

INSIDE VT WOOD



News from Audrey Zink-Sharp, Interim Department Head

• I am extremely pleased to announce that **Dr. Barry Goodell** will be joining us as the new Department Head on January 17, 2011. Prior to moving to Virginia Tech, Dr. Goodell was a Professor and Project Director at the University of Maine, Orono, ME, where he was also a cooperating professor in the Biological and Chemical Engineering Department. Dr. Goodell and his wife, Dr. Jody Jellison, who will become the new Associate Director of the Virginia Agricultural Experiment Station, will be moving to Blacksburg in January. We extend our heartiest **welcome** to Dr. Goodell, we are very glad he will be joining Virginia Tech soon.

New WS/FP department head, Dr. Barry Goodell



• **Fall Commencement Ceremonies to be held Friday, December 17, 2010.** The University [undergraduate] Commencement Ceremony is scheduled to start at 11:00 a.m. in Cassell Coliseum. The Graduate School Ceremony will start at 3:00 p.m. also in Cassell Coliseum. We have several graduate students receiving their degrees this fall, so I hope everyone can join in this recognition and celebration of their accomplishments. Summer and Fall 2010 completions include Jesse Paris, Josh Hosen, Richard Johnson, Dakai Ren, Tim Stuess, Travis Church, and Christian Fricke. Our congratulations to these students.

• **Wood Science Graduate Student Awards available** - the pages at the end of this document show information related to graduate student awards available in our department, college, and university. The first document describes the nomination and selection process for CNRE and VT awards and the second outlines the process and criteria for the Youngs Scientific Writing Award. If you are interested in being considered for the department's A.B. Massey award or the 2010-11 CNRE Outstanding Graduate Student, you should submit a cover letter, transcript, and resume to the Department Head's office by **December 31, 2010**. You may wish to contact your major professor as well for a nomination letter, but this is not required. Students are eligible for the 2010-2011 awards if they were enrolled at any time during that academic year. *Please see the guidelines at the end of this newsletter.*

• Our Fall 2010 **Undergraduate Scholarship Reception and Award Ceremony** was held November 10, 2010, at The Inn at Virginia Tech. Twenty-five undergraduate students in the Wood Science and Forest Products major received scholarship certificates at this award ceremony. Our guest speaker for the event was Mr. Sandy Bennett, President of Blue Ridge Timberwrights, Christiansburg, Virginia. Mr. Bennett described some of the more colorful and memorable events in his 30 year history in the timberwright and timber frame business. He also provided illustrations of some of the challenging wood structure, timber drying, and design opportunities that he had encountered in his career. Mrs. Marianne Stern, Blacksburg, VA, and Ken Morgan and David Billings, Morgan Lumber Company, Red Oak, Virginia, were also with us for the award ceremony. We are very grateful to all our scholarship donors for their generosity and for providing such vital support for our students. Pictures and a listing of our 2010-2011 scholarship winners are on the following pages.



Fall 2010 Scholarships	Recipient
Anderson-Tully Lumber Company Management Scholarship	Joseph Patrick Smith
Columbia Forest Products Company Scholar	James Lassiter
Frank Miller Lumber Company Freshman Scholarship	Thomas Larrowe
Frank Miller Lumber Company Freshman Scholarship	Tyler Matusevich
Hardwood Manufacturers Association Scholarship	Coleman Burch
Victor Clay Barringer Endowed Scholarship	Coleman Burch
Victor Clay Barringer Endowed Scholarship	Rosemary Masser
Victor Clay Barringer Endowed Scholarship	Scott McDonald
Wood Component Manufacturers Scholarship	Scott McDonald
Wood Component Manufacturers Scholarship	Anthony Muscatello
Center for Forest Products Business	Christopher Rider
Center for Forest Products Business	William J. Rand
Morgan Lumber Company Scholarship	William J. Rand
Virginia Forest Products Association Scholarship	Robert Falco
Virginia Forest Products Association Scholarship	William Conan Cook
Appalachian Hardwood Manufacturers Inc. Scholarship	Shawn Crawford
Boehm-Madisen Lumber Company Scholarship	Shawn Crawford
Lora and Martin Kelley Family and Center for Forest Products Business Scholarship	Andrew Seufert
Steven A. Sinclair Scholarship	Russell Carr
Steven A. Sinclair Scholarship	Nicholas D'Amico
Steven A. Sinclair Scholarship	William Eades
Bryan W. Graeser Memorial Scholarship	Christopher Rider
Bryan W. Graeser Memorial Scholarship	Jeffrey Dolan
E.G. Stern and J. Stern Fromberg Memorial Scholarship	Michael Clifton
E.G. Stern and J. Stern Fromberg Memorial Scholarship	Courtney Kepley
G. Scott Francis Scholarship	Courtney Kepley
G. Scott Francis Scholarship	Rosemary Masser
George and Mary E. Ragsdale Scholarship	Coleman Burch
George and Mary E. Ragsdale Scholarship	Justin Morris
George and Mary E. Ragsdale Scholarship	Scott McDonald
George and Mary E. Ragsdale Scholarship	Andrew Seufert
Morgan Lumber Company Management Team Scholarship	Andrew Seufert
Morgan Lumber Company Management Team Scholarship	Khristopher Beagley
Geza Ifju Scholarship in Wood Science and Forest Products	Kevin Roberts
Southeastern Dry Kiln Club Scholars Award	Kyra Schaeffer



