



Central Coast Chapter CRFG
September 2021 Newsletter
by CRFG CC Chapter Members

October CRFG Meeting: Must RSVP!
Friday, October 8th
Mighty Cap Mushrooms
608 Caballo Place, Paso Robles



Our October meeting will be held on Friday, October 8th at [Mighty Cap Mushrooms](#) in Paso Robles. Mighty Cap Mushrooms grows organic, “high end artisanal gourmet mushrooms for the central coast of California.” Please check their website for more information. They have beautiful pictures!

Yes, our October meeting will be held on Friday!
And you must RSVP!!

Mighty Cap Mushroom holds its farmers market on Saturdays, so our tour has to be held during the week. Please carpool to this event if at all possible.

Mighty Cap has limited space at its production facility. Therefore, our **attendance must be limited to 40 people. You'll need to sign up for this meeting.** Unfortunately not everyone will be able to attend if the demand is high.

There will be 4 tours limited to 10 people each. Each tour will be half an hour long. Our meeting will be held between the second and third tours:

Tour 1: 10:50 am

Tour 2: 11:20 am

CRFG Meeting: 12:15pm

Tour 3: 12:50 pm

Tour 4: 1:20 pm

To sign up, please send an email to cfrgccnewsletter@gmail.com:

Include:

- Your full name (first and last)
- Which tours you would be able to attend, in order of preference.

Important: to increase the odds of your being included in a tour, please list as many tours as possible.

When all the tour slots are filled, I'll email you to let you know which tour you're on, or if all tours were filled when your email was received. **You will receive an email response from crfgccnewsletter@gmail.com by Wednesday, Oct. 6th at the latest.**

Priority will be given to:

- CRFG Central Coast members
- People who provide all the information requested above

Due to the limited resources, **restrooms will not be available.** Please use your facilities at home or at a public location prior to attending.

Alisha sends these links so that you can brush up on your fungi knowledge before attending the meeting :

- Fantastic Fungi movie: <https://g.co/kgs/ZSyeb7>
According to the official website for the movie, "Fantastic Fungi, the number one documentary on Apple TV, is now streaming on Amazon's Prime Video, Google Play, VUDU, and Apple TV." It is also on Netflix.
- About the Fantastic Fungi movie:
<https://petapixel.com/2021/08/31/timelapses-for-a-netflix-mushroom-documentary-took-15-years-to-create/>

Thank you, Alisha, for working with MCM to set up this meeting!

Help Shape the 2021 NAFEX Annual Conference Today

Alisha also notified us that this year's NAFEX annual conference, "Fruit Forward: Growing for Tomorrow," will be held November 15-20, 2021, online via ZOOM.

The conference organizing committee is working to line up some of the most interesting voices in the North American fruit growing community.

NAFEX would like to find interested and available CRFG members to participate with NAFEX (North American Fruit Explorers) on their online festival.

"The NAFEX board met earlier this week and we are going ahead to hold an online conference. We would like to include the CRFG and your area chapters, and have several speakers from your area.

“The talks can either be presentations or panel discussions. We can help those who aren't as tech-savvy as needed. All talks will be done and recorded via Zoom and made available online to help ease the time zone differences.”

If you are interested in speaking as part of this conference; sharing a virtual tour of your orchard, farm or garden; or sharing ideas as part of a panel, please reply to: admin@nafexmembers.org.

Sad News: Grace Gelling Has Passed



Many of you know this kind, helpful woman who was an active member of our CRFG Chapter. She attended our meetings and helped at the Scion Exchange with her daughter, June. She was also on the planning committee of our 2016 Festival of Fruit extravaganza, and is shown in the picture above, eighth from the left.

We would like to plant a tree in the CRFG Orchard in her memory.

I need your help — please send in your memories of her so that I can include them with the memories of others for whom trees have been planted. Please send your memories of Grace to crfgccnewsletter@gmail.com.

Articles Needed For The October Newsletter

Articles are still needed. The next newsletter's deadline is Sunday, October 17th, 2021. Please send your contributions to crfgccnewsletter@gmail.com.

