OUR VIEW

Reviewing two years of COVID-19

On Saturday, March 12, the indoor mask mandates imposed by the governors of Oregon, Washington and California were lifted.

Oregon Gov. Kate Brown has also announced that the state of emergency that was put in place on March 8, 2020, will expire April 1.

Huzzah!

Officially, the lifting of the mask requirement reflects declining COVID-19 cases and hospitalizations in the West Coast states. Others suggest the announcements were coordinated with other Blue state governments to suggest a return to "normalcy" before President Biden's State of the Union address and in advance of the midterm election campaign.

Whatever the reason, we are nonetheless thankful for the reprieve — even if it later proves temporary.

Two years and change into the pandemic, it behooves us to take stock of where we have been and offer some observations.

• COVID-19 qualified as a clear and present danger as it unfolded in the early spring of 2020. Little was known about the disease when it arrived in the United States.

In that context, the "two-weeks-to-flatten-the-curve" shutdown made some sense. But as those "two weeks" dragged into more than three months, this seemed less like a thoughtful strategy and more like a desperate effort to outlast the virus.

• While government can quickly shut the economy down, starting it back up again isn't that easy.

• State government was unprepared to deal with the impacts its measures inflicted on working people and their employers. Shuttering the economy left more than half a million people on the West Coast scrambling for a paycheck.

• We have been told to "follow the science." Being strong believers of facts, we put a lot of stock in science.

But, the exhortation to "follow the science" has too often been used as a cudgel with which to beat critics.

Science is not religious dogma. It is an open question, not a declarative statement. We don't say this to benefit crackpots and conspiracy theorists, but to encourage reasoned debate.

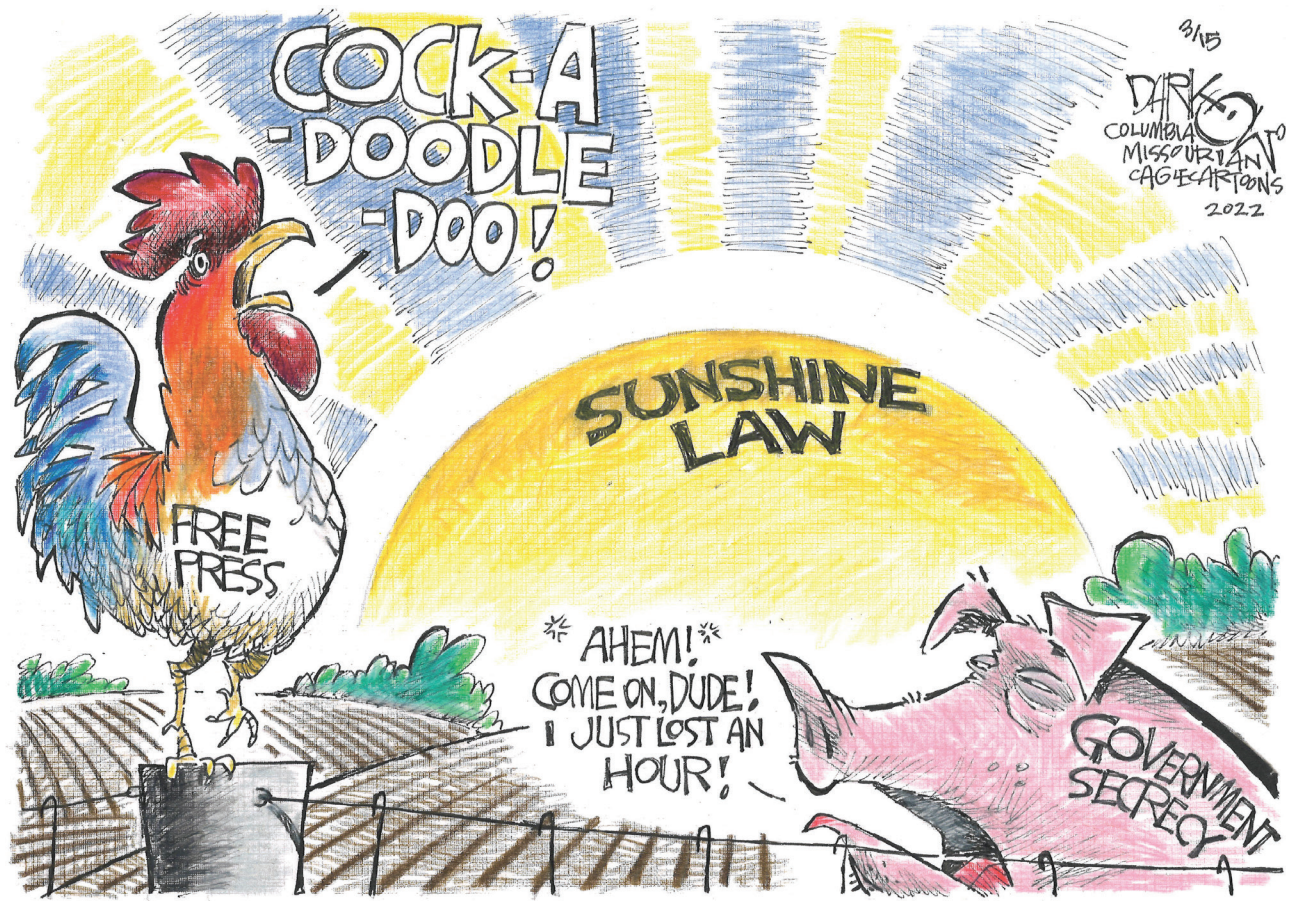
Officials conveying science have too often failed to concede that the body of knowledge is ever changing.