Fall 2010 Undergraduate Scholarship recipients, L to R front row: Courtney Kepley, Kyra Schaeffer, Rosemary Masser; middle row: Chris Rider, Scott McDonald, Anthony Muscatello, Patrick Smith, Tyler Matusevich; back row: Cole Burch, Russell Carr, Justin Morris, Jeffrey Dolan, Conan Cook, Will Rand, Shawn Crawford, Andrew Seufert, James Lassiter, and Michael Clifton.



Mr. Sandy Bennett, guest speaker, 2010 Scholarship Award Ceremony, describing a timber frame home and pool house built by his company, Blue Ridge Timberwrights.

Mr. Ken Morgan (left) presenting the Morgan Lumber Company Scholarship to Will Rand during the 2010 Scholarship Award Ceremony.



More News in the Department



2010 Eastman Chemical Company sponsors a Graduate Student and Post Doctoral Associate Research Symposium November 3, 2010

The 2010 Eastman research symposium was held to recognize outstanding research by students and associates in the Wood Science and Forest Products and Macromolecular Science and Engineering programs at Virginia Tech. Through these awards, Eastman Chemical Company sought to promote research in cellulose chemistry, biopolymers, biomass processing, and related areas. We are very grateful to Laurel Reitfort, Wesley McConnell, and the Eastman Chemical Company for their support of our program and graduate students. A judging panel composed of faculty members from VT and technology representatives from Eastman Chemical Company selected several award winners at the symposium.

*First place in the poster competition was awarded by Wesley McConnell and Laurel Reitfort, Eastman Chemical to **Junia Pereira** (far left) for her poster on clarithromycin solubility enhancement by preparation of amorphous CMCAB nanoparticles. Dr. Kevin Edgar is Junia's major professor. Photos by Will Pfeil.*



*First place for an oral presentation was awarded by Wesley McConnell and Laurel Reitfort to **Karthik Pillai** (far left) for his presentation on creation of bottom-up lignocellulosic composites by layer-by-layer assembly of isolated wood polymers. Karthik is advised by Dr. Scott Rennecker.*



Dakai Ren (not pictured) was awarded second place in the oral presentation category for his talk on investigation of the weather durability of moisture-cure polyurethane wood adhesives. Dakai is advised by Dr. Chip Frazier.



Participants at the 2010 Eastman Chemical Company Graduate Student and Post Doctoral Associate Research Symposium



Department held its first Graduate Research Symposium

Maren Roman

On November 12, 2010, the Department of Wood Science and Forest Products held its first Graduate Research Symposium. Seven graduate students presented their research on topics as diverse as best innovation practices, lean manufacturing and management practices, value-added hardwood products costing analysis, marketing opportunities in Central America, and non-conforming engineered wood product installations in residential construction. In the audience were faculty members, staff members, and graduate students from the department and representatives from Timber Truss Housing Systems, Inc. The symposium was sponsored by the Center for Forest Business, the Center for Unit Load Design, the College of Natural Resources and Environment, the Department of Wood Science and Forest Products, and the Hardwood Market Report.

2010 Wood Science and Forest Products Graduate Research Symposium presenters and faculty advisor, pictured from left to right, Bryan Stinnett, Chao Wang, Adrien Andersch, Dr. Maren Roman (symposium faculty advisor), Christian Fricke, Scott Lyon, and Johanna Madrigal. Not pictured is John Bouldin. Photo by Will Pfeil.



