



BETTE HUSTED
FROM HERE TO ANYWHERE

Let's gather together virtually

So — winter. Snow and ice, roads drifted over, schools struggling to open. And now a mind-boggling spike in COVID-19 cases as the latest variant of a mutating virus arrives. With illness closing one of our local schools, I feel a special sympathy for teachers, who must feel as if they're doing gymnastics on a tight-rope.

At times like these we need more than a blazing fire and the January seed catalogs' promises of spring. We need each other.

Luckily, even when we can't safely gather, if we have an internet connection we can connect through virtual platforms. As Cameron Scott, next Thursday's First Draft featured writer, puts it, "Life is a story, and I see a lot of people trying to make the most of their story that they can."

Scott is a Wallowa County writer, whose own stories — told in four books of poetry and numerous essays — center on fish, environment, family and the West. "I live for fishing, teaching, and writing," he says. "It's a three-legged structure. Take away one of those legs and things get a bit wobbly."

The teaching — currently, grades 7 through 12 at Wallowa High School and youth workshops at Summer Fishtrap — and the writing are going strong. The wobbly leg is fishing, and Scott's insights help us realize this is a loss that impacts us all.

"On the river, things make sense," he writes. We don't have to be holding a fly rod to understand what he means. "In the end, the river is everything, and everything is the river."

But as a long-time fly fishing guide, he began to notice the impacts of increased fishing on the rivers and on the fish that had been caught and held out of the water for photos before they were released.

"And then one summer a severe drought hit the rivers where I guided in Colorado," Scott states. "The entire ecosystem of the area was stressed out. I stepped on a rabid bat, fires consumed the area, something in me broke. I couldn't go back to guiding in a system that was so heavily impacting the thing that I loved."

So he took a year off and then began guiding on his home waters in Oregon.

"However, this past summer, short of being bitten by a rabid bat, I saw drought and heat hammer the Grande Ronde watershed in a repeat of what I'd seen and experienced in Colorado," according to Scott. "At this point there is nowhere to run, and so I'm digging in my heels and making a stand for our anadromous and local fish populations and the ecosystems I love."

His poem "Oregon Country, Hunger" is part of that stand, reminding us that "The ocean refuses no river but there are rivers that never make it to the sea ... Swaths of forest. Entire mountains / eaten away. Seven billion hungers./Thirsts."

Cam is one of the teachers balancing on the pandemic's quivering tightrope — a good teacher, much-loved in Wallowa County since he implemented the Fishtrap Story Lab at Joseph Charter School. Earlier, he co-taught a creative writing workshop, Voices 110 Degrees, for at-risk youth in Tucson.

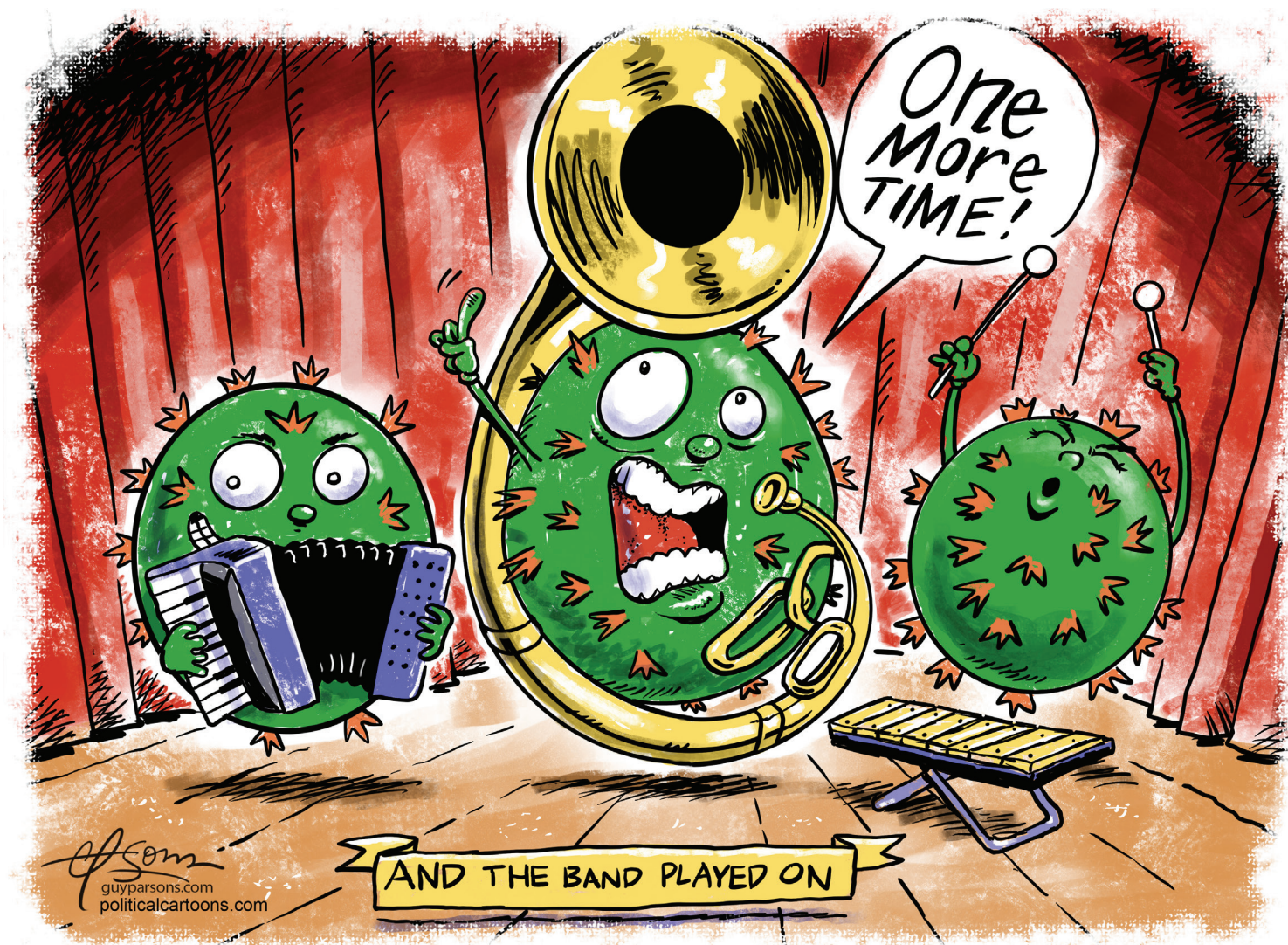
"I show up, listen, and respond to each student's landscape of words and ideas," he told High Country News about his teaching stint in Chiloquin. "And I try to open my world to them in ways that I hope will help them see their world more clearly."

