



CNR NEWS

From the Appalachians to the Oceans: Virginia Tech, with CNR as Lead Partner, Hosts Society of Environmental Journalists Annual Conference

COLLEGE OF NATURAL RESOURCES
Virginia Polytechnic Institute and State University

Virginia Tech hosted 800 environmental journalists, government officials, and non-profit organization leaders from across the nation and around the world for the 18th Annual Conference of the Society of Environmental Journalists (SEJ) at the Hotel Roanoke and Conference Center in October. "A strong team effort across the campus produced what SEJ called 'the best conference ever,'" said Dean Mike Kelly, who chaired the event with Associate Vice President for University Relations Larry Hincker for President Charles Steger.

CNR's public affairs director Lynn Davis, who coordinated Virginia Tech's hosting of the conference, explained that SEJ partners with a university host each year, with the university providing not only expertise from professors and research associates but also financial support it solicits from corporate and government partners.



On the mini-tour to the college's Fishburn Forest, participants viewed the results of prescribed burns conducted over the past few years.

"I spent a lot of my time at the conference getting hands-on journalism experience. I helped SEJ by recording the concurrent sessions and writing summary articles for each of them. It was a learning experience from the scientific angle as well as the journalistic side."

Maureen Halsema
CNR intern

The five-day conference was attended by journalists from every segment of the media, from National Public Radio and *The Washington Post*, to the National Gardening Association's blogs and NBC's environmental beat. Reporters also came from around the world, including Thailand, Belgium, Peru, Australia, Puerto Rico, and Canada.

Virginia Governor Tim Kaine and West Virginia Governor Joe Manchin joined President Steger to open up the conference, along with Philippe and Alexandra Cousteau, grandchildren of the legendary ocean explorer Jacques Cousteau, and Grammy Award-winning country music singer Kathy Mattea, also known for her coal songs.

More than 100 sessions and field trips packed a robust conference agenda, with a sold-out preconference workshop on climate and a poster session by 50 of Virginia Tech's professors and graduate students. A full schedule of "mini-tours" brought the journalists to various campus environmental research centers one afternoon, including the mussel recovery center, black bear research center, and Fishburn Forest.



U.S. Rep. Rick Boucher talked with reporters after a session on energy policy legislation.

"I learned a great deal about the effects of climate change at the conference. For instance, I knew that carbon dioxide emissions were causing huge problems in the atmosphere, but I was shocked to learn the effects that they are rendering on our oceans. Our emissions have put our coral reefs and their inhabitants in danger of mass extinction."

Maureen Halsema
CNR intern

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Those attending the post-conference tour to the Chesapeake Bay had to brave the elements on Tangier Island. Flooding is a common occurrence there, as the island slowly recedes into the bay.



Virginia Governor
Tim Kaine opened
the SEJ conference
with his friend and
colleague, West
Virginia Governor
Joe Manchin.

The main purpose of the conference is to provide reporters on the environmental beat with up-to-date information on the issues and reporting tools, so that they can write with seasoning and depth about matters that concern our planet and its residents. "This year's conference focused on energy (particularly coal), climate, water, the land, and environmental health, centered around the theme, 'From the Appalachians to the Oceans,'" noted conference co-chair and SEJ board member Bill Kovarik, who is an environmental journalism professor at Radford University.

"It was such a privilege to have the opportunity to participate with Virginia Tech in hosting the journalists and scientists who traveled from all over the world to discuss the important contemporary environmental issues."

Maureen Halsema
CNR intern who attended the SEJ Conference

Hincker described SEJ (www.sej.org) as a non-profit education organization dedicated to advancing public understanding of environmental issues by improving the quality, accuracy, and visibility of environmental reporting.



Virginia Tech President Charles Steger welcomed attendees at the evening reception and before the opening plenary session.

Conference (continued on page 2)

Visit www.cnr.vt.edu/sejconference for links to photos, video clips, blogs, and other SEJ conference items.

As I take a few moments to reflect on the past year, I am amazed at how rapidly the year passed, as well as how much was accomplished by our faculty, staff, and students. All units in the college were very busy throughout 2008 advancing our tripartite land grant mission. As I shared with you in the previous newsletter, we have seen growth in undergraduate enrollment, we have added new faculty in key areas, and we have maintained a level of external research funding through grants and contracts that yields approximately \$1.25 for each \$1 provided in our base budget. Our engagement activities across the commonwealth continue to have very positive impacts, especially those focused on workforce development in Southside Virginia, and we were pleased to see several faculty recognized for their good work with awards. So by many measures, 2008 was a very successful year for the college.

And very importantly, we had a number of generous gifts in the past year from alumni and friends. These gifts are the means to provide more scholarship support, as well as help to keep our programs well rounded and vibrant. As I have noted previously, it is the ability to offer these "extras" that are made possible by private gifts and the earnings from college endowments that separates the sheep from the goats when it comes to program quality. The power of collective giving is particularly important during times like these, and every gift, whether small or large, helps us maintain the high quality programs that you have come to expect from the College of Natural Resources.

The year 2009 marks the beginning of the final phase of the Campaign for Virginia Tech, and we still need to meet, and hopefully exceed, some important remaining goals for our college. As we approach this sprint to the campaign finish line, we are most fortunate to add Robert Mollenhauer to our staff as director of

development for the college. Bob is an avid outdoorsman who brings considerable development experience to this position and will play an important role in helping to generate the level of campaign success that will allow us to make a difference. I am also pleased to inform you that through the generous support of the Alumni Association, the college will now have a full-time alumni relations director. Lane Guilliams, a 1995 CNR graduate, will be filling this role. She will be working closely with Bob Mollenhauer and Lynn Davis, our public relations director, to increase our interactions and communications with CNR alumni and friends. In the weeks and months ahead, Bob and Lane will be organizing a number of events and arranging personal visits to share the CNR story with you. I hope you will join me in welcoming them to the college and to their new roles.