New River Cleanup 2010

James Lassiter

The Institute of Packaging Professionals and the Forest Products Club participate in the annual New River cleanup every year. Fall 2010 was once again a successful cleanup, taking a little over an hour. The river cleanup is just one of a few community services that the clubs take part in.



Pictured from left to right, Tomas Lima, Kyle Lownes, William Cook, Ellie May (the puppy), Courtney Kepley, Vaibhav Batheja, Jandir Santin, and Jim Bisha. Not pictured, James Lassiter (taking picture).



Center for Innovation-based Manufacturing launched its first workshop

Henry Quesada

On November 11, the Center for Innovation-based Manufacturing (CibM) presented its first workshop on Innovation-based Manufacturing. The workshop was organized by Dr. Henry Quesada, assistant professor of business and manufacturing processes in the Department of Wood Science and Forest Products and member of the CibM. The CibM was created with the goal to help local industries to solve current manufacturing issues and to help the university commercialize new technologies that stem out research projects. The CibM is supported by the Institute for Critical Technology & Applied Science (ICTAS).

Speakers at the workshop included Dr. Roop Mahajan, Director of ICTAS (Institute for Critical Technology & Applied Science), Dr. Darrene Hackler, VP at the International Economic Development Council, Dr. Allister James, Senior Expert Engineer from Siemens Energy, Dr. Julia Lane from the National Science Foundation, and Mr. Jose Vicente-Gomila from the Polytechnic Institute of Valencia in Spain and co-founder of TRIZ XXI. The morning session of the workshop focused on discussing the basics behind innovation-based manufacturing, the relationship of innovation with economic development, innovation and science of innovation policy, and examples of innovation-based manufacturing in action.



Participants in the first Innovation-based Manufacturing workshop ask questions to the panelist at the end of the morning session.

The afternoon session was focused on innovation tools such as TRIZ, innovation monitoring, and innovation intelligence. The workshop was attended by 45 participants and it was held at the Inn at Virginia Tech. According to current research from Dr. Quesada's group, the wood products industry sector needs to focus more on innovative ways to improve their manufacturing process and innovation-based manufacturing opens enormous potential for companies in this industry sector to increase their competitiveness.

Opportunities for Appalachian Forest Products in Guatemala and El Salvador

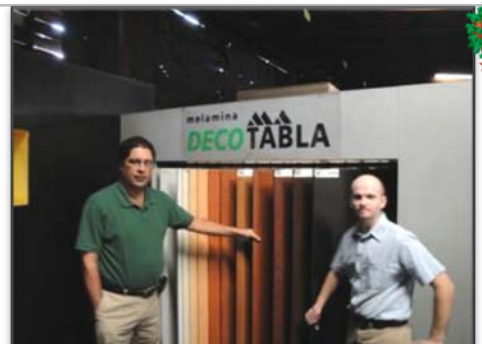
Scott Lyon and Henry Quesada

From November 17-24, 2010, Scott Lyon, graduate research assistant and Dr. Henry Quesada visited 8 forest product importers, 2 non-government organizations, and 2 governmental forestry agencies in Guatemala and El Salvador. The researchers were examining the forest products markets in these countries to identify opportunities for Appalachian forest products companies. The researchers used a structured interview to gain valuable information about the companies and organizations. The objectives of the study were to: (1) identify main competitors of forest product companies in Central American countries; (2) investigate distribution channels of forest products; and (3) investigate local production, demand, and policy of forest products in Central American countries.

The researchers found that restrictive regulations in these countries may create an opportunity for Appalachian forest products. The Guatemalan government requires permission and payment of taxes before harvesting which has caused a decrease of timber harvested. In El Salvador, the government is taking a stand to prevent illegal harvesting, therefore; wood processing companies will be required to prove the legality of their raw materials beginning in 2011. This new regulation will force wood products companies to look elsewhere for raw materials because the legal sources in El Salvador are very limited.

In both countries, furniture constitutes a large portion of wood products production. Because the majority of hardwoods used in furniture production are reddish to dark brown in color, black cherry (*Prunus*

serotina) and black walnut (*Juglans nigra*) from the Appalachian region may substitute for the species currently used. Many of the companies interviewed import a variety of building materials from North and South America, including: plywood, OSB, MDF, and softwood lumber. There appears to be a large demand for wood from international sources with abundant raw materials and efficient transportation systems to deliver products. The Appalachian forest products industry may have the opportunity to expand their markets into Central America. This marketing research project is funded by the USDA Federal State Marketing Improvement Program (FSMIP).



