

Between the Furrows

A Santa Cruz County Farm Bureau Monthly Publication

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Between The Furrows is a monthly publication of the SCCFB. Members receive a subscription as part of their membership investment.

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It's Fair Time!



Don't miss out on this year's exciting events at the Santa Cruz County Fair! **The Annual Apple Pie Baking Contest** will be held on Wednesday, September 14th. Last year's "Best of Show" winner (pictured above) was Janice Weaver. Join in the fun and see if you can win this year's bragging rights!

The **Opening Day Barbecue** will again be sponsored by the Santa Cruz County Farm Bureau along with the Watsonville Firefighters Association. It begins at Noon and goes until they run out of food, normally around 2:30 p.m. The cost is \$20 for adults, \$18 for seniors and \$10 for children ages 5 - 11. Hope to see you there! ■

President's Message

The Importance Of Saving Our Farmland



Arnett Young

If you have been reading my articles, you may have noticed that I have periodically returned to a particular subject, farmland protection. The reason being that the farmland around Watsonville is currently under a considerable threat, the sun setting of Measure U's Urban Limit Line (ULL) protection at the end of this year. Yes, that is right, the end of THIS YEAR. That means that land surrounding Watsonville will be vulnerable to development, permanently

Continued on Page 2

Community Foundation funds have been established for Susan Kim Am Rhein and Frank Prevedelli. Visit agri-culture.us for more details.

President's Message continued from page 1

destroying valuable agricultural lands if we do not act now.

As many of you know, the Santa Cruz County Farm Bureau has been actively involved in extending Measure U to maintain the Urban Limit Line around Watsonville for an additional 18 years through the Committee for Planned Growth and Farmland Protection. Volunteers collected Watsonville resident signatures by going door-to-door and through signature collections at local businesses to get a measure to extend the ULL on the ballot for November 2022. I was one of those volunteers, and I can say that overwhelmingly, the citizens of Watsonville support protecting farmlands. It was informative to hear from people explaining why they felt agricultural lands are important to protect, such as, this is a unique environment, protection of local foods, these farmlands are irreplaceable, supporting local

jobs. I was heartened to hear the support from our neighbors. In the end, the volunteer efforts collected over 3,000 signatures, enough to get the extension measure on this year's ballot.

Unfortunately, the Watsonville City Council voted (by a slim majority) to put a counter-measure on the ballot to oppose the ULL extension. From what I have seen to date, the City's ballot measure will support the ULL in theory, unless they feel the need to build outside the ULL. If they deem it necessary, they can "amend the location of the ULL in the future to allow development that is consistent with certain findings if it chooses to do so". Essentially, the City of Watsonville supports farmland protection unless Continued on Page 5



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ASK MARK

Michael Cahn, UCCE Irrigation and Water Resources Advisor

More Efficient Water Management

Q. Could you give us a primer on how to assess the salinity of irrigation water?

A. We at UCCE on the Central Coast are fortunate to have Michael Cahn, Irrigation and Water Resource Advisor working with us, and he shares the following note on assessing salinity of irrigation water.

Dissolved salts in irrigation water present numerous challenges to growers. Salts reduce the osmotic potential of water, increasing the energy required for plants to extract moisture from soil, and making them more susceptible to wilting. In addition to contributing to water stress, some constituents of salts such as sodium, chloride and boron, are toxic if they accumulate in the leaves and stem. High sodium levels relative to calcium and magnesium can also reduce the rate that water infiltrates into soil. Soils irrigated with alkaline water (high bicarbonate) may develop a high pH and have reduced availability of micronutrients such as iron, copper, manganese, and zinc. Lastly, salts can affect irrigation equipment by causing plugging of drip line emitters or by causing corrosion of metal fittings.

All of these effects of salinity need to be considered when assessing the suitability of a water source for irrigation.