Over the past four months, my personal conversations with many of you have focused on your concerns about the impacts of the economic downturn on the future of the college. Rest assured that our goal during these trying times is to maintain our core functions in the best possible condition so that when better times return we will have a very solid foundation on which to continue building for the future. Even in the midst of declining resources we are developing new initiatives and reprogramming available resources to help get things started. **We continue to be the best college of natural resources in the nation and we do not intend to lose ground to our competition during this time of economic stress.**

Our very best wishes to each of you for the New Year!

J. M. Kelly



Renowned mussel expert Dick Neves explained how scientists cultivate endangered freshwater mussels for return to local rivers on the mini-tour of the college's mussel lab.

Photo courtesy of Christine Woodside

Conference (continued from page 1)

Regional tours took participants to Kayford, W.Va., coal mines; the Jefferson National Forest; Shenandoah Valley farms; the Blue Ridge Parkway; the James and New rivers; the Appalachian Trail; AREVA nuclear energy company sites in Lynchburg, Va.; and the Chatham, Va., uranium site, which Virginia Tech scientists cite as the largest uranium deposit in America. Some conferees had the opportunity to fly over surface mines for a bird's-eye view of mountaintop coal removal sites.

2007 Nobel Peace Prize with Al Gore. Peter Dykstra, executive producer of CNN's Science, Technology, Environment, and Weather, moderated that session.

Washington Post writer David Fahrenthold led a clean air panel that included Pamela Faggert, chief environmental officer of Dominion Power; Bruce Niles, director of the Sierra Club's National Coal Campaign; and John Randolph, Virginia

More than 50 national exhibitors, ranging from the Wild Salmon Center to the USDA Natural Resources Conservation Service, displayed information on their work. Virginia's Game and Inland Fisheries had a tank of live mussels to demonstrate the state-federal mussel recovery work with which college fisheries professor Dick Neves has been involved during his career.

Virginia Congressman Rick Boucher talked on energy and climate legislation prior to the opening plenary session entitled, "Old King Coal: What's His Role in America's Energy Future?" This panel discussion featured speakers from diverse backgrounds, including Nick Akins, executive vice president for generation at American Electric Power, and Jeff Goodell, author of *Big Coal: The Dirty Secret Behind America's Energy Future*.

The conference keynote speaker was Rajenda K. Pachauri, chairman of the Intergovernmental Panel on Climate Change, who shared the



Bill Kovarick (L), an environmental journalism professor at Radford University, and Ken Ward of The Charleston Gazette served as the 2008 SEJ conference co-chairs.

Tech professor of environmental planning in the College of Architecture and Urban Studies.

After the conference, a smaller group of journalists headed for a four-day, post-conference tour of the Chesapeake Bay to learn if the bay would survive its many threats.

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Agricultural and Natural Resources Research Ranks Higher

Virginia Tech's rank for agricultural and natural resource research spending jumped to sixth in 2007, up from tenth in 2006, in the National Science Foundation's recently released nationwide ranking of programs. The university's 2007 expenditure in agricultural and natural resource research, approximately \$92 million, represents an increase of close to \$15 million over the 2006 figure.

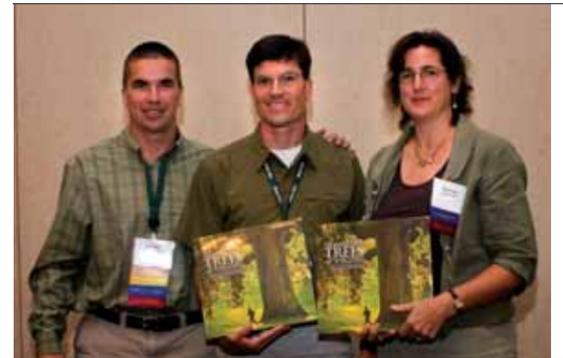
"Our faculty are being recognized for their quality programs, which cross several disciplines across colleges and require the latest facilities and infrastructure for our researchers," observed Dean Mike Kelly. "We continuously strive to explore creative ways for supporting our faculty and their efforts across different colleges and programs within the university, which has become even more critical in recent years."

Governor Tim Kaine stated that the agriculture and forestry industries contribute around \$79 billion to Virginia's economy annually, a significant increase from the \$47 billion figure reported 10 years ago. "The agriculture and forestry sector is an economic engine that drives much of the economic activity in other Virginia industries, such as manufacturing, retail, and wholesale trade, as well as public and private services," he said at a ceremony to mark the release of a recent study on the economic impact of agriculture and forestry in the commonwealth.

The National Science Foundation defines agricultural science to include such disciplines as agricultural production, aquaculture, soil science, animal science, plant science, agronomy, forestry, fish and wildlife, wood and materials science, international agriculture, and many more.

Virginia Tech's agricultural and natural resource research and development program accounted for 25 percent of the research spending at the university in 2007. With more than \$366.9 million in research expenditures, Virginia Tech has the largest research program among Virginia universities.

Virginia Tech Hosts International Society of Arboriculture Meeting



Rob Allen (L), MAC-ISA officer and annual meeting chair, presents copies of Jeff Kirwan's book, *Remarkable Trees of Virginia*, to Eric Wiseman and Susan Day. Photo courtesy of Patrick Teague

Virginia Tech hosted the 30th annual Mid-Atlantic Chapter of the International Society of Arboriculture (MAC-ISA) meeting at the Inn at Virginia Tech Sept. 29 to Oct. 1. The ISA is a worldwide organization dedicated to promoting an appreciation for trees and for the research, technology, and professional practice of arboriculture. This year's meeting broke all past attendance records with 363 attendees. Susan Day, assistant professor of urban forestry and horticulture, and chair of the program committee, noted, "We feel this record indicates both the importance of urban forests to the region and the commitment and support that Virginia Tech is fortunate to have from the industry, the profession, and the public."

