

## Marketing & Industry Development Program News

### **Grant Awarded for Employment, Development Study; Research on Environmental Certification Finished**

Dr. Richard Vlosky was awarded a \$19,000 grant from the TVA Rural Studies Program to study employment training and development needs in the value-added wood products industry in Louisiana. Previous research indicates that there is an unsatisfied need for such training. The first step in this project is to identify specifically what employers are looking for in training and then to develop curricula and recommendations for policymakers that can impact program development. The project is scheduled for completion in January 2000.

A U.S. Forest Service funded study, titled "Environmental Certification: Alternative Strategies for Non-Industrial Private Forest Landowners in the Southern United States," has recently been completed by Dr. Richard Vlosky. Forestry certification is one of the most pressing issues facing global forest-based industries. Certification exists to provide uniform and scientific guidelines for assessing the relative sustainability of various timber-producing operations and to provide an independently verified basis for potential market place claims. The study of 1,000 forestland owners in Louisiana identifies non-industrial private forest landowner attitudes and beliefs toward environmental certification. This information will help to identify alternative strategies to third-party certification as well as help landowners develop planning and marketing tools for those who desire involvement in certifying their forest resources.

The LFPL home page covers a great deal of information in an easy-to-use format – publications, the newest as well as the ones you may have missed in the past; a listing of the research projects currently underway at the Lab and who is conducting them; brief biographies of our faculty and a listing of current graduate students and the major professors with whom they are working; the Graduate Handbook, with all the information a would-be student needs; and a list of forest products links you may not have found. <http://www.lfpl.forestry.lsu.edu>



### **Interim Director Receives Thanks**

Our thanks to Dr. Norwin E. Linnartz for stepping in as the Interim Director of the School of Forestry, Wildlife, & Fisheries for the past 16 months. Dr. Linnartz, a former professor of silviculture at the school, retired on April 1, 1992. He was asked to come back to lead the school in October, 1997 and graciously agreed. We appreciate his commitment to the school. We are glad he will not be leaving us quickly. Dr. Linnartz will be teaching Hardwood Silviculture this spring.



Overlaid panels in either 3-ply or 5-ply construction with a thick core and thin face overlays are widely used in the furniture industry as table tops, door panels, etc. These types of panels sometimes warp unexpectedly and severely after having left the manufacturing plant or dealer's showroom in perfectly flat condition. Such warping cannot be easily rectified by the application of cleats or other reinforcing members because the forces that cause the warping are often of considerable magnitude. Severe warping of finished products may well damage a company's reputation and even lead to lawsuits against the manufacturer.

There is a sound technological basis for such warping to occur. The potential to warp is often built into the panel during manufacture. This potential may be triggered by changes in the moisture content of the panel

components in response to long term variations of the relative humidity of the air. In particular, warping is almost always caused by

differences in shrinkage or swelling from one side of the panel to the other. This imbalance in shrinkage or swelling can be caused by panel structure imbalance, that is a panel constructed with different face and back materials. It can also be caused by moisture penetrating into the panel unevenly from the panel face and back. Sometimes a combination of both is found.

A technical report on how to analyze warping in overlaid furniture panels is available at the LFPL. In the report, the mathematical relations between warp and layer properties of typical furniture panels are outlined and used in developing in a user-friendly computer program that can be executed on any IBM compatible computer. As an example in the report, the program is used to analyze a practical problem - a warped 5-ply cabinet door. The objective of the report is to point out the relative importance of the various technological factors involved and to encourage the manufacturer to make use of the relatively simple methods of analysis in design and manufacture of panels. It is hoped that this will foster a better understanding of the technology of furniture panel design and reduce panel warping with severe negative impact on the image of laminated furniture panels. For a copy of the report and the computer program, please call Dr. Qinglin Wu at (225) 388-8369.