Mr. Michael Mussak, left, General Manager of Maderas el Alto, shows Scott Lyon composite products that his company produces in the city of Zacapa, Guatemala.

Virginia Tech and University of Minnesota Duluth Faculty Conduct Industry Workshop Video Conference

Earl Kline
On November 17, 2010, Virginia Tech and University of Minnesota Duluth Faculty joined together to conduct an interactive video conferencing workshop on Total Productive Maintenance (TPM). TPM is a proven continuous improvement strategy to help wood products companies increase their equipment reliability, minimize production downtime, and improve overall productivity. VT Wood Science and Forest Products faculty Earl Kline and Brian Bond facilitated a group of 11 industry participants and students at the Southern Virginia Higher Education Center in South Boston, VA. Over 1200 miles away, University of Minnesota Duluth faculty Brian Brashaw and Bob Vatalaro facilitated a concurrent workshop to a group of 9 industry participants at the Natural Resources Research Institute in Duluth, MN. The video conferencing allowed facilitators at both locations to have specific training roles and then each location used the same hands-on training exercises to reinforce concepts introduced by instructors. The innovative take-away from this workshop is that industry participants and instructors at different locations can be linked together effectively to learn new methods and to share hands-on experiences that can lead to business improvements. This workshop was supported by the USDA Forest Service's Wood Education and Resource Center (WERC) to assist wood manufacturing businesses to improve their operations and productivity.

Virginia Tech faculty teach Lean in New England

Urs Buehlmann

Virginia Tech continued its involvement in a series of wood products workshops in the Northeast this fall. Earlier this year, VT Wood Science and Forest Products faculty participated in marketing (Tom Hammett) and technology (Dan Hindman) related workshops in the Northeast. This fall, VT Wood Science and Forest Products faculty Earl Kline and Urs Buehlmann with Jeff Howe, Dovetail Partners, conducted Lean workshops in Montpelier, VT, Glens Falls, NY, Utica, NY, Augusta, ME, and Concord, NH with a combined total of more than 120 participants from the wood industry. The workshops, organized by the Regional Wood Products Consortium—an initiative between Sustainable Forest Futures (SFF) and the wood products manufacturing industry in Maine, New Hampshire, Vermont, and northern New York and supported by the USDA Forest Service's Wood Education and Resource Center (WERC), were part of a series of workshops intended to help wood manufacturing businesses to improve their operations and to discover new market opportunities. Each workshop offered four sections addressing Lean, in particular: 1) types of wastes, 2) benefits of Lean, 3) Lean tools, and 4) creating a culture of change. When closing the workshops, Collin Miller, Director of Wood Products Initiatives, encouraged participants to ask for the Regional Wood Products Consortium's support should they consider lean transformation initiatives as the Consortium is able to contribute up to \$7,500 to a company's costs incurred in such an undertaking.

A copy of the workshop material is available at <http://www.foresteconomy.org/programs/wood-products/workshops/lean-manufacturing-workshops/>. A workshop on mass customization is planned for April 2011 and will again involve Virginia Tech faculty.