Day and Eric Wiseman, assistant professor of urban forestry and chair of the field day committee, each received an Award of Merit from MAC-ISA for their service to the chapter in their committee positions. Day's award also recognized her service on the editorial committee of the chapter's newsletter, *Canopy Coverage*. Harold Burkhart, university distinguished professor, was presented with a Certificate of Appreciation and an Honorary Membership for his dedication to the urban forestry program and his work towards achieving Society of American Foresters Specialized Accreditation in Urban Forestry for the new urban forestry curriculum.

University faculty spoke on a variety of topics and led tours during the field day, outdoor trade show, and concurrent sessions. Topics addressed included pesticide safety, wildland fire in the urban fringe, urban wildfire management, invasive urban trees, and business opportunities with small acreage.

Burkhart stated, "Not only did we receive a high attendance, but the chapter meeting was also executed well and field day was extremely informative." Day added, "It was great to be able to be the host of such an active and committed community of urban foresters and arborists, and to see the participation of so many Virginia Tech faculty and students."

Visit www.patrickteague.smugmug.com to view a gallery of photos from the conference.

College's Fisheries Training Center Vital for the Nation's Marine Agencies

The U.S. Departments of Commerce and Education recently released a report to Congress on America's pending shortage of fisheries scientists, specifically those who focus on stock assessment. Jim Berkson, associate professor of fisheries and wildlife sciences and a unit leader for the National Oceanic and Atmospheric Administration's (NOAA) Fisheries Service, was one of three agency representatives who spoke at a press conference about the report.



Jim Berkson leads the Population Dynamics Recruiting Program.

the nation. Led by Berkson, the Population Dynamics Recruiting Program (PDRP) is increasing the quality and quantity of incoming graduate students in the field. It also conducts important stock assessment research in support of the NOAA Fisheries Service's mission in a unique collaboration of undergraduates, graduate students, postdoctoral associates, university faculty, and agency scientists. The NOAA Fisheries Service has provided financial support to the recruiting program, which is serving as a model for a new generation of cooperative research programs nationwide.

Evaluations indicate that between one-quarter and one-third of all PRDP workshop participants have entered graduate school in the discipline. "The program is finding top students from around the country who knew little to nothing about this unique discipline," observed Berkson. "The PDRP workshops are educating and exciting the students, and as a result, many are now entering the discipline. This is being viewed as a great success by both the university and the agency."



Students attending a PDRP workshop in Key West, Fla., learn sampling techniques to determine the age of a fish.

Stock assessment scientists conduct scientific research to determine the current status and future trends of marine species populations and provide key advice to policymakers. "The need for these scientists, whose work is critical to the conservation and management of the nation's marine resources, is increasing due to workload increases and agency retirements," explained Berkson, a major contributor to the report. "Unfortunately, universities are not producing the number of scientists needed to meet the demand."

To address the anticipated shortage of fisheries scientists, Virginia Tech, home to one of the oldest and most respected fisheries programs in the United States, has partnered with the NOAA Fisheries Service to create a first-of-its-kind program designed to identify, train, and mentor promising undergraduates from across

could make adjustments to better serve its students. Department head Paul Winistorfer and professor Bob Smith reviewed the survey and advised Hosen.

"The first two years are rough," one alumnus warned undergraduates, "but stay coachable to learn as much as possible from the people around you, so you will use wood knowledge in a practical way."

Alumni advised graduates to stay in contact with professors and peers. "Their experience and knowledge in the field have proved to be valuable resources," one alumnus responded. Many also strongly suggested that students acquire an internship while they are still in school, because it is an ideal way to see what the industry entails and if it suits them.

The survey focused on the topics of compensation, location, frequency of job changes and relocation, and whether the respondents still worked in the forest products industry. The survey included several open-ended questions to obtain suggestions from alumni on how to improve the department's current curriculum to better prepare students for the industry.

Survey results showed that those respondents with advanced degrees tended to earn more money and most commonly reported having jobs involved in research or teaching. The most common entry-level position for alumni with a bachelor's degree was in sales rather than in a technical aspect of the field, which is one of the reasons that respondents emphasized the need for students to take business classes to help enhance their education and prepare them for the industry.

Survey Shows Wood Science Alumni Well Prepared

The results of an online survey of alumni who graduated between 1987 and 2007 from the Department of Wood Science and Forest Products shows that the majority felt that their education prepared them adequately and even exceeded the needs of their first job. However, alumni recommended that undergraduates take more business classes as electives to better prepare them for long-term careers in the wood products industry.

Josh Hosen, a wood science and forest products graduate student, prepared the survey to find out how alumni felt about their education so the department

Honor Society Welcomes New Members

Xi Sigma Pi, the Forestry Honor Society of the College of Natural Resources, welcomed new members at its fall 2008 initiation ceremony. The Chi Chapter of Virginia Tech seeks to both recognize and encourage academic excellence among forestry and wildlife students. The main goals of the society, which is comprised of juniors and seniors with a cumulative GPA of 3.0 and graduate students with a GPA of 3.5, are to provide free tutoring for students in the college and to conduct various community service projects, such as a Duck Pond cleanup last fall.