He's teaching me, too, sending me to my search engine for insights about "deep ecology" and "dark ecology," which turned out to mean different things than I had assumed.

The snow is finally melting, but there's a lot of winter left, so I hope we'll see each other on Jan. 20 at 7 p.m. Just sign up for the Zoom link on the First Draft Writers' Series web page to hear his voice, see his face (he'll be smiling) and meet a community of grateful listeners — some from distant places who would not otherwise be able to attend. You can just listen, or share your own story at the open mic.

Until then, stay warm. And keep that seed catalog handy.

Bette Husted is a writer and a student of tai chi and the natural world. She lives in Pendleton.



Facing a future that will impact us all



JEFF BLACKWOOD
UNDERSTANDING OUR CHANGING CLIMATE

The Oregon Climate Change Research Institute has published its "Fifth Oregon Climate Assessment." OCCRI is a consortium of universities, researchers and professionals at Oregon State University.

Every few years, they publish an assessment on climate change to help our communities, agencies, businesses and citizens better understand, prepare and adapt to our changing climate. The report is summarized statewide but built on a county-by-county approach. A section on Umatilla County describes predictions for the 2020s and 2050. These findings and trends are common for our region and can help us better prepare for our future.

For our region, the outlook in general is for warmer, droughty summers, and less predictable rainfall in winters. Although other factors, such as wind events, blowing dust and loss of wetlands will be factors, they are predicted to not see the dramatic changes of summer droughts and heavy winter rain events.

Summer droughts and heat waves are expected to increase in frequency and intensity. We are experiencing earlier spring snow melt and runoff, leading to earlier wildfire seasons and reduced late summer water availability.

The report states, "Wildfire risk, as expressed through the frequency of very high fire danger days, is projected to increase under future climate change. In Umatilla County, the frequency of very high fire danger days per year is projected to increase on average by about 40% (with a range of minus 14 to +101%) by the 2050s under the higher emissions scenario compared to the historical baseline."

"Under future climate change, the risk of wildfire smoke exposure is projected to increase in Umatilla County. The number of 'smoke wave' days — days with high

MORE INFORMATION

The OCCRI report is an important tool to help us and our communities prepare and adapt to a changing climate. Similar reports are completed for Grant, Baker, and Wallowa counties. The report is available by contacting Oregon Climate Change Research Institute, College of Earth, Ocean, and Atmospheric Sciences, 104 CEOAS Admin Building, Oregon State University, Corvallis, OR 97331.

The report is also available to download from this website: <https://blogs.oregonstate.edu/occri/oregon-climate-assessments/>.

concentrations of wildfire-specific particulate matter — is projected to increase by 141% and the intensity of 'smoke waves' is projected to increase by 82% by 2046–2051 under a medium emissions scenario compared with 2004–2009."

Warming summer temperatures will challenge agriculture and increase public health issues, including heat related illness and respiratory issues caused by poor air quality from wildfire smoke.