In The Orchard

As you know, the deer are nibbling on our trees. During the last Orchard Work Day we put wire around all the trees we could before our stash of wire ran out.

I put a "wanted" ad on Craigslist requesting old chicken wire or fencing. A very nice man in the north county responded. He was just taking it down and had it all rolled up for us. Manny and I drove up to Paso Robles get it. It was a win-win: he didn't have to send it to the dump, and we can save the rest of the trees from the deer.



You can help! If you feel like spending time in the orchard feel free to use the wire to surround the trees that are still vulnerable to deer attacks.

September 11, 2021 Meeting: Cuesta College North County Campus

Manny kicked off the meeting by welcoming the 40 attendees. We had three new guests at this meeting!

Announcements

Upcoming Elections

Dara reminded folks that the board member election for our Chapter will be coming up in December. Volunteers keep our Chapter running. Without volunteers we wouldn't have a chapter, because every position is a volunteer position.

Start thinking about how you want to help in 2022- we will need at least one new co-chair, a newsletter editor, and a group of program coordinators to find locations for meetings and follow up with potential hosts.

Don't be shy if you are new to the Chapter or think you don't know much about fruit trees. That's not a requirement for any volunteer position: you just need a willingness to help. You can find the <https://www.crfg-central.org/about> on our website (scroll to the bottom of the page).

Artichoke Seeds & Heritage Peppers

Thank you Trudi for bringing us bagged heritage chili peppers, and artichoke flowers to use for seed!



**Dean Harrell, Instructor
Cagliero Plant Science Facility**



CRFG Chapter listens to Dean Harrell talk about the facility.

Our September meeting took place at Cuesta College's North County Campus in Paso Robles, on a day that turned out to be pleasantly warm. We started out under a large canopy where Dean told us a little about himself and the development of the Cagliero Plant Science Facility.



Manny heads for the shade canopy, our initial gathering point.



Underneath the shade canopy, with the greenhouses in the background.

Dean was initially hired at Cuesta as a part-time instructor. He teaches the fundamentals of agriculture: Introduction to Soil Science, Introduction to Plant Science, Plant Propagation and Viticulture. He'll be teaching Advanced Viticulture next semester.

