

Statement for April 7 Senate Work Session on Academic Freedom and Independence at OSU's College of Forestry

Chair Shields and members of the Committee, I am Hal Salwasser, Dean of the College of Forestry and Director of the Oregon Forest Research Laboratory at Oregon State University. Thank you for providing me with an opportunity to address the committee and answer your questions.

The Science of Post-fire Forest Regeneration

While I understand the primary focus of this hearing deals with the general issue of “academic freedom” and perceptions about the college’s bias towards forest industry, I would like to begin by telling you what I think is known about post-fire forest recovery and impacts of logging and reforestation. It is important context for what follows. Field foresters know a lot from many decades of practical experience. One need look no farther than the Tillamook State Forest or the Hull Mountain fire to see what can be accomplished if rapid reforestation is the objective. But scientists know there is not as much in the body of peer-reviewed scientific literature as is known by practicing foresters. And rapid reforestation is not always the goal for every burned area.

The Donato et al. study published in Science in early January added to our body of peer-reviewed literature and challenged some of the practical knowledge held by field foresters. It generated initial attention not by what it found regarding seedling survival and post-logging fuels but by several conclusions drawn from those findings. But this initial attention was quickly overshadowed by major controversy over the way people concerned about those conclusions handled their concerns, including me. I will leave it to experts to argue out their technical differences. My main concerns in the College at this time are restoring a collegial atmosphere, protecting academic freedom and determining how we should handle scientific differences in the future based on what we can learn from our recent experiences.

Practical experience and science tell us that forest recovery after fires is highly variable and depends on how multiple factors interact, such as: forest type, fire intensity, soils, slope, aspect, seed source, weather in years following the fire, and competition among plants trying to occupy the site. Although long-run outcomes cannot be predicted with high accuracy from data only on seedling survival in the first 3 years following fire, it can be said, that if the seedlings are still alive after 3 years, the future forest at least has a chance of being dominated by conifers. Donato et al. gave us some useful data on that point.

I am also interested in what else Dan and his colleagues have to tell us in their future publications. They are collecting data on many different variables from a broad area of the Biscuit Fire and a lot of very useful information will come from those publications. Further, OSU has several more teams of students and faculty working on other aspects of post-fire forest responses and I am eager to see their results as well. Collectively they will all vastly improve what is known and represented in the peer-reviewed scientific

literature. Eventually we will get beyond opinion arguments among different groups of scientists.

Issues of Academic Freedom

Now to the issue of academic freedom. Within days of the online publication of the Science article, we were criticized for releasing the article. The college actually does not have a release policy for scientific or scholarly work of its faculty, staff and students. We rely on principle investigators to work with colleagues to get critical and constructive reviews culminating with the peer-review process used by journals prior to acceptance for publication.

In the first few days following the article's online release and media coverage, I spent many hours interacting with a diverse range of people, including the lead author of the Science article. My intent was to keep critics focused on the science and its conclusions. I worked sporadically via email with some of our faculty who were crafting a technical comment so that it did not degenerate into an attack on students or Science magazine. I also counseled critics on what they could legitimately say about the study and encouraged them to be as accurate as possible about what they were critiquing. At least this is what I thought I was doing.

Despite attempts to place the study in a larger context and keep critics focused on content and not authors or journals, it didn't work. And I missed an opportunity to discourage some faculty in our College from requesting a delay of the final publication. The firestorm that blew up after they sent their letter to Science turned a matter of technical disagreement into a perceived infringement of academic freedom. It generated a perception, both within and outside our college, of senior faculty intimidation of students.

As soon as I saw this outcome, I immediately began taking steps to deal with impacts on students, the College's credibility, and perceptions concerning our commitment to academic freedom. We are still taking those steps. I sent a letter of personal regret for any unintended impacts my actions had on the issue of academic freedom. I have now met 5 times with concerned graduate students to hear their concerns and respond accordingly. I am committed to continue working with students regarding their concerns and to improving communication between myself and all members of the College. With this objective, I have made myself very accessible via open office hours for any student who wants to drop by and talk with me and also via e-mail communication. I try to respond to student concerns promptly and with candor and honesty. I have held 2 open all-college meetings to explain to students and faculty what I did and what I thought I was doing. We formed a team of distinguished faculty to lead the College through a dialogue on what academic freedom and academic responsibility mean in terms of interpersonal behaviors and action, and have included a student representative on this committee. We are holding a special seminar series on the topic this spring and hope to conclude the dialogue with commitment to positive action by end of term. In all of these efforts, I am working with students and faculty to directly address the issues within our college.