Why Lean? Lean@Virginia Tech conducts Lean Workshop in Richmond, VA

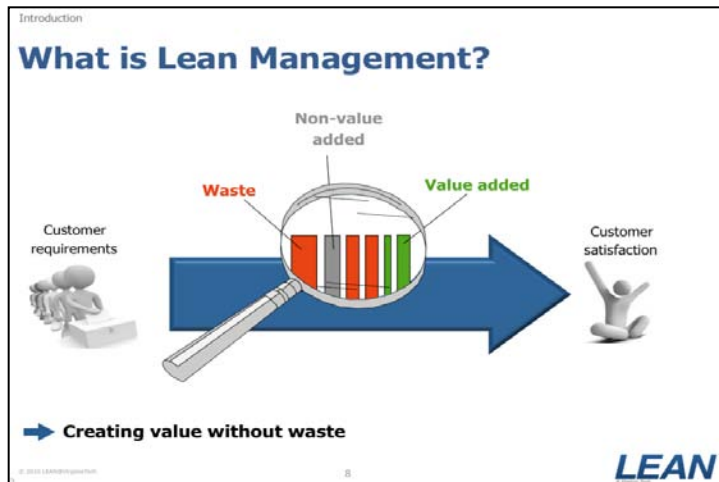
Urs Buehlmann

Lean@Virginia Tech (Adrienn Andersch, Yu (Angela) Zhou, Judith Franzen, Christian Fricke, Mathias Schmitt, Chao Wang, Laszlo Horvath, and Urs Buehlmann) conducted a two-day workshop entitled "Why Lean" on Nov. 22 and 23, 2010 in Richmond, VA. Nineteen participants from industry and academia learned about the power of Lean and were introduced to tools that support Lean practices. Guest-speaker Wiebe Nijdam, Lean Champion at the Lean Instituut in the Netherlands and member of the Lean Global Network (LGN), opened the workshop with a presentation about the power of Lean and a discussion of potential pitfalls when implementing Lean. A session entitled "What keeps you awake at night?" in which participants shared their problems (e.g., things that keep them awake at night) followed next. This session allowed the Lean@Virginia Tech team to compile a list of problems that industry-participants face. Workshop participants were promised that potential solutions would be discussed after more lean knowledge was learned in the workshop. To illustrate the power of Lean, the Lean@Virginia Tech team then conducted a simulation with the participants in which paper boats had to be "built." In this first iteration of a total of three simulations, a traditional push production set-up was used and problems like low productivity, high inventory, quality problems, and uneven workloads became evident. In the picture below is Matt Black, a graduate from the Department of Wood Science and Forest Products in 2010, and now employed at Moulding and Millwork Corp. in their Richmond, VA, manufacturing facility. Matt is in charge of raw material preparation.

Matt Black, 2010 graduate from the Department of Wood Science and Forest Products preparing materials for the workshop simulation.



The simulation taught participants how to improve inefficient ways of production, and participants were then taught "Principles of Lean," covering subjects such as Waste, Value-Added, Continuous Improvement, and other topics relevant to Lean implementation and Value Stream Mapping. The picture below shows one slide from this session, explaining the concepts of value-added and waste.



Using concepts learned in this teaching session, participants then came up with a new production set-up and, in a subsequent simulation run, improved their productivity by 100 percent and decreased work-in-



process inventory (WIP) by 700 percent. Encouraged by these improvements, Lean@Virginia Tech team members then guided the workshop participants through the process of creating a "Future State" Value Stream Map, depicting a near-ideal way of producing paper boats. In a third simulation run, this solution was implemented and further improvements in productivity, quality, and inventory were achieved. A final session discussing solutions to "What keeps you awake at night?" problems concluded this two day workshop. Participants left with numerous new ideas as to what and how to change in their operation and one participant stated: "The team did an outstanding job in teaching the necessary background material on Lean and to demonstrate the power of Lean through their simulation exercises."

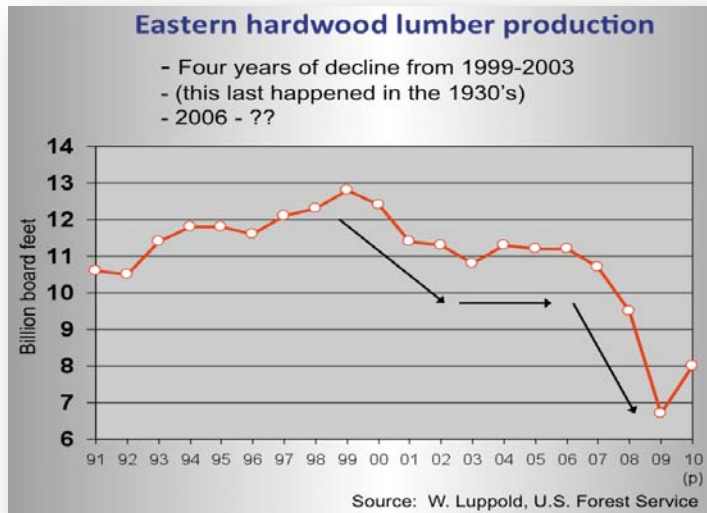
The Lean@Virginia Tech Team is currently working on their next workshop, planned for March 2011, which will be dealing with *Lean Administration*. For more information see www.vtlean.org or email info@vtlean.org.

Virginia Tech conducts lumber yield workshop

Urs Buehlmann

The Department of Wood Science and Forest Products on Nov. 8, 2010 conducted a lumber yield and operation efficiency workshop in collaboration with the USDA Forest Service's Wood Education and Resource Center (WERC) in Princeton, WV. The workshop, sponsored by the USDA Forest Service's Wood Education and Resource Center (WERC), Virginia Cooperative Extension, and Virginia Tech was taught by Ed Thomas, computer scientist at the USDA Forest Service, Princeton, WV lab and Urs Buehlmann, Associate Professor at the Department of Wood Science and Forest Products at Virginia Tech. The workshop entitled "ROMI 3.1 - Improve lumber yield and operation efficiency" aspired to educate the 16 participants in ways to improve their lumber yield and operational efficiency using the USDA Forest Service's ROMI rough mill simulation program.

