CHANGES NEEDED IN WOOD SCIENCE EDUCATION

Comments accompanying receipt of the 2003 SWST Distinguished Service Award

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To begin, I want to thank those who took the time to write the nomination statement and letters of support. I had a chance to read the nomination statement and supporting letters and was moved by the many nice things that were said therein. I thank you sincerely. I have also read through the list of previous recipients of this award and am very honored to be in the company of this select group.

It seems to me that to the extent that any of us are successful or achieve much of anything significant is almost invariably due to the direct or indirect support of others. This is certainly true in my case. This society (SWST), for instance, provides an invaluable underpinning to the profession, scientists and professionals working within it, and educational and other institutions working in related areas. I have certainly benefited professionally and otherwise from my association with SWST.

Another source of support is that which comes from employers who provide more than a paycheck. We sometimes tend to take for granted support in the form of startup funds, project seed money, project support, travel funds, and most importantly, freedom to pursue ideas or areas of support or outreach efforts. But such support is vitally important, and in my case, I am indebted to the University of Minnesota and my home college and department.

Colleagues who engage in formal collaborations or who provide less formal support on a continuing basis make an incredible difference in professional achievement. I personally owe a great deal to many people for all kinds of cooperation and support. No less important are graduate students, who can make one look really good or really otherwise. I have had the good fortune of having worked with many outstanding graduate students over the years. I will not dwell on support of family and friends other than to observe that such support is important beyond words.

It seems to me that all of these elements are essential to weaving together the fabric of a career in which at least a few things along the way might be considered as a success. In any event, I again thank you all very much for bestowing this honor.

I was told that I was expected to say something extremely wise and philosophical on this occasion—but that I had extreme latitude in what I might do. So, after thinking about this, I decided to skip the wise and philosophical part and focus on the concept of wide latitude. I would like, then, to share a few brief observations about the state of the profession. There is, I believe, cause for concern.

On the *positive* side:

- Many new and exciting research directions are emerging:
 - -New products
 - -Product and process improvements
 - -Product durability enhancements.
- A number of talented young scientists and professionals are in the field.
- Abundant employment opportunities continue to characterize the field.
- It is an expanding field internationally.

On the negative side, however:

- Wood science is a static or contracting field in North America.
- Forest products and wood science are politically incorrect in many circles.
- The profession is linked within most insti-

tutions to colleges of forestry in which traditional curricula are also in decline, in which environmentally oriented curricula have become dominant, and in which wood science and forest products faculty and students are often viewed as anti-environmental.

In the College of Natural Resources where I work, students within our Natural Resources curriculum often refer to fellow students who transfer into the Wood and Paper Science curriculum as those "who have gone over to the dark side" ... and they aren't kidding.

And so, there is cause for concern—not cause for despair, but cause for genuine concern, and a need for forthright planning and action:

There is more need than ever for strong wood science programs. However, it is increasingly obvious that wood science-oriented programs will have to evolve so as to attract more students and to better align with emerging realities. Programs will, I believe, have to move more closely to a materials science orientation, meaning perhaps more of an engineering orientation. Different alliances may also be needed within academic institutions, in some instances translating to transfers out of colleges in which wood science programs have traditionally been located.

Research and education will increasingly need to focus on issues and technologies related to rapidly grown plantation wood as well as agrifiber and other non-wood fiber. Clark Binkley, Managing Director and CEO of Hancock Timber Resource Group, recently discussed trends in fast-growing tree plantations in a speech to the Great Lakes Forest Alliance, indicating that his analyses suggest that within only several decades the volume of wood harvested from natural forests around the world will be roughly equivalent to only one-half the current annual harvest in North America and in Europe. If he is right, this will significantly alter the kinds of challenges faced by the wood-using industry and by the North American wood-using industry in particular.

Research and education must also shift more toward composite materials development, production, and use and away from more traditional subject areas. In step with the changes that are coming, students and professors alike will increasingly need foreign language skills—i.e., Portuguese, Spanish, Chinese,

I could go on, but suffice it to say that in my view, significant changes are in the wind, and the profession must proactively react to remain relevant.

Thanks for listening!