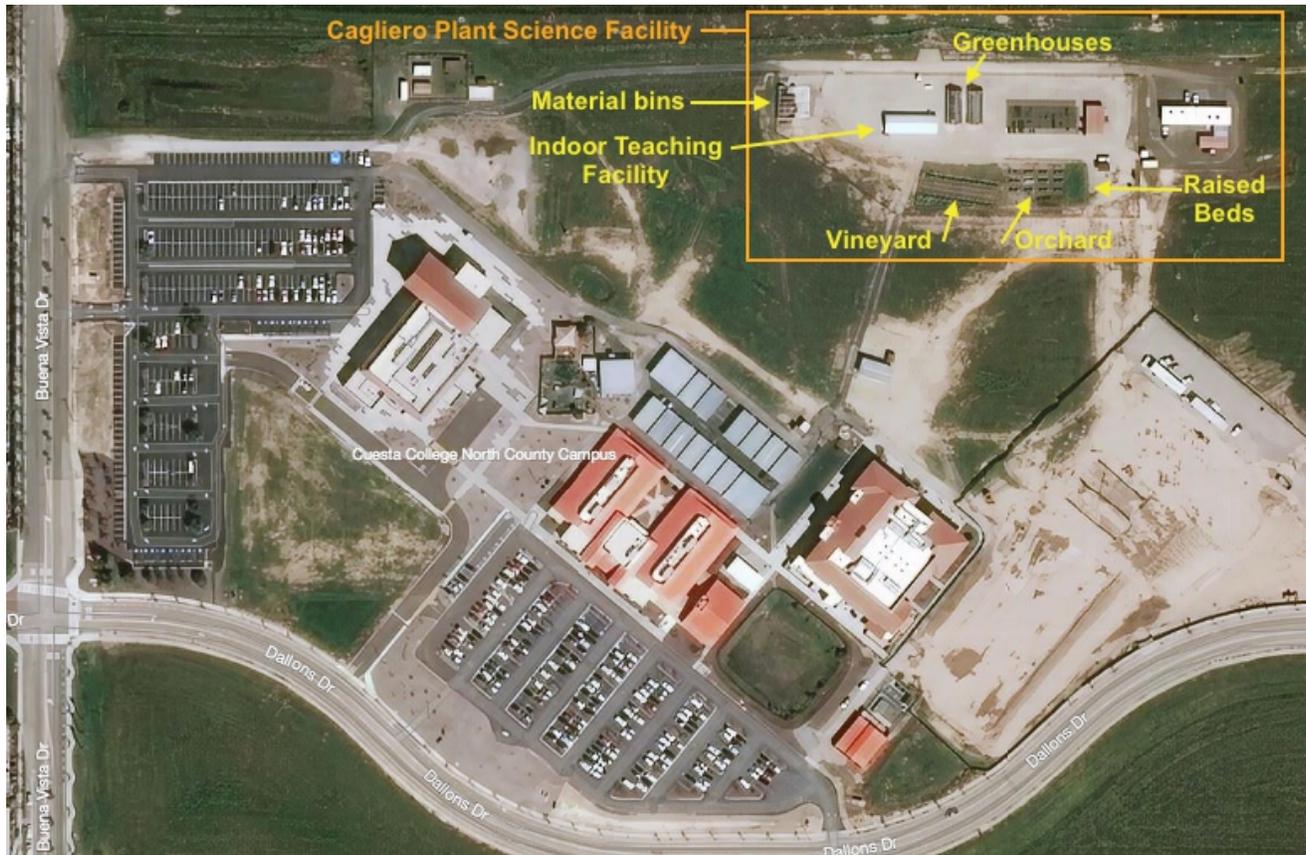
Dean is an advocate of Community Colleges- he encourages everyone to take classes. Other Cuesta classes not taught by Dean, but in which you might be interested: Irrigation, and an online course on Sustainable Agriculture.

Cuesta also has a plant sale in mid-April. In 2021, the students produced 5,000 plants for the sale.

Dean has an extensive background of agricultural experience. He has helped farmers analyze and improve their soil. He is fluent in Spanish and used to teach Spanish-speaking workers how to do tasks in the field. At his last job he worked on eight vineyards, with 800 acres of vines.

He has been to UC Davis and spent two years at Diablo Valley College. He is currently in his fourth year of tenure at Cuesta College.

Many in our Chapter know Dean: in Jan 2020 he was our Chapter's guest pruner. He's helped out on many a CRFG Orchard workday. Members of our Chapter have also been up to the North County Campus to help him teach his students how to graft apple trees. Those who visited at that time were impressed by all the changes that had taken place in just a few years.



Dean, his technician, Troy Quimby, and students have spent the last four years developing this field research center which started out on a bare patch of land. This area has been growing so rapidly that it is difficult to find a satellite map that shows anything near its current configuration. It now has a large indoor teaching area; two greenhouses; large raised planting beds; an orchard; a vineyard; and bins for materials such as sand, compost, and decomposed granite.



After our introduction Dean led us on a tour of the facility, with a stop in the orchard to teach us about summer pruning.

First we passed through a large, cool and bright indoor teaching facility.



Raised Bed Planters

Next we passed a number of large raised bed planters, filled in part with corn and tomatoes. After these large planters were made, soil from the area was mixed with compost and minerals to fill them. Approximately 50 tons of compost were mixed in.



Seedlings



Just before reaching the orchard, we walked by vegetables the students had started from seed and irrigated with drip line, including broccoli and snap peas.

Orchard

The orchard was started just four years ago, and look at the size of these trees!



Most trees in this orchard require 400-600 chill hours. A berm on the north side holds cold air in, enhancing chill hours. Dean notes that you can lose chill hours in the Spring.