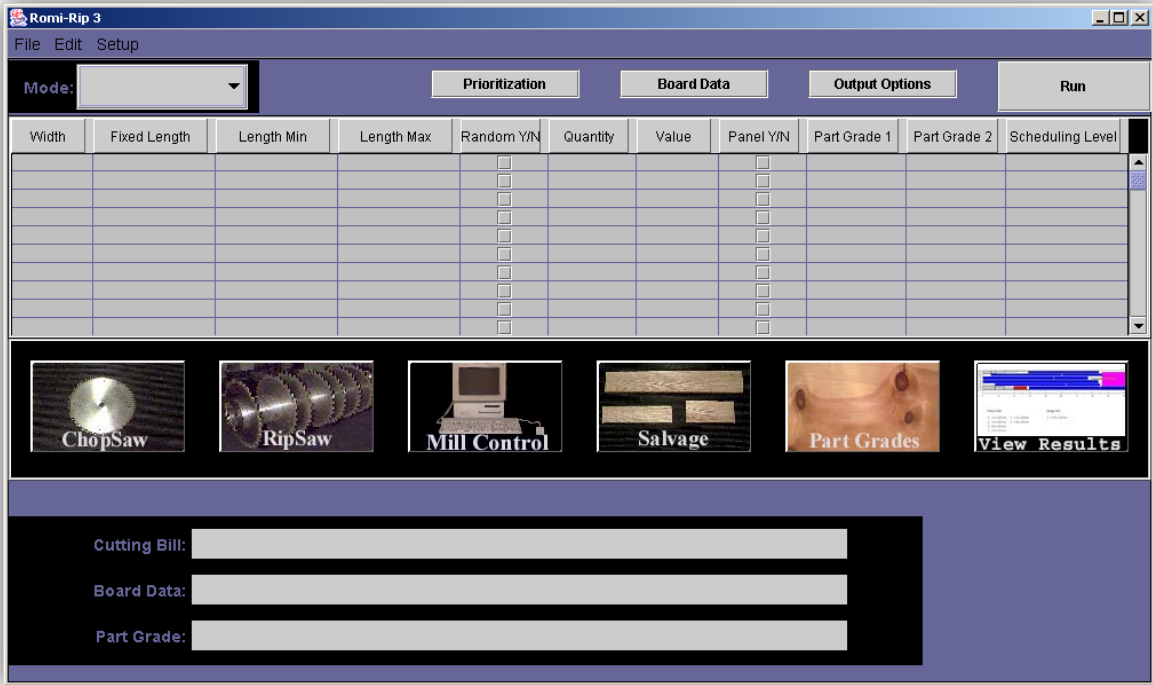
After Ed Cesa, Deputy Director of the WERC, welcomed participants to WERC's facilities, participants first were updated on the harsh realities of the hardwood lumber business through a review of the state of the hardwood lumber industry in 2010. As an example, the picture below shows the decline in hardwood lumber production over the past few years. However, as it appears, the industry has hit bottom and production seems to recover.



Reviewing facts on lumber yield and operational efficiency was next on the program. Topics covered included factors affecting yield and operational performance; cutting bills and yield; lumber quality, yield and productivity; least-cost lumber grade-mix selection; color and character-marks (defects); marker



accuracy; and the future of rough mills. The participants then installed a free copy of ROMI 3.1 on their laptop and, in an interactive session, the cut-up of lumber in rough mills was simulated. Pictured below is the main interface of ROMI 3.1.



Main interface of the USDA Forest Service's ROMI rough mill simulator.

Participants then had time to simulate the cut-up of lumber in a setting similar to their own rough mill while having the instructors provide assistance when needed. Phil Araman, USDA Forest Service team leader at the USDA Forest Service research station in Blacksburg, VA then introduced the topic of lumber scanning to the participants before the final discussion session was concluded with remarks by Steve Milauskas, Director of the USDA Forest Service's Wood Education and Resource Center (WERC).