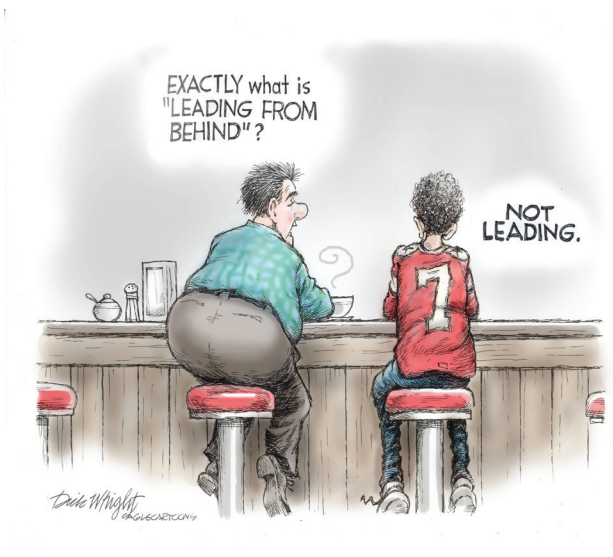
We have always been strong advocates for vaccinations, and still are. Initially, we were told the vaccines would prevent infections and transmission in most cases. Then we were told that in most cases it would only keep people from getting really sick. That's still a worthy outcome, but not what conveyors of science promised in the beginning.

Policy makers have been the strongest proponents of "the science," but have been willing to forego the science for political expediency.

• No elected official should be allowed to rule indefinitely by decree. Emergency powers should be limited in duration and subject to mandatory legislative oversight. A benevolent dictatorship in all but name is nonetheless tyranny.

Most people learned to live with the virus months ago. We are happy that the governors are learning it, too. We hope in future emergencies that they put more trust in the instincts of their constituents.





Protecting large trees key to healthy forests

DAVID MILDREXLER
OTHER VIEWS

Proposed forest management of the Mount Emily Recreation Area has raised important questions about large trees. I'm an ecologist who studies forest ecosystems and the significant values they provide. I'd like to share a few findings specific to the largest trees in the forest that underscore their outsized benefits to both the forest and local community.

Large trees are crucial in ecosystem water and energy cycles. Large deeply rooted trees tap groundwater resources not available to shallow-rooted plants. During drier months roots lift deep soil water up to shallow, drier portions of soil and release it, sharing water to the ecosystem, including neighboring plants of different species. A study in old growth ponderosa pine found that during July and August this process accounted for approximately 35% of total daily water usage from the upper soil, adding weeks of water during drought. This allows the ecosystem to continue photosynthesis, storing more carbon, and cooling the forest canopy as water evaporates from foliage. Forest canopies can register summer surface temperatures more than 30°F cooler than adjacent non-forest cover types, and large trees are the engine of this work. The water released to the atmosphere contributes to downwind moisture content and rainfall. Intact forests with large trees are positively associated with cool summer temperatures, increased late-summer streamflow and clean surface drinking water.