Xi Sigma Pi members and guests. (L-R) Front: Amy Carrozzino, Amanda Wilson, Adam Scouse, David Hogue, Lindsey Curtin, Rachel Hamilton, Charlotte Weaver, Stephen DeFranco, Dean Mike Kelly; Middle: forestry professors John Seiler and Richard Oderwald, Melissa Prestowitz, Katie Charles, India Crowder, Kyle Waters, Trevor Michaels, Bethany Mutchler, Nathan Lambert; Back: forestry professor Bruce Hull, Josh Widmer, Jeff Curtis, Perry Isner, Dan Schultz, Bhae-Jin Peemoeller.

Barker Receives ADA Access Honor Roll Award



Cathy Barker, program support technician in the college's undergraduate programs office, received an ADA (Americans with Disabilities Act) Access Honor Roll Award at the Disability Awareness Reception on campus in October. Barker, who coordinates the December and May graduation activities for the college, was recognized for her contributions toward improving accessibility for people with disabilities and her dedication to keeping the campus accessible to everyone attending and visiting the university.

"I was shocked that I received this award because I feel that people having access to commencement venues is just part of my job," Barker remarked. "It's significant that the university is acknowledging that accessibility can be a problem on campus."

Barker communicates with graduating students regarding family members who need special accommodations to attend events. She arrives early on event days to mark and reserve seating spaces for anyone with special needs, and tests all elevators and lifts on the days leading to and the day of the event. Barker also remains in contact with students and families in the time leading up to graduation to provide suggestions for making the campus more user-friendly.

"Cathy remembers whose family members may have disabilities and asks those grads, even years after graduation, how their family members are doing, continuing to express her interest and concern," noted Suzie Leslie, the college's director of academic advising.

Virginia Tech Named Tree Campus USA Site

The Arbor Day Foundation selected Virginia Tech as one of nine colleges to participate in its new Tree Campus USA program. The foundation launched the program to honor college campuses and their surrounding communities for promoting healthy urban forest management and engaging the campus community in environmental stewardship.

In recognition of this accomplishment and to officially kick off Tree Campus USA at the university, the Arbor Day Foundation and Toyota held a tree-planting event during Virginia Tech's Sustainability Week. More than 200 participants attended and assisted in the planting of 100 trees in various locations around campus. Students from the college worked with volunteers and provided education on how to properly plant a tree.

"Trees are a critical component of the Virginia Tech campus," said Eric Wiseman, chairman of the Virginia Tech Arboretum Committee. "We value their aesthetic and environmental contributions to the community. The Tree Campus USA planting event is an opportunity to celebrate trees and demonstrate our commitment to a sustainable urban forest."

Representatives from the Arbor Day Foundation and Toyota presented Virginia Tech with a plaque and a "Tree Campus USA" flag at the tree-planting event.

Photo courtesy of Joshua Rosenfeld, Town of Blacksburg



In order to receive Tree Campus USA status, colleges are required to meet five core standards of tree care and community engagement: establishing a campus tree advisory committee; evidence of a campus tree-care plan; verification of dedicated annual expenditures on the campus tree-care plan; involvement in an Arbor Day observance; and the institution of a service-learning project aimed at engaging the student body.

"The Tree Campus USA program will have a lasting effect at Virginia Tech and throughout the country because it will engage students and local citizens to plant trees and create healthier communities for people to enjoy for generations to come," said John Rosenow, chief executive of the Arbor Day Foundation. "Virginia Tech will benefit from better tree-care practices on campus, and it will help connect the university with tree-care professionals in their community to improve the tree canopy in Blacksburg."

Smith Collaborates on Primary Forest Products Marketing Guide

Robert L. Smith, professor and associate dean for engagement, joined with Edward T. Cesa of the U.S. Forest Service and Patrick M. Rappold, a former graduate student in the college, to produce *A Marketing Guide for Small and Medium Sized Primary Forest Products Processors*. The guide, similar to one Cesa wrote in 1992 for marketers of secondary-processed wood products, provides small and medium sized sawmills and primary processors with many new marketing ideas and concepts. "Identifying and meeting customers' needs is often the most difficult item for small to medium sized companies to accomplish," says Smith. "This guide was developed to assist smaller firms to better understand the marketing concept and

provide easy access to agencies and individuals who can help them succeed in their business."

Topics covered range from marketing research methods to product promotion; the publication also includes a unit on Internet marketing and a complete listing of state and federal government offices that provide assistance. Case studies in the book illustrate how effective marketing practices have assisted new forest products firms. The publication, which is only available online, can be found at <http://na.fs.fed.us/pubs/detail.cfm?id=5485>.

STUDENT NOTES

Hokie Student Takes Alaska By Storm

Between working as a forestry technician, avalanche forecaster, ski patroller, boat captain, and taking classes to complete his Master of Natural Resources, it seems impossible that Matt Murphy still finds time to partake in two of his favorite hobbies: skiing and hiking. Of course, with a job that incorporates both of these pastimes, it is fitting that he would bring a unique level of passion and dedication to the field. In recognition of his leadership skills and accomplishments, Murphy was recently named Employee of the Year for the Alaska Region of the U.S. Forest Service.



Murphy, who has worked on the Glacier Ranger District of the Chugach National Forest for three years, categorized his job by having two distinct seasons: summer and winter.

In the summer, Murphy leads a crew responsible for renovating cabins and trails in the district. He also captains vessels for agency operations in Prince William Sound and is involved in wildland fire assignments.

In the winter, Murphy helps operate the Chugach National Forest Avalanche Information Center, where he is responsible for managing winter recreation on the district by monitoring weather conditions and tracking areas susceptible to avalanches. He also teaches avalanche awareness classes and maintains public contact to help stabilize a balance between motorized and non-motorized users. By increasing the

Matt Murphy (C) received an Honor Award for Heroism and Emergency Response at the USDA Secretary's Honor Awards Ceremony for his efforts to save an avalanche victim. He is joined by his father, Dennis Murphy (L), and Forest Service Chief Gail Kimbell.

