

EDITORIAL

Science for Grownups

What explains the conflicted expression on the face of Dean Hal Salwasser of Oregon State's College of Forestry? His beloved science is under assault from the forces of environmental politics.

There's little need to belabor the old battle lines and political divides already entrenched in the world outside the ivied walls of academia. The spotted owl battles, Clinton's Northwest Forest Plan that left an industry decimated, 1,000 mills closed, and more than 130,000 jobs lost. Timber represented 10 percent of Oregon's economy in 1990; now timber accounts for less than 3 percent of the economy.

Sure, the mostly youthful environmental extremists held the timber industry's feet to the fire, forcing some useful momentum toward sustainable forest practices and even forcing an evaluation of the public's attitude about forest uses. All the while, the grownups, as usual, had to worry about the realities of life such as meeting payrolls, providing products for a booming construction industry, competition from global rivals, and, oh yes, paying the college tuition bills for those liberal kids.

Over the long haul, and after devastating fire seasons such as 2002 with 7 million acres burned, 500,000 in Oregon alone, public attitude has settled upon a reasonable approach. The majority of grownups think that the state's most bountiful and unique resource should be used wisely and that trees can be categorized as commodities without committing some New Age sacrilege. Their choice—mixed use of forests to include wildlands, recreation, and timber harvest. Most important, the public agrees that it makes sense to harvest diseased timber, to salvage log.

In spite of the U.S. Congress' passage of the Healthy Forest Restoration Act in 2003, which was supposed to set a new tone in managing national forests, most salvage logging of Oregon's Biscuit Fire was stopped by preservation groups in federal courts. In the end, less than one percent of the Biscuit Fire was salvaged logged.

In response to the federal government's inability to salvage log after a catastrophic fire, Cong. Greg Walden, chairman of the U.S. House Subcommittee on Forests and Forest Health, has introduced a companion to the Healthy Forest Restoration Act—The Forest Emergency Recovery and Research Act.

Writes Hasso Herring of the Albany *Democrat-Herald*, "The bill is under attack from environmental groups. The Unified Forest Defense Campaign calls it 'this new environmental assault threatening the national forests.' The opposition is misguided. ...What it does instead is to require forest managers, after a disaster, to spend no more than 30 days deciding what if anything to do about it."

The environmental assault is misguided, but it's also grown more sophisticated—some of those college grads have started earning their livings promoting preservationist causes. Their former utopian interests now have a decided edge of financial self-interest.

And their weapon of choice more often these days is “science.” Universities, widely recognized as bastions of leftist ideology, are ripe for their exploitation. And the media's role ranges from sympathetic collaborator to outright co-conspirator.

Thus, the latest science dust-up, the recent case of OSU graduate student Dan Donato's controversial research paper on salvage logging, could be the beginning of a very dark trend. It could be the undoing of any public faith or reliance on science to assist us with these important public choices.

In 2002, Tom Sensenig, the Southwest Oregon Area Ecologist for the U.S. Bureau of Land Management, agreed to partner in research on the Biscuit Fire with Oregon State professor Boone Kaufmann. The research money for the study, more than \$300,000, came from an Idaho division of the Forest Service called the Joint Fire Science Center. During the project, Sensenig would also donate more than \$70,000 of BLM work as an in-kind contribution.

Kaufmann, who now heads the Pacific Island Ecosystem Research Center in Hawaii, would depart OSU before the study was issued. Kaufmann brought others from OSU into the project. Students Dan Donato and J.B. Fontaine wrote the report along with OSU Research Associate John Campbell, while OSU professors Beverly Law (an expert in forests and the global carbon cycle) and W. Douglas Robinson (an expert in birds) were responsible for oversight.

After only two years of study into a complex regeneration cycle, the students released their current study results of burned timber tracts. The results: if you log burned areas after two years, you will stomp out many newly sprouted tree seedlings, and if you don't clean up your mess, you'll leave more timber refuse and flammable debris than if you did nothing at all.

Now, you're probably thinking about the big ole boots those timber guys wear and their big tractors and you're thinking, “I could have told them that for less than \$400,000.” And you'd be right. But that wouldn't be “science.” We're pretty sure, because they're scientists, that the students will keep checking to see if faster growing shrubs overtake and choke out the seedlings, or if drought wipes them out. We're also pretty sure they'll keep checking to see if that overgrown shrubbery and dead, unsalvaged timber goes up in flames again. Pretty sure.