ROMI 3.1 is a free software provided by the USDA Forest Service. Copies are available from Ed Thomas at ethomas@fs.fed.us or 304.431.2324. Copies of the workshop material can be ordered for free from Urs Buehlmann at buehlmann@gmail.com or 540.231. 9759.

Class participates in Green Living and Energy Expo, Roanoke, VA
Tom Hammett

For the second year in a row, Dr. Tom Hammett has organized a booth at the Green Living and Energy Expo at the Civic Center in Roanoke and organized a field trip there for students in his class , WOOD 3004 Sustainable Nature-Based Enterprises (Green Business) course. Students in the class come from our department and several majors across campus including, agricultural economics, civil engineering, and environmental conservation and policy. At the Expo, students were assigned to interview exhibitors and report on their organization’s efforts to become green.

Recently, Dr. Dan Hindman organized and taught a Green Building Systems course, WOOD 3324. He and Dr. Hammett used the Expo booth to showcase their courses in sustainability to the vendors and the general public which came from a broad region covering parts of Virginia, West Virginia, and North Carolina. The booth highlighted their research and outreach efforts in recycling, sustainable business planning, certification, and energy conservation. A picture of the class at the Expo is on the next page.



Students from Dr. Tom Hammett's (2nd from right) green business class gather at the CNRE booth organized by Dr. Dan Hindman and Hammett at the 2010 Green Living and Energy Expo on December 3rd in Roanoke.

Students benefit from conducting research and peer-review

Tom Hammett

Dr. Tom Hammett organized a daylong session of technical presentations for his graduate class at James Madison University on December 4th. His class, NR 5114 Global Issues in Natural Resources, examines key issues affecting sustainable management and utilization of natural resources. During the semester, each student develops a research paper in the format suitable to be peer reviewed and accepted by a technical journal. The students meet once a week through videoconference and online throughout the semester. During the semester each student develops a concept, makes a proposal, selects an appropriate peer-reviewed journal, conducts research, outlines and builds two drafts the paper, and conducts a peer review of a colleague's paper. At the end of the semester, we organize this technical seminar where students (from the Blacksburg, Richmond, and Washington campuses) come together to present the results of their research.

The session includes giving and receiving feedback and evaluations. The last step is to revise and put in the format required by the journal. 16 graduate students participated this semester. Also this year Dr. Hammett was joined by Dr. Heather Eves, CNRE adjunct faculty member at the Northern Virginia Center.



Students gather at the end of their daylong technical session at James Madison University on December 4, 2010. Dr. Hammett, far left, front row, was joined this year by Dr. Heather Eves, 3rd from left, front row, of the Northern Virginia Center.

**Merry Christmas and Best Wishes for a Happy 2011 from
all of us INSIDE Wood Science and Forest Products at
Virginia Tech.**



Call for Nominations – Graduate School 2010-11 Student Excellence Awards
For details see- http://www.grads.vt.edu/academics/honors_awards/graduate_awards/index.html

Graduate School Award	Award	Graduate School Deadline
Graduate Man and Woman of the Year	Plaque and \$500	February 4, 2011
Outstanding Graduate Student in Interdisciplinary Programs (doctoral)	Plaque and \$500	February 18, 2011
Outstanding Dissertation Award (in math, sciences, and engineering)	Plaque and \$1,000	February 4, 2011
Outstanding Dissertation Award (in social sciences, business, and humanities)	Plaque and \$1,000	February 4, 2011
Graduate Student Service Excellence Award	Plaque and \$1,000	February 4, 2011
Graduate Student Teaching Excellence Award	Plaque and \$1,000	February 4, 2011

Call for Nominations – Graduate Awards Administered by CNRE

CNRE-Administered Awards	Award	CNRE Deadline
<p>2010-11 Outstanding Graduate Student by the college at the (a) master’s and (b) doctoral level</p> <p><u>Department Head or Interim Responsibility:</u> Each department will select, by a means of its choice, its outstanding M.S. and Ph.D. nominees.</p> <p><u>Student Responsibility:</u> Students interested in being considered should submit a cover letter, transcript, and resume to their department head by December 31, 2010. Students are eligible for the 2010-2011 award if they were enrolled at any time during that academic year. The college will recognize these two students at the honor’s banquet on March 31, 2011.</p> <p><u>Department Head or Interim Responsibility:</u> A CV and nomination letter, signed by the department head or interim for each departmental nominee (one M.S. and one Ph.D.), are due to Jim Campbell, chair, CNRE Student Policy and Affairs Committee, by January 13, 2011.</p>	Plaque and \$500 for one M.S. student and one Ph.D. student	The Student Policy and Affairs Committee must make their final selection by February 14, 2011, so that we can meet the Graduate School’s deadline of February 18.
<p>A. B. Massey Honorarium</p> <p>This award is presented to four CNRE graduate students, one in each of the academic departments of the college, who have displayed outstanding academic and professional leadership. Please see your advisor if you wish to be nominated for this award</p>	Plaque	Departments must make final selection by February 18, 2011.