***Warp in Overlaid Furniture Panels: Causes & Analysis***  
**Technical Report Available from Forest Products Lab**

## Third Annual 3-Day Lumber Drying Workshop to be Held February 24-26 in Baton Rouge

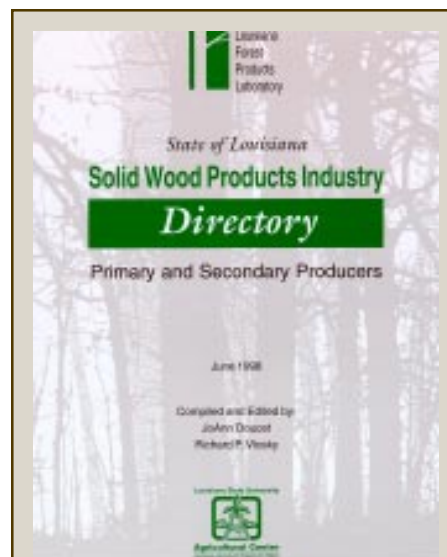
The Louisiana Cooperative Extension Service and the Louisiana Forest Products Laboratory will be co-hosting the third annual comprehensive 3-day lumber drying workshop, "Drying Lumber for Quality and Profit." The workshop will be held on February 24-26, 1999 at the LSU School of Forestry, Wildlife & Fisheries. This workshop will cover the entire lumber drying process from start to finish. Some topics to be covered include wood-water relationships, steam kilns/ operation, dehumidification drying, moisture meters, kiln control principles, wood anatomy, wood shrinkage, air drying and stain, drying stress/ degrade, troubleshooting, steam basics and steam traps, statistical process control, and much more. Instructors from the Louisiana Cooperative Extension Service and the Louisiana Forest Products Laboratory, as well as industry representatives, will share their years of drying knowledge. Participants will receive a binder of current lumber drying reports, the Dry Kiln Operator's Manual, banquet, refreshments, and a lot of hands-on experience and guidance. For more information, contact Dr. Todd Shupe at (225) 388-4087 or Dr. Qinglin Wu (225) 388-4255.

### Hardwood Workshop Set for Louisiana Tech

The LFPL at Ruston will again be one of the cooperators for the Louisiana Tech University School of Forestry's Annual Hardwood Log, Lumber, and Tree Grading Workshop. This workshop is designed to present a working knowledge of the NHLA hardwood lumber grading rules and the USDA Forest Service log grading system and its relationship to lumber grades and product utilization.

In addition to earning **22.5 CFE credits** (Category I), attendees will learn to recognize external defect indicators and their importance in hardwood logs, as well as the basics of grading hardwood lumber. The application of log grading to standing timber will also be covered. The course is designed to assist those involved in the hardwood lumber industry (mill owners, sawyers, edger operators, inspectors, sales and office personnel), those involved in timber management (forestry technicians, foresters, refuge managers, and private landowners), and other interested persons.

The workshop is scheduled for March 16-19, 1999 in Ruston. Further information can be obtained from Dr. Mark D. Gibson, Workshop Coordinator, by calling (318) 257-3392, sending an email to mgibson@latech.edu, or writing to the School of Forestry, Louisiana Tech University, P.O. Box 10138, Ruston, LA 71272-0045.



### New Solid Wood Products Industry Directory has been Published

The new *State of Louisiana Solid Wood Products Industry Directory* of primary and secondary producers has been published. Directories have been mailed to the primary and secondary producers in Louisiana.

Anyone requesting a copy of the directory should contact

JoAnn Doucet at  
(225) 388-4157  
or Pat Lefeaux at  
(225) 388-4255.

## Calendar of Events and Workshops

- February 24-26** **Drying Lumber for Quality and Profit.** The third annual three-day lumber drying workshop will be held at LSU in the School of Forestry, Wildlife & Fisheries building. If you are interested, call Dr. Todd Shupe at (225) 388-4087 or Dr. Qinglin Wu at (225) 388-8369.
- March 16-19** **Hardwood Log, Lumber, and Tree Grading Workshop.** To be held at Louisiana Tech University, Ruston, Louisiana. Earn 22.5 CFE credits (Category I). For more information contact Mark Gibson, Workshop Coordinator, at (318) 257-3392.
- January - April** **Louisiana Furnishings Industry Association (LFIA)** holds regular monthly meetings at the Ponchatoula headquarters. If you are interested, call LFIA at (504) 386-0471 for the date and time.

 Louisiana  
Forest  
Products  
Laboratory

### LFPL FACULTY & STAFF LSU

W. Ramsay Smith - Program Leader  
Niels de Hoop - Environmental and Safety  
Rich Vlosky - Forest Products Marketing  
Qinglin Wu - Wood Processing  
Elvin T. Choong - Wood Physics  
Pat Lefeaux - Chief Clerk II  
JoAnn Doucet - Research Associate

### LA Tech

Mark Gibson - Material Properties  
George Grozdits - Research Associate

**Louisiana State University Agricultural Center**  
William B. Richardson, Chancellor  
**Louisiana Agricultural Experiment Station**  
R. Larry Rogers, Vice Chancellor and Director  
**School of Forestry, Wildlife & Fisheries**  
Norwin E. Linnartz, Acting Director  
**Louisiana Forest Products Laboratory**  
W. Ramsay Smith, Program Leader  
Forestry, Wildlife and Fisheries Building  
Baton Rouge, LA 70803-6202  
TEL (504) 388-4155 FAX (504) 388-4251  
<http://www.lfpl.forestry.lsu.edu>  
LFPL Newsletter Graphic Design, Barbara Corns

*Louisiana State University Agricultural Center provides equal opportunities in programs and employment.*

 Louisiana  
Forest  
Products  
Laboratory

Louisiana State University  
Forestry, Wildlife & Fisheries Building  
Baton Rouge, LA 70803-6202

**Non-profit Org.**  
U.S. Postage  
**PAID**  
Permit No.733  
Baton Rouge, LA