Photo courtesy of U.S. Forest Service

quality and number of snowmobile trails in motorized areas, Murphy decreased the number of users venturing into closed areas and high avalanche hazard areas.

On top of his hectic work schedule, Murphy is also a graduate student at Virginia Tech, working towards completing his Master of Natural Resources through the college's distance-learning program. "I was looking for more education, but I didn't want to move from Alaska. I found out the U.S. Forest Service and Virginia Tech put together a distance-learning program. I was sold," explained Murphy.

Murphy's education and training was truly tested while he was skiing on a day off in February 2008. Upon witnessing an avalanche bury another skier, Murphy formed a 20-person search team and directed their efforts. After digging the skier out from under four feet of snow, he found the victim unconscious. "I was surprised to find him alive; it is statistically rare to survive that," said Murphy. Fortunately, he was able to act quickly and led the rescue effort in about 30 minutes. "It was amazing to see my training work," Murphy remarked. "That was a very stressful day, but I was able to slow down and switch to that part of my brain that knew what to do. It worked."

CMI Offers Students Invaluable Work Experience

Student workers from the college are assisting the Conservation Management Institute (CMI) in updating the National Wetlands Inventory Spatial dataset. Over the past year and half, fifteen different student workers from the college have logged a combined total of over 3,000 hours identifying and mapping wetlands.

Senior geography students Tim Brown and Steve Quagliata were among those helping to complete the task. Each took the job for the invaluable experience it would offer. "There is only so much they can teach you in a class, and having the ability to explore geographic information systems [GIS] to new depths will pay later on. I have had the chance to use software not used in class while resolving issues not presented to me before," said Quagliata.

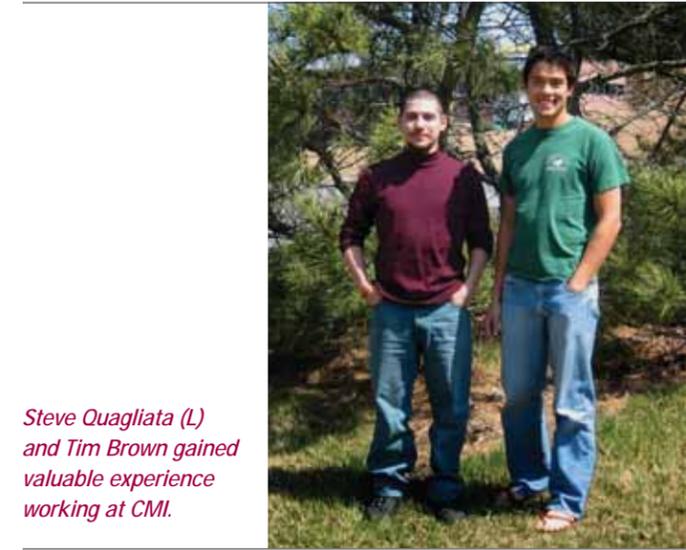
The biggest advantage about working for CMI is the opportunity to learn skills in data management. "When working on a project for class, the data is so limited that the problems of bad data management are not really seen. I learned quickly here that I better keep everything in check," said Quagliata, who added

that his experiences have given him a standard for acceptable work that can only be attained by becoming a part of the workforce.

"Working at CMI has allowed me to advance my working knowledge of GIS and apply these skills to conservation topics on a daily basis," said Brown. He had hoped the work would help him attain his future career goals by gaining real-world experience and advancing his skills in GIS.

And indeed it has. Last May, Brown took a job in Washington, D.C., working with a consulting firm on a contract at the National Institute of Justice, where he supports the Mapping and Analysis for Public Safety (MAPS) program. He continues to utilize the GIS expertise he gained while working at CMI.

After graduation Quagliata was hired by CMI full time. He continues to work on the National Wetlands Inventory as well as other projects, while preparing to apply to graduate school.



Steve Quagliata (L) and Tim Brown gained valuable experience working at CMI.

The students encourage others to take on student-worker positions at CMI because the staff there works with students to accommodate their needs. "As a student here at Virginia Tech, there isn't any better deal for those looking for GIS work," Quagliata observed. "The location, staff, and experience can't be matched."



Tom Copenhaver, along with friends Kevin Do and Spencer Ferguson, produced the first-prize winning entry in the "True Life: I'm a Hokie" YouTube video contest.

Geography Student Takes Top Prize in Video Contest

When geography sophomore Tom Copenhaver of Winchester, Va. teamed up with some friends to enter the "True Life: I'm a Hokie" YouTube video contest, he never dreamed their entry would take the top prize.

The winning effort, a music video highlighting many aspects of student life, was definitely a team effort. Although Copenhaver is credited as producer and videographer, Kevin Do, a sophomore in hospitality and tourism management, wrote and performed the lyrics, and sophomore chemistry major Spencer Ferguson composed the music. "We had been kicking around the idea of entering the contest, but kept putting it off," Copenhaver recalled. "Finally, about a week before the deadline, I approached Kevin and Spencer and said, 'We can do this.' Kevin started writing

the lyrics that day, and we used music that Spencer had already composed."

Tom, a seasoned videographer, had produced videos on a weekly basis for a camp where he worked this past summer. "The quick turnaround time wasn't an issue for me. I was accustomed to that kind of schedule," he said.

Tom and his friends had no idea their video had won until the contest results were announced during the University of Virginia football game on Nov. 29. They earned \$500 for their winning efforts, and the video was shown before the feature film at the Lyric Theater in Blacksburg during the first week of December. See their winning video (#43), as well as other entries, at www.youtube.com/virginiatech.