What the study did *not* contemplate is the comparative result of careful salvage logging that included replanting viable seedlings and treatment of the surrounding area to remove debris and competing undergrowth.

And the study was, by design, mute about the lost revenue from the projected \$2 billion of burned salvageable timber in just one Oregon area, the Biscuit Fire.

But let's do the math anyway, students. In the grownup world that's enough money to stabilize K-12 school funding and pump desperately need funds into higher ed improvements. On an ongoing basis it might even be enough to turn around Oregon's struggling economy.

Shouldn't science separate itself from these policy discussions? Yes indeed. But instead, Donato's paper took a splashy swan dive into the policy limelight, complete with suspicious fanfare and timing. The paper hit the weblogs, webzines and the printed press before you could even say "peer review."

First published online on January 5 in *Science Express* magazine, an online version of *Science*, the study was covered that same day by the Associated Press, and the next day with a banner-headlined, front page *Oregonian* story. National Public Radio also gave Donato significant airtime on the popular show "All Things Considered."

"The release was fast," says Salwasser.

Sensenig, the U.S. Forest Service and the Bureau of Land Management, who together paid almost \$400,000 for the research, were never shown the study prior to its publication in *Science Express*. Neither Salwasser nor any of the OSU forestry professors with national reputations, such as John Sessions, Steve Tesch, Paul Adams, and Mike Newton, were shown or informed about the study prior to publication.

Professors of OSU's College of Forestry were only internally informed about the study's findings days later via a seminar conducted by John Campbell.

No wonder Salwasser looked conflicted and tense. No wonder his colleagues with lengthy, esteemed careers in forest science were pushed to the point of public action. A group of highly regarded forest scientists wrote to request that *Science* delay publication of the study for further peer review. And, of course, the leftists screamed censorship.

On January 22, the *Oregonian's* Michael Milstein wrote: "...scholars at Oregon State University and elsewhere said they fear the attempt by a group of College of Forestry professors to have a graduate student's research withheld from a top scientific journal may mar the school's reputation."

A day later the paper's editorial page weighed in: "Donato came to sweeping conclusions about his research that seem unjustified. However, the effort to block publication of his report was out of line."

Although Salwasser had previously expressed concern to *BrainstormNW* about the report's lack of peer review and the obvious perceptions of political advocacy, he yielded

to the newspaper's pressure and apologized to Donato on behalf of the professors and for his failure to immediately celebrate the report's public attention.

Salwasser's apology was meant to protect the purity of science research at OSU and to uphold traditions of academic rigor and review. But it may do the opposite. What does it portend when science is so hurried? When the peer review process is shortchanged? When grant funders are left in the dark? When there are serious concerns about a left-leaning political motive? Those concerns may be real or they may be the result of the overblown media attention and sympathetic, inflammatory headlines. But for the public, perception is reality, and the damage done is to science itself.

That's precisely why the peer review process should be slow and thorough, and why respected, seasoned professors should engage in the review. And that's why *Science*—yes, that's the same *Science* magazine that was spanked on January 15 by Nicholas Wade of the *New York Times* for publishing the fraudulent claims of Dr. Hwang Woo Suk to “have created embryonic stem cells from parents”—has once again undermined its own reputation.

Why all the secrecy?

Because the Donato report is incomplete science, manipulated into political advocacy. Though there is no evidence of cooperation on the Donato group's part, nevertheless, upon the paper's publication an orchestrated campaign began to smear salvage logging and Congressman Walden's bill at a critical moment. One source inside the U.S. Forest Service believes that Professor Kaufmann and his students may have behaved fraudulently in using government money for political purposes and should potentially be subject to a criminal investigation.

Meanwhile, the extremist environmental groups were prepared to launch their offensive with the one-page student paper as their weapon of mass destruction. If the leftist ideologues want to base their policy assault on a 29-year-old graduate student's incomplete study, they run some obvious risks—it will be embarrassing when they're proven wrong by time and thorough science in the years ahead.

For his part, Walden still trusts in science and in the College of Forestry at Oregon State University. He isn't worried about the intellectual debate between his committee and preservationist groups. “Truth is on our side,” says the congressman. Walden says he enjoys the openness of lengthy congressional hearings on these subjects. He admits, however, that doctored up studies do make the public debate and the legislating process more difficult because, “They are brought up again and again, and used against good legislation.”