Various measurements are used to characterize the salinity of irrigation water. The main parameters tested are: 1. **Total dissolved solids** (TDS), a measure of the bulk salinity often determined indirectly by measuring electrical conductivity of the water 2. **Sodium adsorption ratio** (SAR), the ratio of sodium to the sum of calcium and magnesium, and 3. **Alkalinity**, a measure of the bicarbonate dissolved in the water (Table 1). TDS and EC are useful for evaluating the osmotic effects of salts on crop growth. SAR is useful for assessing if infiltration rates will be reduced or if sodium has the potential to build up in the soil. Measurements of alkalinity are used to assess if there is potential for calcium and magnesium carbonate to precipitate inside pipes and drip lines, or affect the pH of the soil. While these three measures of salinity can give a general assessment of the suitability of water for crop production, the principal cations and anions also need to be determined to know which types of salts are present in the water.

Article continued on Page 11 with Tables 1 and 2 included

Interesting California Trivia

John Sutter, a Swiss national, after leaving Switzerland due to financial crises, arrived in California in 1839 and persuaded the Mexican governor to grant him lands on the Sacramento River. There he established the colony of New Helvetia which later became Sacramento. However, the discovery of gold on his land by a carpenter named James W. Marshall brought some bad luck for the Swiss. When the news about the discovery of gold broke out, the colony was deserted by workers and gold seekers alike, and his goods and livestock were stolen and destroyed. Eventually when the U.S. court denied him title to his Mexican grants, he went bankrupt. ■

THE WATER NANNY

"Agriculture, the Original Green"

Murder on the Orient Express

As you may recall Hercule Poirot solved the ghastly murder of a businessman with 12 stab wounds on a snow bound train by deducing everyone did it. Such it is with any change in Santa Cruz County, delayed to death by a thousand pricks. It seems that every land use or construction proposal is met with objections and protests. A recent appeal of a Santa Cruz Zoning Administrator's determination to the Planning Commission has everything but the kitchen sink, and maybe it's in there too. And it is only a change of crops, agricultural use on Agriculture zoned land.

On one hand we farmers should be thankful, after all we cannot help ourselves from overproducing strawberries and vegetables every summer driving down the price below profitability. So any trend that reduces agriculture utilization of our land should be a welcome reprieve from the rigors of capitalism, well I don't subscribe to this theory either. One our new crops, cannabis has really seen the bottom drop out of the market. The *Old Mount Protectors* want to help.



Outdoor grows on A zoned land require a Level 5 Agricultural Development Permit with a noticed hearing before the Zoning Administrator (ZA). Here the farmer wants to replace 20,000 sq.ft. of existing vineyard

with cannabis, on a 31 acre parcel. The applicant proposed fencing and security measures which were approved by the Cannabis Licensing Manager. The existing well is used for Ag and domestic uses and meets county environmental standards.

Objections from the Protectors included siting, archaeological resources, biotic resources, water use for agriculture, public safety, illegal grows elsewhere, and CEQA development review. OK, so neighbors oppose another pot farm, why should we care? The real issue here is the attempt to limit a farmer's discretion to change a crop, say from apples to berries. There are two categorical exemptions to CEQA analysis which protect farmers, and the county has no jurisdiction over water usage from an existing well. This should have been the end of the discussion.

Non cannabis crop farmers do not need any approval for their farm operations. Cannabis growers fall into various categories required for a county license, many dealing with security and visibility. An outdoor grow on an A zone must have their application reviewed at a public hearing before the ZA, which can be appealed to the Planning Commission. An existing greenhouse on CA zoned land only needs a staff review, with no public notice. As Santa Cruz is known for activist community outcry, the difference is significant.



Change is hard once your project starts the public review process. Delays are often, this application started early in 2021. The ZA is a planning professional, the Planning Commission are appointed from the public. They may acknowledge that a proposal meets all standards yet spend hours discussing building height, access and architectural trim, only to send it back for revisions. Predictability in this process is difficult, and the only immediate relief is an appeal is to the Board of Supervisors, adding months, or years to the application. The Old Mount Protectors prevailed in overturning the Zoning Administrator's approval apparently based on the wish of the Commission that the CEQA exemptions shouldn't apply, even when they were specifically on point.