Wood Industry Student Placement Program

The Wood Industry Student Placement Program, a powerful online tool that took six months to develop, is now available to Virginia Tech students and registered industry representatives.

The web site, which was developed by the Department of Wood Sciences and Forest Products, was launched last summer. It allows industry representatives, once registered online, to post employment opportunities and review student resumes, and Virginia Tech students to post their resumes and view available positions.

Unlike other job search web sites, the Wood Industry Student Placement Program is specifically for jobs in the wood science and forest products industry. However, there

is a need throughout the industry for engineers, architects, chemists, marketers, managers, wood scientists, foresters, and other professions and skills, so students of all majors are encouraged to use the placement program.

"We are developing several vehicles to achieve broader opportunities in our sector for all students at Virginia Tech, including our Wood Industry Student Placement Program and our Wood Week Career Fair venue," said department head Paul Winistorfer.

Will Pfeil, the department's web specialist, did the development and web work for the placement program, which can be found at www.woodscience.vt.edu/careers.



John Boyer remains a student favorite, even after moving his World Regions class to the 3,003-seat auditorium in Burruss Hall last fall.



Boyer's Class the Largest Ever at Virginia Tech

John Boyer's World Regions class has come a long way since it was first introduced in 1998. Students enjoyed the class, and Boyer's unorthodox teaching methods, so much that its popularity quickly spread. Despite moving the class to the largest classroom on campus, 3,000 students remained on the class waiting list.

This fall, the class was moved to the 3,003-seat auditorium in Burruss Hall and enrolled 2,680 students, leaving room for some who just come to watch Boyer's performance. The class is about three times the size of the next largest class at the university, accommodating over 10 percent of the undergraduate population.

To tackle the challenge of student interaction in so large a class, people with microphones are located

throughout the auditorium for audience interaction. Boyer also utilizes the Internet, which appeals to tech-savvy students, as a course companion by posting podcasts and online quizzes, and holding online office hours through web cam.

On the web site www.ratevtteachers.com, where students rate university professors, Boyer has 186 reviews and an average rating of 4.91 stars, making him Tech's highest rated instructor as well as the most reviewed. Despite a faculty member's criticism of Boyer's textbook in 2007, Boyer is still able to fill seats, and, depending on his success in this new location, he may again find himself teaching Virginia Tech's largest class.

Vaughan Recognized for Bear Research

Fisheries and wildlife sciences professor Mike Vaughan has received much recognition for his research on black bears at the Virginia Tech Center for Bear Research. The center recently received a top rating from the university's Office of Research Compliance and was the first center to be featured on its web site. "I was very pleased with the news. We were actually one of the first centers they rated," Vaughan said.

The Center for Bear Research is one of only two places in North America that does significant captive bear research. The center uses bears captured by the Virginia Department of Game and Inland Fisheries as "problem bears" (e.g., those captured in corn fields or near bee hives) for its research. Vaughan and his students hold bears overwinter, usually August to May, and collect data prior to, during, and following hibernation.

Vaughan is currently conducting research for a bone metabolism study, examining bone growth of hibernating bears in the hopes of finding a human application for the results. Bears do not develop osteoporosis during the inactivity of hibernation, while humans on bed rest for the same amount of time often do. Comparing the differences between the two species may lead to medical breakthroughs in human health.



Mike Vaughan

In another center effort, Vaughan submitted a proposal to study the effects on black bears and red wolves of the proposed widening of Highway 64 through the Alligator River National Wildlife Refuge in North Carolina. Vaughan's research will aid in preparing a compatibility determination for the project, which refuge personnel must complete before they will issue the state Department of Transportation a permit for road construction.

Vaughan's first task will be to determine where highway wildlife underpasses should be placed. He plans to gather data by stringing barbed wire along the potential widening site; the wire will catch some of the bears' fur, marking sites where they cross the road. In turn, bridges would be built at these bear crossings, allowing the bears to cross under the road without interfering with traffic and putting themselves or humans at risk. "However, along with the widening of the highway comes the possibility of the long-term reduced population and habitat of black bears and red wolves, which are both top predators in the area's food chain," Vaughan observed.

Looking ahead, Vaughan is about a year from retirement and still not sure what the future of the center holds. "After I retire I plan to still stay active with the bone metabolism work. Professor Marcella Kelly is interested in our bear work and perhaps she will continue the work of the center," Vaughan said.

With a new semester on the horizon, Vaughan's last year at the university will surely go by in a blink and, of course, not without recognition.

Forestry Department Welcomes Gwenlyn Busby

Gwenlyn Busby has joined the Department of Forestry as an assistant professor. Busby's primary interest is the use of economic analysis to inform sustainable resource management and policy. She has research experience and ongoing interest in the areas of wildfire risk management, incentive-based policy design, and



conservation. Much of her work focuses on landscapes with mixed ownership and the interaction between landowners in their resource management decisions. She is particularly interested in issues where there are cross-ownership spatial interdependencies, where decisions made by one landowner have a direct impact on neighboring landowners' values.

Busby received a B.A. in economics from Middlebury College, an M.E.Sc. in natural resource economics from Yale University, and a Ph.D. in forest resources from Oregon State University. Busby's work experience includes positions with the Bureau of Land Management in Salmon, Idaho, and the U.S. Forest Service at the Pacific Northwest Research Station in Portland, Ore., where she worked on wildfire, wildlife, restoration, and forestry projects.

Busby's advice for her new students and colleagues: "Go outside!"