One thing is clearer to me now from my experiences of the past 3 months: we have a very diverse group of faculty, staff and students and all of them are passionate about their work -- too passionate at times. The diversity in our College is strength and reflects diverse worldviews about nature and about resource management. This diversity greatly enriches our College. It also influences what people choose to work on and it can sometimes influence how results are interpreted. This is natural to all human endeavors and science is not immune to it. People from ecological disciplines tend to see the world quite differently than people from engineering and management backgrounds. Differences in perspectives fuel scientific and scholarly inquiry and must be supported in academia. Through effective communications people with diverse perspectives and backgrounds can learn from one another and improve the overall contribution to society. This is the desired outcome from academic work. But events of the past few months tell me we have a problem with internal communications across this diversity in our College and it is reflected in how our faculty handled both the initial article's preparation and responses to it.

OSU's College of Forestry is now preparing for its centennial celebration. It has a strong tradition of accomplishments and contributions to the quality of life Oregonians enjoy, a tradition we intend to continue. However, the recent controversy has taught us to be ever watchful for barriers to effective communications among scientists and protective of academic freedom for all.

Funding the College's Work

Let me now talk about funding and our work. Beginning around two months ago reporters began asking me questions about sources of funding, potential conflicts of interest, and bias toward one forest interest over others, i.e., a bias toward forest products industry. This inquiry continues to this day so I will do my best to address it. Our college receives its funding from many different sources. I have given each of you our 2004 Annual Report and you can see on pages 10 and 11 that we receive most funding from research grants and contracts, around 67% of our total budget, mostly from federal agencies. On some of these grants or contracts our faculty pose the questions to be studied and convince funding agencies with their proposals to fund their projects. On others, our faculty submit proposals to study questions posed by the funding agency. Some grants are hybrids of funding entities wanting general areas addressed and faculty posing specific studies with specific questions to be addressed. The project reported in the Science article is one of the third type. Federal agencies wanted research done about forest responses after large fires and OSU faculty proposed the study that got funded.

Some of our funding comes from state appropriations: about 7% from Education and General and about 10% from Forest Research Laboratory (FRL) general fund appropriations. About 11% of our total budget comes from a tax on timber harvested in the state, about 7% in state funds for Forestry Extension, around 12% from gifts, endowments and college forest revenues, and the remainder from federal formula funds or outreach education revenues. The FRL and Harvest Tax revenues are pooled and

allocated to research faculty and staff without regard to what they are working on. The pool is treated as general salary support, the engineers and management scientists get it and so do the ecologists, physiologists and economists. There is one exception to this and it is how we allocate the portion of the Harvest Tax dedicated to research on fish and wildlife habitats in managed forests. Fifteen percent of the Harvest Tax revenue is allocated for graduate student or faculty research assistant work through a competitive grant process that is advised by representatives of the people who pay the tax: industry foresters and biologists, family forestland owners, and state and federal agency biologists and foresters. They advise; I make the decision on what gets funded.

Like all public universities OSU has a budget crunch. I have articulated a budget strategy for our college to increase revenue streams to offset declines in state support. We have one of the nation's premier forestry colleges and I do not wish to be part of letting a top-tier program slide to second tier. So I am working with every revenue stream I can to increase financial support for our programs. Nothing is off the table and nothing is a sure bet except that if we are unsuccessful in raising revenues, our college will have 25-33% less capacity for forest resource education, research and outreach in 2010 than it had in 2000. I did not sign on in July 2000 to lead such a retreat but if that is to be the future then we need to craft a strategy for how to maintain a smaller yet still excellent program that serves the new needs of the state.

Industry Influence and Bias

Before concluding my statement I want to address one more issue I keep hearing about: whether the College of Forestry at Oregon State University is overly influenced by the forest industry or by federal forest agencies in the state and thus not objective in its work. Even before I arrived in Oregon 5 ½ years ago I heard from forestland owners and managers that the College had too little focus on the needs of forest products businesses. I heard that we were too focused on needs of federal agencies and on issues of forest science perceived to be unrelated to forest management. As the forestry arm of a land-grant university, we have a duty and an obligation to contribute to the well being of the entire forest sector in our state and nation broadly defined. We do this through how well we educate future professionals for industry, government and conservation organizations; through the relevance and strength of our research and technology development, and through the effectiveness of our outreach and extension to the citizenry at large, foresters, loggers, and mill managers in particular, and policy makers when they ask us for assistance.