Poirot proposed two solutions to the murder, what actually occurred, and a fanciful account of an unseen mysterious man who did the deed and escaped through the snow. While there was a confession, the authorities agreed the stranger did it, averting scandal. So many planning applications are quashed because the process is designed to avoid the controversy caused by change, even in denial of the correct outcome. *"Bureaucracy, the rule of no one, has become the modern form of despotism."* (Mary McCarthy) ■



FAVORITE RECIPES

Barbecued Beef Brisket

I have a personal favorite recipe that I would like to share with you this month. It is a *Taste of Home* recipe that I found several years ago. It's easy, it's delicious and if you love barbecue, you will love this recipe. I have adapted it to meet my cooking needs and I am sure you all can make adjustments to meet your way of doing things. Or, follow the recipe...It's a winner!

INGREDIENTS:

- | | |
|----------------------------|--|
| 1/2 cup packed brown sugar | 3 tablespoons dark corn syrup |
| 1/2 cup ketchup | 2 tablespoons prepared mustard |
| 1/4 cup water | 1 tablespoon prepared horseradish |
| 1/4 cup cider vinegar | 1 garlic clove, minced |
| 1/4 cup canola oil | 1 fresh beef brisket (2-2 1/2 pounds), trimmed |
| | 2 tablespoons canola oil |

1. In a small saucepan, combine the first nine ingredients; cook and stir over medium heat 3-4 minutes or until brown sugar is dissolved. Transfer to a disposable foil pan.

2. In a large skillet, heat oil over medium heat. Brown brisket on both sides. Place in foil pan, turning to coat with sauce. Cover pan tightly with foil.

3. Place pan on grill rack over indirect medium heat. Grill, covered, two to two and one quarter hours or until meat is tender.

4. Remove from heat. Remove brisket from pan; tent with foil and let stand ten (10) minutes. Meanwhile, skim fat from sauce in pan. Cut brisket diagonally across the grain into thin slices; serve with sauce.

Notes from the Editor: I don't always have a beef brisket on hand in my freezer and they are usually too large for the two of us in my household. I most always use a flank steak of the same size as indicated in the recipe. I also use my Pampered Chef Rockcrock slow cooker instead of the foil pan on the grill. It makes this a meal I can put in the slow cooker, on low, in the afternoon for about three hours and

it will be ready to eat at dinner time. I just keep an eye on it and shut it off when the meat is tender and I think it's done. It is very moist, tender and tasty. It can be served with rice or potatoes, or shredded and served on a roll of your choice as a barbecued beef sandwich. You can also add a little spice to it if you like the heat. Your options are many. Enjoy!!! ■

President's Message continued from page 2

they decide that agriculture is in the way. This is disheartening. A community that was born through agriculture and that its citizens see as an important part of the community, has a majority governing body that now sees agriculture as a barrier.

So here is the ask of you. First, support The Committee for Planned Growth and Farmland Protection. It will require a lot of support to fight a counter-initiative and send a clear message to the voters as to why we need to continue the

ULL to protect farmlands. Second, contact your city council member! As noted above, not all council members supported a counter-ballot initiative, but more did than not. Make your voice heard. You can email your council member through the city's website at <https://www.cityofwatsonville.org/183/City-Council>. Hopefully, through our combined efforts, we can protect agricultural lands for an additional 18 years. ■

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The Santa Cruz County Farm Bureau is a vital part of our community, providing an important voice for the Santa Cruz County and Pajaro Valley agriculture industry. Everyone is eligible to apply for Farm Bureau membership and receive the many benefits and services available. By joining the Santa Cruz County Farm Bureau you help support agriculture in Santa Cruz County and the Pajaro Valley.

How to Join

Go to www.cfbf.com and click on the "JOIN" button. No need to log in on this page. Go to the bottom of the page and click on NEVER BEEN A MEMBER to set up a new account.