Call for Nominations – Graduate Awards Administered by CNRE

CNRE-Administered Awards	Award	CNRE Deadline
<p>The Robert L. and Esther S. Youngs Award for Excellence in Written Contribution</p> <p>First awarded in 2008, this award highlights the need for excellence in understanding, describing, and promoting conservation and effective utilization of the world’s natural resources. The award recognizes outstanding Virginia Tech College of Natural Resources and Environment graduate students whose efforts promote this cause. Criteria for this award are attached. All documents (CNRE faculty nomination cover letter and graduate student’s scientific document, consisting of an essay and press release) are due to the Research, Extension, and International Affairs Committee, Attention: Chair, CNRE Research, Extension & International Affairs Committee, by January 31, 2010.</p> <p>Nominations and the student’s document should be given to Arlice Banks, 324 Cheatham.</p>	Certificate and \$500	Research, Extension, and International Affairs Committee must make final selection by February 18, 2011.

**Robert L. and Esther S. Youngs Award
for Excellence in Written Contribution to Natural Resources**

Reflecting their devotion and outstanding contribution to scientific endeavors promoting conservation and effective utilization of the Earth's natural resources, Robert L. and Esther S. Youngs established the Youngs Award for Excellence in Written Contribution to Natural Resources and Environment. First awarded in 2008, this award highlights the need for excellence in understanding, describing, and promoting conservation and effective utilization of the world's natural resources. The award recognizes outstanding Virginia Tech College of Natural Resources and Environment graduate students whose efforts promote this cause.

The Robert L. and Esther S. Youngs Award for Excellence in Written Contribution to Natural Resources shall be given according to the following criteria:

- A. The Award, \$500 and a certificate, shall be made annually to a graduate student enrolled in the college (or received a graduate degree in the preceding year) who authors a scientific document that demonstrates excellent writing and effective communication, reflecting how their graduate research advances the understanding of any aspect of the management, utilization, conservation, or socio-economic effects of natural resources.
- B. To be considered for the award, the document shall be prepared by the applicant, only; it shall contain two essential elements and meet the corresponding criteria as follows:
 1. **The essay**, concisely summarizes the effort to solve a scientific problem, and is written for a general scientific audience, omitting or minimizing specialist jargon. Text and illustrations are limited to two double spaced pages; a third page is allowed for citations only, if needed. Minimum 25mm margins and 12 point font apply.
 2. **The press release**, appears on the last page of the essay as a brief statement on the practical significance of the research. The press release is written for a non-scientific audience, approximately at the pre-teenage level, and is limited to 50 – 100 words.
- C. Documents for the award shall be submitted no later than **January 31** of the year in which the award will be made. Submission must occur through a single CNRE faculty nomination, and must be accompanied by a nominating cover letter that meets the following requirements:
 1. Includes a nomination statement; also provides applicant biographical information strictly limited to: applicant's degree program, year of study in the graduate program or date of successful defense of the graduate degree.
 2. No comments about the applicant's qualifications or about the significance of the applicant's research will appear.

continued,

- D. A panel consisting of one faculty member from each college department will review and judge nominated documents.
- E. Criteria for judging the documents are:
1. Good scientific writing that is clear, unambiguous, and fluid, exhibiting correct word usage, punctuation, and effective transitions between ideas.
 2. Organization: Beginning, middle, ending. Clearly describes a problem, its significance, the approach to solving it, and conclusions reached.
 3. Illustrations (if needed): appropriate and clear.
- F. After selection, the award winner shall provide supporting images suitable for electronic and printed publications. The award winning essay shall be published on the College of Natural Resources and Environment web site; the corresponding press release shall be published in the college newsletter.
- G. In the event that no student meets the above-stated criteria in a given academic year, no award shall be made.
- H. Complete award applications must be submitted by **January 31** of the year in which the award will be made. Submit completed award applications to Arlice Banks in 324 Cheatham. Selection of the award winner will be made by the CNRE Research, Extension, & International Affairs Committee.