was the choice of many, but the real card sharks play Uno!

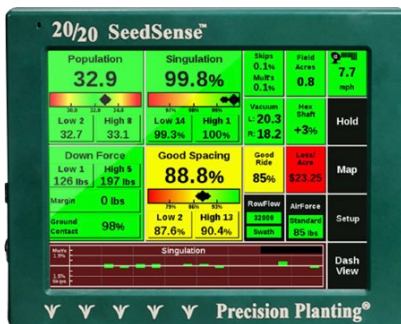
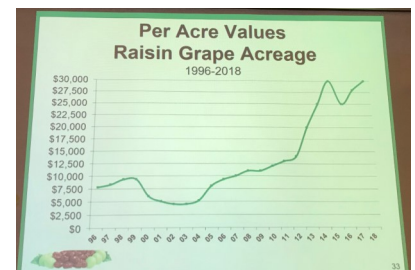
The following day our group toured Yosemite to see El Capitan, Half Dome and falls from our bus.



- * Grapes are planted E/W to use sun for drying most effectively.
- * Shelf life of a raisin is 2-3 years
- * \$1,800/ton paid currently for raisins.
- * Yields average 2 ton/acre

Sun Maid Raisin Processing Facility:

On this tour, we were able to go to the Sun Main Raisin Processing Facility. There, they only grow (Thompson's) green grapes. Because birds are so attracted to fruit, we wondered if birds were a problem for them. The answer was interesting. Green grapes (Thompson's) are not damaged by birds because birds associate the color green with being immature fruit, however, birds are hard on purple grapes (which are not used for raisins). Raisins are fumigated to keep bugs out of their inventory stored in one thousand pound bins. With the current attractiveness of the almond market, more grapes are being taken out of production, which has increased their value. There had been fires in California this past year, with all the smoke in the atmosphere the quality of the grapes harvested last year was poor (less UV rays and sunshine during the growing and drying season). 35% of California's grapes are picked by hand the remainder are harvested mechanically. If harvested by hand it takes 60 people 1 day to harvest 20 acres then the grapes are laid on paper to dry for 7-10 days in the sun. If drying grapes on the vine, the drying time is four + weeks. It's a labor intensive process, but grapevines can last for more than 100 years!



It's that time of the year where we are getting ready for spring. There are a couple things that we all need to be thinking about to maximize every seed on every acre. You should ask yourself a few questions. How did your planter perform? What are the weak spots of your planter? How was the singulation from your meters? Are you happy with the data your monitor is giving you?

The 20/20 monitor from precision is a great upgrade that gives you row by row singulation and spacing. This gives you a great diagnostic tool in your planter. You can see which row isn't planting as good as the others and check that meter to see if there isn't something set different than the others or if there are other issues. If there is something that you think should be better than last year, you can contact Tyler at the Gayville office to discuss what plans of action we can take.

We are currently looking for Seasonal Drivers

for our upcoming spring and summer season...

Could you help us on weekends? Evenings?
Know a college student or friend who needs a job? We work hard, but we have a great work atmosphere!

Great Pay! Plus Overtime!

- Sign on Bonuses ◀
- \$1,000 Performance Bonus Program ◀

Gayville and/or Spink Locations

A CDL is not required to start work.

Contact Jimmy at the Gavyille office 605-267-3100 or his email jimmy@valleyagsupply.com

Annual Valley Ag Supply Grower Meeting

Valley Ag Supply will once again be hosting a Grower Meeting at the Old Lumber Company in Vermillion. Come join us for food, drinks, prizes and agronomic info to get excited about the upcoming crop season! Also hear how this past year's yield contest went and hear from some of the Valley Ag agronomists about what we learned from last year, looking into the next.

Afterwards, please feel free to grab a drink and mingle amongst other growers and specialists in the field from some of our various suppliers.

Watch your mailbox for an invitation once details are finalized!

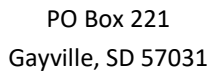
You're Invited—Grower Meeting

Why Fungicide?

What a year for FUNgicide! It is getting harder each year to find growers who want to leave a check strip on their fields to make sure a fungicide application paid off. It seems more and more the check strip is an eye sore in the field and on the yield monitor. This year was no exception, with strong southern winds, hot temperatures, and wet and humid field conditions we had diseases move in earlier than usual and had continuing pressure throughout the season. Some diseases that we saw pretty commonly in the area were frogeye leaf spot, bacterial blight, septoria brown spot, southern and common rust, northern corn leaf blight, and gray leaf spot to name a few. To get the best return out of a fungicide it is good practice to look at field pressure history and what diseases we are targeting to help choose the best fungicide and knowing if a fungicide will have any activity on the intended target. Making sure to have a fungicide on the plant before disease shows up is one way to see a better return from a fungicide application because once a plant is infected it has already taken away some yield. In 2017 we were a bit lighter on disease pressure until late August when more diseases showed up. Growers who applied the fungicide noticed a nice difference between fields. Another way to increase return on a fungicide investment is looking at hybrids or varieties' response to fungicides. A more defensive hybrid could have a high tolerance to diseases and a grower might not see quite the same bushel increase as when using a fungicide on a hybrid with more offensive traits. At Valley Ag Supply we have resources to help compare hybrids and how they have responded to fungicides in the past.

Some data we have seen and heard around the countryside on Trivapro this last year was unreal. The graph below is some of the information we were able to get back from fields. I know Iroquois isn't exactly close but it was some more data I could pull to show results. Seeing such good results, a big return on investment, and taking a trip in February sure does make it fun to use FUNgicide! *Next year on our Syngenta fungicide trip we will be heading to North Carolina! On the trip we plan to learn about blueberries, blackberries, tobacco, and sage.*

Location	Crop	Treatment	Avg. Yield	Difference Between Treatments
Yankton	Soybeans	Trivapro	64.7	11.7 Bu/Acre
		Check	53	
Iroquois	Soybeans	Trivapro	78.6	9.3 Bu/Acre
		Check	69.3	
Elk Point	Corn	Trivapro	246.4	22.2 Bu/Acre
		Check	224.2	

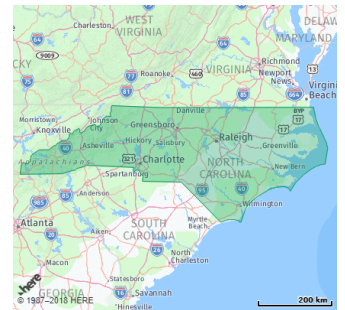


Next year we'll be learning about:

Blackberries

Sage

A wide-angle photograph of a lush green tobacco field. The plants are densely packed and show signs of being well-maintained. In the background, a large, light-colored barn with a dark roof is visible, surrounded by trees and a clear blue sky. A person can be seen walking through the field in the distance.



Talk to your Valley Ag Supply agronomist today about Syngenta's fungicide purchase qualifications so you too can learn about ag with us next February.