Questions? Contact the Santa Cruz County Farm Bureau
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I'm a Farm Bureau Member/Supporter because...



Ken Kimes (R) and wife Sandra Ward (L)

"I am a Farm Bureau Member because the Farm Bureau does really positive things in the local community; such as, helping farmers in the area get their workers vaccinated during the COVID-19 pandemic.

That was a really great thing."

Ken Kimes, Owner
Greensward/New Natives, LLC



Why Farmers Should Use Dash Cams

*The following information is provided by Nationwide®, the #1 farm and ranch insurer in the U.S.**

Kee your eyes on the road. It's one of the first things taught when someone is learning to drive. Dashboard cameras — a growing segment of telematics technology — are helping large farm operations with large fleets do a better job of that and a whole lot more.

Dash cams can help farm managers improve efficiency and productivity, while ensuring safe operation on the road and in the field by:

- Documenting accidents
- Enabling proactive operator management
- Supporting and retaining drivers and operators

What are fleet dash cams and how do they work?

A dash cam is a small camera mounted on a vehicle's dashboard, rear-view mirror or windshield that records the driver and the road ahead. There are two main types of fleet dash cams:

- **Standalone dash cams** are usually forward-facing and record roadway activity that can be reviewed in the event of an accident or incident. More advanced systems have dual lenses to also capture in-cab activity.
- **Telematics-based dash cams** tie into a bigger telematic system. They monitor operator behavior and document in front of and around a truck or piece of machinery. Data collected demonstrates trends over time that contribute to more proactive, efficient management.

Accident documentation and resolution

In the case of an accident, a dash cam automatically captures everything in its view. Video footage can provide management, law enforcement and others with clear evidence of who is at fault and specifics of the event. This unbiased view can eliminate doubt sometimes caused by eyewitnesses and help resolve insurance claims more quickly and reduce costs in the process.

Proactive driver management

Unsafe operator behavior like speeding, hard braking and distracted or fatigued driving can cause both accidents and additional costs through liability and increased maintenance. Dash cams monitor drivers and provide data that can be used to coach drivers on safe driving procedures. While any dash cam can monitor for distracted driving, a telematics system can gather information on:

- Speed
- Vehicle movement patterns
- Instances of aggressive acceleration, hard braking and erratic cornering
- Fuel efficiency and vehicle performance diagnostic data

Dash cam privacy and security implementation considerations

No employee wants to work for Big Brother, so it's important to establish policies and guidelines around dash cam usage and how the devices work. Have open, honest conversations with your employees, answer their questions and address any concerns.

Get started with telematics today

Nationwide has partnered with Razor Tracking, a leader in real-time telematics and dashboard camera solutions. Nationwide farm policyholders receive preferred pricing on Razor's devices and subscription. ■

THE AG COMMISSIONER

Juan Hidalgo, Agricultural Commissioner, Santa Cruz County

STAY READY TO PROTECT AGRICULTURAL WORKERS FROM WILDFIRE SMOKE



The cool foggy weather of summer can make us forget about the high risk of wildfires in our area. The recent Anzar Fire in Aromas is a reminder that we need to be prepared to protect farmworkers in the event of poor air quality created by smoke. Preparation starts with

reviewing CalOSHA's regulations for protection of employees that work outdoors and may be exposed to wildfire smoke. These requirements fall under Title 8, Section 5141.1 and can be found here: <https://www.dir.ca.gov/dosh/doshreg/Protection-from-Wildfire-Smoke/Wildfire-smoke-emergency-standard.html>

It is essential that employees are properly trained and understand the protections in place for them in the event of poor air quality created by wildfire smoke. This includes understanding health effects of exposure to wildfire smoke, the Air Quality Index (AQI), and how to properly use an N-95 respirator. Employee training resources can be found in English and Spanish from the UC Davis Western Center for Agricultural Health and Safety here:

<https://aghealth.ucdavis.edu/wildfires>

When air quality begins to decline due to wildfire smoke, employers should be monitoring AQI to determine initiating additional protective measures to keep employees safe while working outdoors. These measures may include moving work to enclosed structures where air is cleaner or filtered, moving employees to other areas where AQI is lower, or providing N-95 respirators to employees. Consider saving the following websites to receive AQI information in our area: www.airnow.gov and <http://air.mbuapcd.org>. The weather app on most smart cell phones also contains AQI information.