Although the amount of winter rains may be normal or slightly more, the timing will be less predictable. The intensity of extreme precipitation events is expected to increase in the future as the atmosphere warms and can hold more water vapor. Low to mid elevations, a zone where snow comes and goes, will be more prone to rain-on-snow events that pose high flood risks.

The report also states, "Warming temperatures, altered precipitation patterns and increasing atmospheric carbon dioxide levels increase the risk for invasive species, insect and plant pests for forest and rangeland vegetation and cropping systems."

So, as our climate continues to change, how can we best prepare, adapt, and mitigate the expected risks? With the recent passage of the national infrastructure bill, there may be opportunities to assure our roads, culverts, and bridges are designed to withstand intense flooding. In addition, there may be ways to improve community resilience to high water events.

We have opportunities to plant more shade trees as a response to future heat waves, especially in underserved commu-

nities. Along with this, we should expect to deal with more heat wave events and find ways to provide cooling shelters for people exposed to the elements or unable to afford or have air conditioning. For those of us who rely on water to irrigate crops and fields, we will need to find more efficient ways of conserving water, monitor our ground water supplies closely, and in some cases, convert to more drought resistant crops.

While many climate change problems are being addressed at the national and state level, we all share in the responsibility of doing what we can to reduce our personal impacts. Monitoring and reducing our food waste, purchasing sustainable products, including those with recyclable packaging, along with traveling less and reusing more are just some of the options we can consider as individuals. Xeriscaping our yards and taking advantage of incentives for residential solar installations also will help. Voting for candidates willing to take action to reduce the effects of a changing climate, especially at the local level, is a powerful tool as well.

There always are opportunities to share ideas and collaborate with agencies, tribes and communities to pool expertise and resources. The more we know and the more we all share, the better prepared we will be to face the future that will impact us all.

Jeff Blackwood retired from a career with the U.S. Forest Service and is a member of the Eastern Oregon Climate Change Coalition.

Dairy's latest violation underscores danger of factory farms



MACKENZIE AIME
OTHER VIEWS

Mega-dairies and the natural gas industry have lobbied hard to convince Oregon's lawmakers that manure digesters lessen factory farms' environmental impacts, but as environmental violations pile up that argument disintegrates.

Last year, Oregon's Department of Environmental Quality fined two of the state's mega-dairies (including its largest) for air quality violations that resulted from digesters, which capture mega-dairy methane to produce so-called biogas that can be sold to utilities for a profit. Both digester projects received millions of dollars in public funding despite posing myriad threats to Oregon's communities and threatening Gov. Kate Brown's ambitious climate goals.

Chemically, factory farm biogas is identical to fracked gas. Its main component is methane, a powerful greenhouse gas that must be drastically reduced to slow the worst effects of climate change. Brown's plans for Oregon's emissions

reductions are among the most ambitious in the U.S., setting a goal of an 80 percent reduction by 2030 that far eclipses Biden's goals for the country. But, instead of reducing the ag sector's methane emissions, a raft of tax credits and incentives is making it easier than ever for Oregon mega-dairies to produce more methane and sell it for a profit.

Threemile Canyon Farms and Farm Power Misty Meadow both face fines upwards of \$18,000 for air quality violations at their dairy manure digesters, but the fines are a pittance compared with the millions of dollars in public funding allocated to these projects from Oregon's taxpayers.

In fact, Threemile Canyon Farms' former general manager called factory farm gas "the most valuable product that we have out there" — more valuable even than the milk it produces for dairy giant Tillamook. Threemile and Farm Power received more than \$5 million and nearly \$1.5 million to subsidize their factory farm gas, respectively.

Oregon's Clean Fuels Program alongside its Renewable Natural Gas Portfolio allowances incentivize the purchase of factory farm biogas by natural gas utilities, allowing them to greenwash their pollution of our climate and communities.

Northwest Natural, a household name to many in Oregon, has scored three lucrative factory farm gas contracts as a result. And just recently, Shell Oil announced the creation of its first biomethane facility in Junction City, just outside of Eugene.

Unless our leaders act fast, factory farm biogas will sit alongside fossil fuels as an essential ingredient in our current market-based, climate-wrecking cocktail.

If Brown hopes to meet her ambitious emissions reductions targets, she and our legislators cannot allow factory farm gas or mega-dairies to grow. In her last term, Brown must cement her legacy as a climate champion. She can start by enacting a moratorium on mega-dairies, cutting off the raw materials necessary for factory farm biogas. She can slash the incentives and tax credits that have made methane profitable and redirect those funds to real climate solutions, including electrification and community-sourced energy plans. Oregon can meet its climate goals, but not with factory farm gas and polluting digesters.

Mackenzie Aime is the Oregon Organizer with Food & Water Watch. She lives in Eugene and works to protect Oregon's communities and environment from the harmful impacts of mega-dairies.