

A SPECIAL SERIES
FROM **NeLMA**

5 QUESTIONS WITH MSU'S DR. RUBIN SHMULSKY

BY JEFF EASTERLING

WE SAT DOWN with Dr. Rubin Shmulsky, Mississippi State University.

1 Tell us who you are and what you do at Mississippi State.

At Mississippi State University, my role is that of professor and department head of the Sustainable Bioproducts (formerly Forest Products) Department. As professors, my colleagues and I teach, perform research, and provide technical assistance/extension outreach to forest products-related stakeholders. This department, and Mississippi State University, are in the heart of the nation's pine and mixed hardwood timber basket. For people who are passionate about sustainable forestry and wood products, this is among the best places on earth to work.

2 What does the Department of Sustainable Bioproducts do?

The Sustainable Bioproducts Department seeks to educate the next generation of professionals regarding how to glean as much value as possible from the nation's timber resource. We provide formal education for college students as well as short course- and workshop-type training opportunities for working people, either online or in-person. We try to meet people where they are. When we can make small accommodations regarding content delivery timing and location, we see much greater



Dr. Rubin Shmulsky

participation, particularly at the national level. We are also a strong research laboratory with targeted research focusing primarily on lumber yield, properties, and value; wood protection and preservation; automated wood identification; engineered wood composites; and nondestructive evaluation. The

Gulf South part of the country is home to some of the nation's most productive pine and hardwood forests. To keep this land base forested, landowners need robust and perpetual markets. Our personnel are passionate about these values. I'm very fortunate to get to work every day with people who share a deep commitment to these goals.

3 What challenges do you see in the lumber industry right now?

One major challenge is rising interest rates. Lumber is routinely the largest market for timber and lumber markets are driven by housing starts. As interest rates rise, housing starts typically flatten.

Two other major challenges are markets for small diameter (12- to 15-year-old) pine timber and structural products from underutilized hardwoods. Small diameter pine trees are produced as foresters seek to grow larger high-grade trees for sawtimber. Previously, these small trees were converted to pulp and paper. With increasing digital commu-

nications and less demand for paper, we are challenged with developing economically viable products and markets from these small trees.

The other big challenge is developing structural markets for hardwoods. NeLMA plays a key role in this effort because they write the rules for structurally graded oak, maple, hickory, and other hardwoods. As an example of market development, we are seeing a national effort to more thoughtfully evaluate the strength and stiffness of hardwood timbers that go into industrial matting—we are excited about the future opportunities.

4 What lumber industry trends is your department watching?

One of the most promising trends is that of nondestructive evaluation. This technology lets one assess the strength and stiffness of a piece of wood—whether new or in-service. For railroad ties, utility poles, building products, engineered beams, other industrial products, this technology is key with respect to capturing the highest possible value at the time of production and for determining the point at which a wood member, structure, or building should be taken out of service and replaced. Nondestructive evaluation thus improves both value and safety. Our scientists get a great deal of satisfaction from knowing they are helping address national housing and infrastructure issues.

Another major issue on the horizon is the increase of mass-timber construction. With larger, stronger