Lastly, given that most agricultural activities in our region take place outdoors and the option to move employees to indoor work is very limited, employees may need to be provided with NIOSH approved N-95 respirators to continue work. One key element of being prepared is having a supply of N-95 respirators on hand. In previous wildfire emergencies

due to supply constraints created by the COVID-19 pandemic, the California Department of Food and Agriculture in collaboration with the California Office of Emergency Services made N-95 respirators available to all growers through distributions by Agricultural Commissioners. It is unknown if a similar distribution of PPE will occur in the future, so it is best to plan ahead by independently securing supplies now. ■

Save the Date

Santa Cruz County Farm Bureau

Santa Cruz County Fair

September 14 through September 18, 2022

Annual Directors' Dinner

November 3, 2022

5:45 p.m.

CFBF 104th Annual Meeting

Monterey, CA

December 4-7, 2022

Agri-Culture

14th Annual Testicle Festival

Estrada Deer Camp

August 27, 2022

3:00 p.m. to 7:00 p.m.

26th Annual Farm Dinner

Location to be determined

October 22, 2022

4:30 p.m. to 8:00 p.m.

News & Information from RCD

Written by Dan Hermstad, Agriculture Program Specialist
Resource Conservation District, Santa Cruz County

Nitrate in Water

When was the last time you checked the amount of nitrate in your irrigation water? It's not a very common thing to do but it can help you save money and stay ahead of water quality regulations (Ag Order 4.0)!

Nitrate levels vary a lot between wells in our area. Several wells have high nitrate levels, while others don't; hence, the importance of measuring and knowing what you have available.

High nitrates in well water can cause health problems for humans who rely on that water for drinking, but at the same time, for farmers they are a readily available source of nutrients ("free fertilizer") available to nitrogen-hungry crops. At medium and high levels, nitrates in your well water can supply much of your crop nitrogen needs, reducing your fertilizer costs. Furthermore, as crops use the nitrogen in the water, farming can play a role in alleviating nitrogen pollution in underlying aquifers (pumping nitrogen out of the system) as long as irrigation is also fine-tuned.

A critical component to making this environmental "pollutant" into a benefit is to only apply the amount of water needed to your crop. If you overwater, the nitrogen in that well water leaches into the soil below the crop root zone where it cannot be accessed by the crop. So efficient and sufficient irrigation is critical to optimizing the benefit of nitrogen in your well water in a way that helps to reduce fertilizer costs, protects water quality and saves water.

Online programs like UCCE's CropManage can provide fertilizer recommendations that account for the nitrate in your well water. Contact the RCD of Santa Cruz County to learn more about how to measure nitrate levels in your well water and how to use this free nitrogen to lower your fertilizer inputs and costs. ■

14th Annual

Testicle Festival



- **Cow Pie Bingo**
- **Horseshoes**
- **"All in the Sauce" Contest**
- **Great Food!!**
- **Music by the No Respect Band**
- **Live Auction**
- **Raffle**
- **Beautiful setting!**

Saturday, August 27

3:00 - 7:00 p.m.

**Estrada Deer Camp
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If you haven't tried a rocky mountain oyster, now is the time! For more information, visit our website, www.Agri-Culture.us, or purchase tickets and sponsorships on www.eventbrite.com (search for "Testicle Festival" in Watsonville).