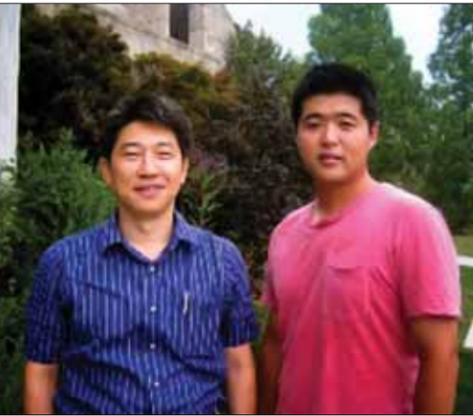
Gwenlyn Busby

Congratulations

Dean Mike Kelly presented awards to Peggy Quarterman (L) and Randy Wynne (R) at the convocation in August. Peggy received the Dean's Award for her exemplary performance and service to the college. Randy received the Diversity Award for providing a welcoming climate for all, demonstrating support of diversity, and providing leadership through example. Congratulations Peggy and Randy!



College Makes Joint Agreement with Korean University



Professor Jungkee Choi (L) and exchange student Juwon Shin.

Virginia Tech students and faculty will be able to study, do research, or teach in exchange programs under a recent agreement between the College of Natural Resources and the College of Forest and Environmental Sciences at Kangwon National University in Chuncheon in the Republic of Korea.

The agreement encourages a wide spectrum of opportunities, including academic programming such as study abroad for students, research, internships, practical training, distance learning, and service learning; exchanges for research, training, or teaching; collaborative research projects, workshops, or conferences; and exchange or other institutional professionals or information.

The contract was fostered by Jungkee Choi, a former visiting professor in the college's forestry department and currently an associate professor in Kangwon's forestry department. Choi also serves as the agreement's exchange coordinator, selecting and counseling the students who exchange from one university to the other. The first student taking part in this exchange program arrived from Korea in August. Juwon Shin will spend on year at Virginia Tech to research his thesis on Korean white pine growth and yield under the leadership of forestry professor Harold Burkhardt.

International Collaboration Continues with Chile

Faculty from the College of Forest Sciences at the Universidad Austral de Chile in Valdivia, Chile, returned to Virginia Tech in October to further establish the Memorandum of Understanding between the two colleges. During their weeklong visit, the Chilean faculty met with Dean Mike Kelly, faculty members, and students to discuss possible outlets for future collaborative research and to promote faculty and student exchanges. In addition, the faculty members expressed interest in expanding the memorandum to include collaboration in watershed management, geographic information systems, remote sensing, wood chemistry, wood quality, and forest biometrics.

The Universidad Austral de Chile signed a Memorandum of Understanding with the college in 2005. The two colleges planned to reconvene in the upcoming months to begin negotiations of specific alternations to the current memorandum.



Faculty from the Universidad Austral de Chile who visited the college to discuss possibilities for expanding the colleges' Memorandum of Understanding included (L-R) Mario Meneses, Head of the Institute of Forest Management, Faculty of Forest Science; Guillermo Trincado, Director of Graduate Studies, Faculty of Forest Science; Victor Sandoval, Institute of Forest Management; Alicia Ortega, Institute of Forest Management; Francisco Burgos, Institute of Wood Science; and Andrés Iroumé, Director of the Ph.D. Program in Forestry, Faculty of Forest Science.

ALUMNI UPDATE

Capt. Cliff Anders (L), 2000 B.S. in forestry, led a U.S. Army flyover with two AH-64 Apache attack helicopters from the 82nd Combat Aviation Brigade at Fort Bragg, N.C., during pre-game ceremonies at the Virginia Tech homecoming game on Oct. 4. Anders, a member of the Virginia Tech Corps of Cadets Class of 2000, is a former Virginia Tech football player who played in the 2000 Sugar Bowl against Florida State.



Upcoming Alumni and Friends Receptions and Special Events

TUESDAY, MARCH 31, 2009
College of Natural Resources
Annual Honors Banquet
6:30 p.m., German Club
Blacksburg, Va.

SATURDAY, APRIL 18, 2009
American Fisheries Society Student Chapter
26th Annual Mudbass Tournament
8 a.m., Duck Pond
Blacksburg, Va.

FRIDAY, MAY 15, 2009
Graduation Exercises and
Graduate Student Graduation
Details TBA; Blacksburg, Va.

SATURDAY, MAY 16, 2009
College of Natural Resources
Graduation Exercises
Details TBA
Blacksburg, VA



May 2008 graduates and longtime friends **Elyssa Klopfenstein, wildlife science,** and **Rachel Diersen, natural resources conservation (recreation),** traveled to Scotland shortly after graduation to visit Elyssa's relatives there and tour the country's historical hot spots. Elyssa shot this photo of Rachel at Stirling Castle in Scotland's Lowland region.

Elyssa and Rachel had served as Natural Resource Ambassadors while undergraduates, representing the college at university events and leading tours for prospective students and parents, and were also members of Xi Sigma Pi, the forestry honor society.

ALUMNI NEWS

Greg Scheerer, 1992 B.S. and 1994 M.S. in forestry, received the SAF 2008 Young Forester Leadership Award at the SAF National Convention in Reno, Nev., last fall. An SAF member since 1989, Scheerer served as chair of the Virginia Tech Student Chapter from 1991 to 1992 and has served in many leadership positions in the organization since then. Among his many awards, he most recently received the 2008 Appalachian SAF's Young Leadership Award. He has served on the Forest Resources Advisory Committee for the college since 2002 and currently serves on the Virginia Forestry Association's Board of Directors.