To start this orchard they had to break through a subsurface clay layer 18 inches thick. They tested the soil and found it was deficient in calcium, magnesium and potassium. They added these minerals as well as some sea bed material with silica and metal micronutrients.

This orchard now boasts 37 trees, including apples, apricots, cherries, figs, nectarines, olives, peaches, pears, persimmons, plueries, pluots, plums, and pomegranate.

A few other things we learned:

- You can start limiting water to the trees after fruiting. Apricots and cherries have set their terminal buds, and are no longer growing.
- Faster growth is not better growth. Fast growing pears are more susceptible to fire blight, as are pome fruits such as apples and quince.

Dean reminds us to check out the Bay Laurel Nursery in Templeton and put in your order now if you want bare root fruit trees. He's right: by last January they were already sold out.

Cover crops

Cover crops are important not only for weed suppression, but because the root exudates feed microbes in soil. Dean and his students use winter and summer cover crops. They use 6-8 different types of seeds, including sun hemp, cow peas, buckwheat, winter peas, and Daikon radishes (great for opening up soil). These are all beneficial, but be sure not to sow these seeds too densely.



Walking from the orchard (right) to the vineyard (left).

Vineyard



The vineyard is just 3 years old, and also started on bare land to which compost and minerals were added. It currently has 12 varieties of grapes donated by Duarte Nursery. The trellising materials were donated by Vineyard Industry Products here in Paso Robles.

The vines were bearing plenty of grapes when we visited. Dean allowed us to sample. They grapes were delicious. What about wine, you ask? Nope, Cuesta is not allowed to make wine at this facility.



Summer Pruning

Dean has some sage advice for pruning:

- Make sure you set aside some time when you're planning to prune your trees. Don't be in a rush.
- Take your time and really look at the entire structure before you start making decisions.
- Don't be in a bad mood!
- Minimally prune 1-2 year old trees: don't limit the leaf area early or you limit the growth of the tree. You need the little leaves and branches to provide food for the tree.

He usually does summer pruning in Paso Robles during the first two weeks of September, after the fruit crops have been harvested. Again, the timing depends on your location.



Why Summer Prune?

To eliminate possible disease:

Remove any damaged or diseased wood.

Rain can move fungal spores and bacteria into open tree wounds caused by winter pruning. Trees that are very susceptible to such infection, such as apricots and cherries, should be pruned in summer, not winter.

Dean had a story of a location that managed to kill all their apricot trees in just 7 years by doing winter pruning. The wounds created by pruning can take 4-8 weeks to heal. Spores infected the wounds and eventually killed off the trees.

It's a good idea to do some summer pruning on plums, peaches, and nectarines. Persimmons should only be pruned in the winter.

To reduce size of tree:

Pruning is a dwarfing process, whether done in summer or fall. It will reduce the leaf area, limit the size of trunk and root growth and the number of buds.

First set the main structure of the tree. Select the primary scaffolding and secondary scaffolding branches. You don't want to have stacked branches; you want to have the branches spaced out.

There are two types of cuts: heading and thinning. It is better to make a series of thinning cuts rather than head the whole tree.

Thinning lets the appropriate amount of light into the canopy. Light is needed for fruiting. (Dean cautions to be sure to know what a fruiting spur looks like. You can encourage spurs to grow if you prune too much.)

Today's advice was for the Paso area. You may need to modify this advice based on where you live. Paso is hot, so more branches are needed to protect the tree bark from the hot sun. Leave an extra cover on the inside of fruit trees to shield the bark. South/southwest branches can get sunburned which leads to bark curl and burrowing insects. In SLO, you want to do more thinning cuts inside of the tree to allow more light into the center.

Dean notes that one disadvantage of summer pruning is that it's harder to see what you're doing. And he jokes that the good thing about pruning is you know whether or not you made a good cut the moment after you made it!