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More Efficient Water Management - Continued from Page 3

Salts dissolve into water to form pairs of positively (cation) and negatively (anion) charged ions. The main cations and anions in ground water, listed in Table 2, should be included in water tests. Although, iron and manganese are usually present at low concentrations, they should be also included in water tests because they can form precipitates that clog drip emitters. Test results are usually expressed in units of parts per million (ppm) or milliequivalents per liter (meq/L). Parts per million is also the same unit as milligram per liter (mg/L). Conversion between ppm and meq/L is often necessary because thresholds for plant response may be expressed in either unit. The factors for converting from ppm or mg/L to meq/L are also listed in Table 2. ■

Table 1. Major parameters for evaluating salinity in irrigation water.

Water Quality Measurement	Symbol	Formula ¹ /Units	What it measures
Sodium Adsorption Ratio	SAR	$SAR = \frac{Na}{\sqrt{\frac{Ca + Mg}{2}}}$	ratio of the concentration of sodium to the sum of the concentration of calcium and magnesium in water
adjusted Sodium Adsorption Ratio	SAR _{adj}		same as SAR, but the calcium concentration is adjusted for the level of bicarbonate and EC of the water
Electrical Conductivity	EC _e	dS/m ² , mmhos/cm	measure of bulk salinity in water
Total Dissolved Solids	TDS	ppm ² , mg/L	measure of bulk salinity in water
pH	pH	$pH = -\log(H^+)$	concentration of protons (acidity) in water
Alkalinity		ppm or mg/L of CaCO ₃	concentration of bicarbonate in water, usually expressed in equivalents of CaCO ₃

¹- SAR, SAR_{adj}, and pH are expressed without units

²- dS/m = deciSiemens per meter, mmhos/cm = millimhos per centimeter, 1 dS/m = 1 mmhos/cm

³- 1 ppm = 1 mg/L

Table 2. List of anions and cations commonly found in ground water.

name	symbol	mg/meq ¹	name	symbol	mg/meq
Calcium	Ca ²⁺	20	Chloride	Cl ⁻	35
Magnesium	Mg ²⁺	12	Sulfate	SO ₄ ²⁻	48
Sodium	Na ⁺	23	Bicarbonate	HCO ₃ ⁻	61
Potassium	K ⁺	39	Carbonate	CO ₃ ²⁻	30
			Nitrate	NO ₃ ⁻	62
			Boron	B	-- ²

¹ conversion between mg/L and meq/L; (eg. 100 mg/L Ca = 100/20 = 5 meq/L)

² Boron can be in several anionic and neutral forms in water

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Focus Agriculture, Session
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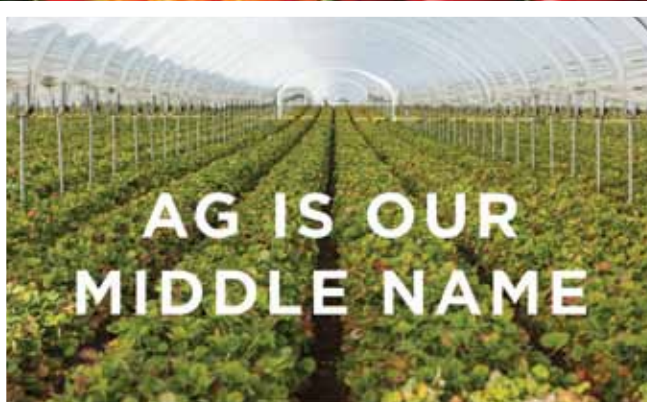
SATURDAY - AUGUST 27
14th Annual Testicle
Festival

WEDNESDAY-SEPTEMBER 14
Santa Cruz County Fair
begins and runs through
Sunday, September 18th

WEDNESDAY-SEPTEMBER
Annual Apple Pie Baking
Contest

WEDNESDAY-SEPTEMBER 14
Opening Day Barbecue
starts at 12 noon

SATURDAY - OCTOBER 22
26th Annual Farm Dinner



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of the small details that go into the big
picture of farming. Because agriculture
is what we know, it's all we do.



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