### **DIRTY FINGERNAILS AND ALL**

# Smoke got in my eyes, but did it get in my plants?

#### **BY SIOUX ROGERS**

How'd we fare over a smoky summer? Here's a recap of some of the impacts. Grapes

When wood burns, like in a forest, the smoke contains phenol, a volatile organic compound. These creepy phenols then become even creepier and creep directly into grapes through smoke. Not sure how they, the phenols, cause this, but the normal sugars of the grapesthe glucosides-then give the grapes a smoky taste. This seems rather unjust, but apparently the glucosides can fall apart, reducing the sugar content and creating a slightly barbecued taste (en.wikipedia. org/wiki/Phenol).

When grapes have been exposed to smoke, the taste can be rather smoky, ashy, medicinal, burnt, or just plain yucky.

Turns out that all grapevine varieties can be smoke-impacted, but the smoky flavor may be less noticeable in a fullbodied syrah than in a lighter-bodied pinot noir. Also, the stage of grape growth, smoke density, and length of smoke exposure are significant factors in the taste impact of smoke to the grapes. According to Con Simos and Mark Krstic of the Australian Wine Research Institute, "Processing techniques and style of vinification also have a big impact on the sensory impact of smoke compounds." (For more information, read the article, "I can smell smoke-now what?" awri. com.au/wp-content/uploads/2020/01/ s2131.pdf.)

#### Chickens

Seems as though the ash from fires contains heavy metals. When poultry scratch and peck this ash, which sometimes contains elevated amounts of lead, their eggs can become contaminated. This is a significant concern, as "backyard poultry"

Allowable Dose Level of lead consumption associated with reproductive harm (0.5)microgram/day). Concentrations of other metals, such as cadmium, arsenic, copper, nickel, and mercury, were well below toxic levels" (ucanr.edu/sites/poultry/ files/294539.pdf).



Smoke from the Slater and Devil's fires rises over the Applegate. Photo: The Kerulos Center for Nonviolence.

is growing in popularity.

Out of this concern, the University of California-Davis School of Veterinary Medicine used "backyard scientists" to collect eggs, which were evaluated via a mass spectrometer. They found that "17.6 percent of the eggs submitted (40 percent of premises with heavy metal results available) surpassed the California Proposition 65 Maximum

#### Cannabis

And, lastly, could our treasured cannabis and hemp be harmed by nasty smoke?

Surprise answer: It depends on the weather and which way the wind is blowing, according to Jon Vaught, CEO of the Colorado biotech company, Front Range Biosciences, in an article in Cannabis Business Times (cannabisbusinesstimes. com/article/can-wildfires-impactApplegater Winter 2020



Sioux Rogers

If a cannabis grow is heavily stressed from smoke, it can kill the plant, lessen its bud production, or just give it a nasty smoke flavor. Yuk.

cannabis-quality-

test-results).

Pressure-treated wood, for example, contains chemicals like chromium and arsenic, which can settle on cannabis crops from soot and ash.

Fire retardant can also pose threats to cannabis crops and their water sources. Per Lydia Abernethy, director of cultivation science for Steep Hill Labs, in a 2019 article in Leafly, "If your product has been exposed to (a fire retardant), you should not consume it or release it into the cannabis market" (leafly.com/news/growing/wildfire-seasoncannabis-crop).

Nearby water sources may also have contaminated water, which needs to be tested. Testing in itself is a bag of worms. Labs have different ways of testing for contaminants and toxic levels. If they are not looking for specific contaminants—arsenic, for example—that presence will not be monitored or reported if it is not in the water.

Abernethy also said, "Typically, heavy smoke or particulate exposure degrades the product quality to such a degree that most people won't knowingly purchase it."

"I survived because the fire inside me burned brighter than the fire around me." —Joshua Graham

Dirty Fingernails and all, Sioux Rogers dirtyfingernails@fastmail.fm

## Applegate emergency plans continue to evolve

#### **BY SANDY SHAFFER**

Some people love to make plans, while others shudder at the thought. Right now hubby and I are preparing for a vacation over on the coast. We both love to cook, so I'm having fun planning some of our favorite dishes to make while we're there, while watching the waves crash and the rain fall.

As a teenager, almost everyone plans where they will be going to college and how much money they will make. But there are lots of "plans" in life: family planning, career and retirement plans, surprise party plans. And of course, planning for the unexpected. Out here in the Applegate Valley, we all learn how and why to plan and prepare for wildfires, sometimes the easy way—by talking to neighbors and our Fire District folks. Other times folks learn the hard way, with a wildfire threatening their home and lives. My husband and I learned about "defensible space" the year we finally moved to the Applegate. Fortunately, the county had required us to create a defensible space by thinning and

removing fine and dead fuels around our homesite, as well as along our long driveway, all before we could even start building.

This practice of removing fuels can literally save your home in a wildfire. It's a necessary part of living safely in a forested area that allows residents to safely evacuate and firefighters to safely arrive and defend your home. (Most of you have read in many of my past articles over the years that firefighters will choose to go up clear, open roads to save homes, rather than to head down an over-grown, narrow road where they can't even see around a corner.) In 1999 there were wildfires in the Applegate, and the community had their eyes opened wide! Fortunately, there was also some grant funding available in 2000 for rural communities like the Applegate. To further promote wildfire safety, we Applegaters obtained some of that grant money and wrote a comprehensive "fire plan" for our community, for our state and federal land managers, and also for our forests. It was the first community

wildfire plan in the nation, and we were celebrities, with some members of the team traveling across the

> share the The Applegate Valley Fire experience! I'm sure there

are hundreds of community fire plans

Services Long Range Master Plan"! It's "hot off the press," and I'll be taking it on vacation to peruse while I watch the waves crash.

Some of the items covered in this plan are a community risk assessment, community demographics (yes, we are a graving group out here), and current services, as well as community expectations of the Fire District, strengths and weaknesses of the district, and the potential need for growth with more paid first responders and firefighters.

The plan closes with stakeholder input, conclusions, and both short- and long-term recommendations for future strategies. A planning committee has already been formed and will begin meeting soon to move forward with implementation. I'll be following their progress. Back to planning yummy meals for our upcoming vacation, including how many towels to bring to dry off our fiveyear old Akita, Maggie, after every walk on the beach! She's rarin' to get in the car! Sandy Shaffer sassyoneor@gmail.com

country to

District patch.

across our nation today.

And now two decades later, the Applegate Fire Plan is still valid and utilized annually to help keep our valley green. Did you know that many Applegaters who move out of the valley leave their red-binder Applegate Fire Plan behind with a note to the new residents? It's true!

Also of note: As of last month we have a new "plan" residing here in the Applegate! Our Applegate Valley Fire District #9 now has its own "Emergency