Here is Dean's handout that sums this all up quite nicely:

Dean Harrell/ Plant Science Instructor
Cuesta College

Summer Pruning in Fruit Trees

CRFG Meeting; 9/11/2021 at Cuesta College North County Campus

Objectives

- Select primary and secondary scaffolds to create the main structure of the tree
- Make larger pruning cuts during the dry season
- Allow light and air circulation within the tree canopy
- Remove damaged or diseased wood
- Not to make every detailed cut on the tree

Benefits

- Making larger cuts during the dry season minimizes the infection by fungal pathogens
- Fungal and bacterial pathogens produce spores that are brought into contact with the pruning wounds by rainfall
- Maintains the size of the tree

Disadvantages

- It can be difficult to see what you want to remove
- Reduces leaf area which reduces the trunk size and root growth
- May expose bark to sunburn if excessive.

When to Summer Prune

- After the crop is harvested
- Timing depends on your location
- Tom Spellman from Dave Wilson has a video for stone fruit
<https://www.youtube.com/watch?v=KgXsdJc1bhU>
- In Paso Robles, I have pruned in late July, mid-August and the first two weeks of September
- Early September has been the most successful for the late varieties in Paso Robles due to fall frost conditions

Best trees to summer prune

- Apricot
- Cherry
- Plum
- Peaches and Nectarines

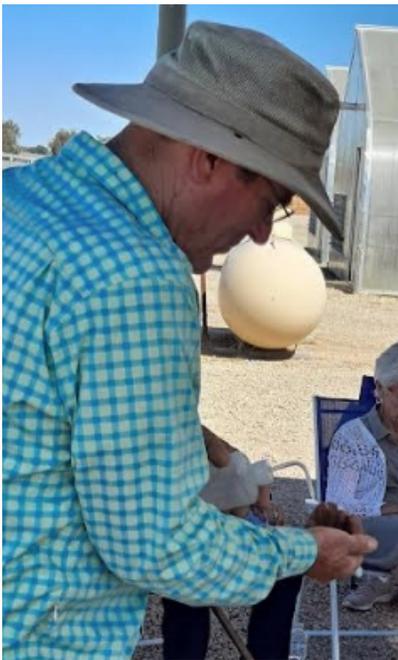
Demonstration and Practice

Soil Texture Testing

After touring the facility we walked back to the shady canopy where Dean showed us how we can test the texture of our soil.

The texture tests help you determine the proportion of sand, silt, and clay in your soil. Knowing this information lets you know how well your soil retains water and nutrients.

Dean provided a nifty handout that summarized soil texture testing tools. He uses this handout in his classes. We were able to refer to it as he demonstrated the tests.



Sand test

Pour soil in your hand. Pour in some water (see picture at left). Mash them together by squeezing them with your hand. If it feels gritty, it consists of 50% or greater sand. If it is not gritty, it consists of 25% or less sand. Dean says his sample felt gritty: therefore, it contained 50% or more sand.

Clay tests

The first clay test we were shown was the "Wire Test."

Sift your sand, then grab a handful and add water. Squeeze together, make sure it's evenly wet and not cracking. Roll into a cigar shape, then hold the roll in the middle using your thumb and forefinger to see if it bends and cracks (see picture at right).

From information in the handout, Dean estimated the amount of clay in his sample at 24-30%.

Using another tool from the handout, the USDA Soil Texture Triangle, he followed graph lines for 50% clay and 24-30% clay, finding that his soil was "sandy clay loam." He says this type of soil has a decent ability to hold water and nutrients. He says that the best soils are loam soils.



Dean next showed us the "Ribbon Test," which also tests for clay but is not usually done in the field.

Close your fist around your damp soil sample and use your thumb to pinch out the soil between your thumb and forefinger, forming a ribbon. The greater the clay content, the longer the ribbon will be. Eventually, it will break off. A chart on the handout indicated that since Dean's sample broke off at about an inch, and also feels gritty, it is a sandy clay loam. Dean says this soil is from old river deposits.

Thank you, Dean, for hosting us at your amazing facility and educating us with a wealth of interesting information!