Alex Miller, 2006 B.S. in fisheries science and environmental policy and planning, and 2008 M.S. in agriculture and applied economics, is the new staff economist for the Gulf States Marine Fisheries Commission in Ocean Springs, Miss., where he is charged with directing the Fisheries Economic Data Program for the Gulf of Mexico. The program, a cooperative partnership among the five Gulf Coast states, the Gulf Marine Fisheries Commission, and the National Marine Fisheries Service, monitors the economic performance of commercial and recreational fisheries of the gulf and assesses the economic impacts of fishery management decisions on specific fisheries and regional economies.

Stephanie Rodrigue, 2004 M.S. in forest products marketing, has been named marketing director for R.W. Larson Associates, a Pennsylvania-based architecture firm. For the last 10 years, Rodrigue has held marketing and sales positions in the hardwood lumber industry. In her new position, she works with the firm's architects and designers creating tools to help obtain new customers and initiate new projects for current customers. She also provides information on the wood products used for various applications in both new construction and renovation. Stephanie and her husband, Jason (2001 M.S. in forestry), a silviculturist with the U.S. Forest Service, reside in Warren, Pa.

Nothing to Grouse About

After six years of cooperative research, the Appalachian Cooperative Grouse Research Project (ACGRP) culminated with the publication of its monograph "Ruffed Grouse Population Ecology in the Appalachian Region" in *Wildlife Monographs*. The Wildlife Society, the leading international organization representing professional wildlife managers and scientists, recently granted the ACGRP its prestigious award for Outstanding Publication in Wildlife Ecology and Management in the Monograph Category.

This award-winning monograph represents the collaborative effort of 20 authors, seven of whom are Virginia Tech faculty, alumni, and graduate students. Pat Devers, 2005 Ph.D. in fisheries and wildlife, was lead author of the monograph, which represents the bulk of his dissertation on ruffed grouse population dynamics.

The monograph is the product of an extensive research project involving 12 study sites in eight different states in the central and southern Appalachian region. More than 200 people were involved during the course of the study, representing five universities and a variety of state, federal, and private organizations.

The study observed over 3,000 grouse that were captured and fitted with radio transmitters, and then tracked using radio telemetry. These observations helped to isolate factors related to the decline of ruffed grouse in the study area and to devise improved management methods.

Virginia Tech served as the data repository for the project. "The main database was held here," noted fisheries and wildlife sciences professor Dean Stauffer. "All of the other universities involved had full access to our data." Stauffer served as Virginia Tech's academic and university coordinator for the project.

A major goal of the research was to estimate reproductive and survival rates, and identify factors influencing grouse populations. The researchers found a strong correlation between hard mast production, particularly acorns, and reproduction success rates and post-hatch chick survival of ruffed grouse. "We found that in years following a very good acorn crop, chick survival was much higher than in years following a poor acorn crop," Stauffer explained. "We felt the main reason was that when the hens eat a lot of acorns, they have a higher fat content, which provides a better early food supply and better chick condition when they hatch."

Fisheries and wildlife professor Dean Stauffer accepted the Outstanding Monograph Award on behalf of all of the authors at the Wildlife Society's 71st Annual Awards Ceremony in Miami last fall.



Virginia Tech Contributors

Patrick K. Devers (Ph.D. 2005)

Dean F. Stauffer (Professor)

Gary W. Norman (M.S. 1980)

Dave E. Steffen (B.S. 1975, M.S. 1978)

Darroch M. Whitaker (Ph.D. 2003)

David A. Buehler (Ph.D. 1990)

Roy L. Kirkpatrick (Professor Emeritus)

The primary contributor to shrinking grouse populations in the Appalachian region over the last several decades has been the decline in young forests, a critical habitat for grouse. An additional factor is related to poor chick survival rate. "One notable finding was that while egg hatching success was high, chick survival was very low, with a 5-week survival rate of only 22 percent over the course of the study," Stauffer said. Chicks are often lost to predation. Exposure to cold weather is another danger because the chicks cannot maintain their own body temperature during the first few weeks of life.

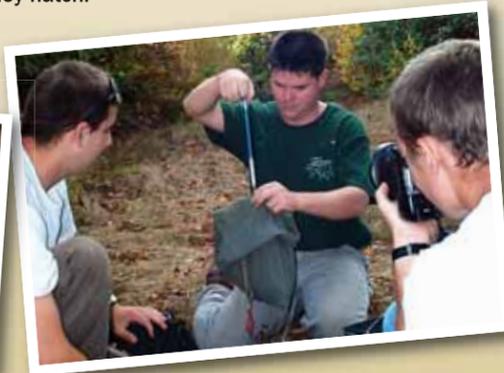
In addition to estimating survival and reproduction rates, the ACGRP identified cause-specific mortality rates. "A major thrust of the study was about mortality and trying to find out what was killing the ruffed grouse," Stauffer stressed. Predation was the number one cause of mortality observed in this study.

One of the goals of the project was to determine whether hunting was detrimental to grouse populations. The ACGRP was given a unique opportunity to conduct a true experiment in order to address this question. During the last three years of the study, with the cooperation of Virginia, West Virginia, and Kentucky, the ACGRP was able to close the hunting season on three study sites. "At the harvest levels we observed, hunting did not have a negative effect on grouse populations," Stauffer added.

In addition to the publication of the monograph, over 25 articles have been published from the cooperative work. With great credit to the support from the Richard King Mellon Foundation, the ACGRP is also writing a book about the study, edited by Stauffer. "One of our goals was to write a book that was less technical for individuals interested in grouse ecology and management," Stauffer observed. The group hopes to see the book published in the spring.



Young grouse chicks are often subject to high mortality rates.



Pat Devers weighs a captured grouse before attaching a transmitter and determining the bird's age and sex.



Transmitters are fitted around a grouse's neck, with the antenna extending down its back, but pose no risk to the bird.



Grouse are released after being outfitted with transmitters, which contain a mortality sensor to let researchers know if a bird had died.