Among the more remarkable recent discoveries is that massive root systems of large trees link belowground ecosystems via mycorrhizal fungal networks and myriad soil microorganisms, forming an interconnected resource sharing and communication network. Large trees function as focal centers of this underground system, revolutionizing our understanding of the complexity and interconnectedness of forest ecosystems.

Globally, a 2018 study found that the largest-diameter 1% of trees hold half of all the aboveground carbon stored in the world's forests. In a recently published analysis of carbon storage in six national forests in Eastern Oregon, my coauthors and I found that big trees, with trunks more than 21 inches in diameter (DBH), comprise just 3% of these forests but store 42% of the aboveground carbon. The dominant tree species at MERA, Douglas-fir and ponderosa pine, both had the same proportion of stems ≥ 21 in DBH (about 3.7 %), yet these stems held 37.5% and 45.8% of total species aboveground carbon, respectively.

As trees grow larger, small increases in diameter add a relatively large amount of volume — the overall effect being that carbon stores increase rapidly with tree diameter. For instance, doubling tree diameter from 10 inches to 20 inches led to a 5.3 to 6.2-fold increase in carbon, whereas tripling diameter led to a 13.8 to 18.2-fold increase. The very large trees (≥ 30 in DBH) are exceptionally rare in eastern Oregon — less than 1% of the total stems in the forest. But these giants held an even greater proportion of carbon relative to their small numbers, demonstrating the importance of letting large trees grow larger and accumulate more carbon for climate mitigation now and into the near future.

From its beginning, logging removed the easily accessible low-elevation, large, old-growth ponderosa pine, Douglas-fir, and western larch trees. Today, all remaining old trees are incredibly valuable. Even certain diseases disparaged from a timber production point of view add to the complexity of these inherited treasures from an ecological perspective. Small trees pose the greatest fire risk and are most vulnerable during drought relative to mature trees that have reached full root, bark and canopy development and respond to climate variability better. Large trees are the safe vault to store carbon.

It's only through large live trees that large-diameter snags come into existence and provide crucial habitat for a diversity of wildlife species in Eastern Oregon's forests. Snags and fallen trees also contribute to complex long-term carbon and nutrient cycling, serve as substrate for the next generation of seedlings, and contribute legacies that link forest generations. On the ground they act like sponges, absorbing and retaining water and slowly releasing it during the summer to the soil and atmosphere. A 2020 study found that across Pacific Northwest forests there continues to be a long-term deficit in large live trees and snags from 20th century logging.

Large trees are cornerstones of diversity and resilience for the entire forest community, and they provide many services important to society. We would do well to protect large trees where we can, and a sufficient supply of those that will soon reach large diameter.

———

David Mildrexler is a systems ecologist with Eastern Oregon Legacy Lands where he focuses on terrestrial systems science, large landscape conservation, and the educational programs at Wallowology Natural History Discovery Center. He holds an M.S. in forest science from the University of Montana, and a PhD in forest ecosystems and society from Oregon State University.

SUBSCRIPTION INFORMATION

SUBSCRIBE AND SAVE

NEWSSTAND PRICE: $1.50
You can save up to 55% off the single-copy price with home delivery.
Call 800-781-3214 to subscribe.

Subscription rates:

Monthly Autopay	$10.75
13 weeks	$37.00
26 weeks	$71.00
52 weeks	$135.00

THE OBSERVER
An independent newspaper founded in 1896
www.lagrandeobserver.com

Periodicals postage paid at Pendleton, Oregon 97801
Published Tuesdays, Thursdays and Saturdays (except postal holidays) by EO Media Group, 911 Jefferson Ave., La Grande, OR 97850
(USPS 299-260)

Phone:
541-963-3161

Toll free (Oregon):
1-800-781-3214

Email:
news@lagrandeobserver.com

POSTMASTER
Send address changes to:
The Observer,
911 Jefferson Ave.,
La Grande, OR 97850

STAFF

Regional publisher	Karrine Brogoitti	Multimedia journalist	Alex Wittwer
Interim editor	Andrew Cutler	Home delivery adviser	Amanda Turkington
Assistant editor	Ronald Bond	Advertising representative	Kelli Craft
News clerk	Lisa Lester Kelly	Advertising representative	Amy Horn
Reporter	Dick Mason	National accounts coordinator	Devi Mathson
Reporter	Davis Carbaugh	Graphic design	Dorothy Kautz

A division of
eomediagroup.com