The impact of our programs is indicated by some recent numbers. We have the highest enrollment in our degree programs since 1981, with 31% growth in the past 2 years. These students will become the best educated forestry workforce and leaders of the future. Our research productivity peaked at over \$12 million in grants and contracts last year. And our faculty is engaged in some of the most policy relevant work in the state and nation and in some of the most exciting science from nanotechnology to biofuels to forest roles in global climate. This is what effective land-grant universities do for a state.

Is it all industry focused? No way! Certainly some of our research tries to help Oregon's broad forest sector stay competitive and maintain our employment base as it should, but that is only part of what we do. Consider this information before you reach your conclusions about industry influence in our College.

- College of Forestry faculty played key roles in development of the Clinton-era Northwest Forest Plan, hardly to the pleasure of forest industry in the Pacific Northwest.
- One of our faculty, Dr. Norm Johnson, was a member of the so-called Gang of Four that worked to protect old growth and spotted owls prior to his having tenure; he was completely protected by the College and is now a University Distinguished Professor.
- An article by the Gang of Four in this month's issue of Conservation Biology calls for conservation of all old growth forests and trees remaining on federal forests. Our faculty co-author did not seek or need any clearance to write the article nor was his participation, which was known to College administrators, hindered in any way.
- One of our senior faculty, Dr. John Bliss, has published on the public's dislike for clearcutting in the Journal of Forestry.
- Forest Science Department Head Logan Norris's Society of American Foresters task force on productivity of the nation's forests urged an ecosystem approach and almost caused the Southern chapters of the SAF to secede.
- The report on riparian protection by the Independent Multidisciplinary Science Team (chaired at the time by Dr. Norris) called for increased riparian protection and a landscape approach.
- The College provided primary leadership for the Coastal Oregon Productivity Enhancement (COPE) Program (1987-1999), a large research and outreach education program designed to develop a better understanding of how Oregon Coast Range forests and streams could be managed for multiple resources. College faculty and graduate students made many significant contributions to our understanding of fish and wildlife ecology and habitat needs through COPE-sponsored research.
- In 2000, the College, without too much opposition by forest industry, hired a new dean who spent his 23-year U.S. Forest Service career first working to improve fisheries and wildlife habitat conservation in working forests, then leading the internal process to adopt Service-wide ecosystem management policies, and finally as a Regional Forester and Research Station Director directing the management and conservation of federal forest landscapes for more diverse values through better integration of science with management and improved

collaboration with people and communities affected by how those forests were managed.

The list could go on, and on.

People in the forest sector in Oregon care for nearly 45% of the state's land. That's 28 million acres of federal, industry, family, state, tribal, and municipal forestland and it ranges from remote wilderness areas to tree farms to forests at the urban fringe. This diverse and productive renewable natural resource supports over 85,000 well-paying jobs and generates over \$12.5 billion in annual economic activity. Forest products are more than 25% of the traded sector economy in 22 of Oregon's 36 counties, over 50% in 15 of those counties. The forest sector not only does this for the state's economy but it also produces the wood for our homes and wood-based products every Oregonian uses every day. It keeps the water clean in forested watersheds. It keeps private forestlands in forest uses against pressures to develop for other uses. It contributes to the clean air and beautiful landscapes we all enjoy.

The primary obligation of our college, as it is for any university, is to support our students and give them diverse opportunities to pursue their aspirations and learn their discipline, thus our immediate reaction when it became clear that students were being affected by actions taken by faculty and administrators. It is also vital to our mission that the College of Forestry stay well informed on the needs of Oregon's broad and diverse forest sector to ensure that our programs align with those needs. It is absolutely appropriate to receive financial support from those who expect us to meet their needs if we hold to high standards of academic freedom and responsibility. The same holds true for land-grant university programs in agriculture, engineering, pharmacy and marine resources and their related business sectors provide substantial financial support at universities across the nation. But that does not mean any party interested in how forests are managed or how wood products are made can buy the results they want whether it is the content of our courses, the findings of our research, the education and outreach we deliver, or the counsel we provide to policy makers.

We at OSU's College of Forestry have a duty and an obligation to do our part to improve the wellbeing of every responsible participant in the forest sector of this state and in turn improve the wellbeing of our forests, our citizens, our economy, and our communities. Our faculty, staff and students continue to do this despite the time and energy devoted to events of the past few months, though faculty and staff engaged in the post-fire logging study issue would like to spend less time on that and more on the work they would like to do. Everyone who cares about Oregon's forests, Oregon's economy, Oregon's environment, and Oregon's communities should be as committed to the health and vitality of every part of Oregon's forest sector as we are at Oregon State University.

I will be pleased to take your questions.