



College of
Forest Resources

n e w s l e t t e r

FALL 2003



Who's your daddy? Graduate student Randy DeYoung (l) and animal care coordinator Steven Tucker measure a newborn fawn in the captive deer research facility, part of a five-year study of breeding success in white-tailed deer. The study uses DNA-based parentage analyses of captive and wild deer to determine which bucks are breeding and how many fawns they sire per year.

Dean's Comments

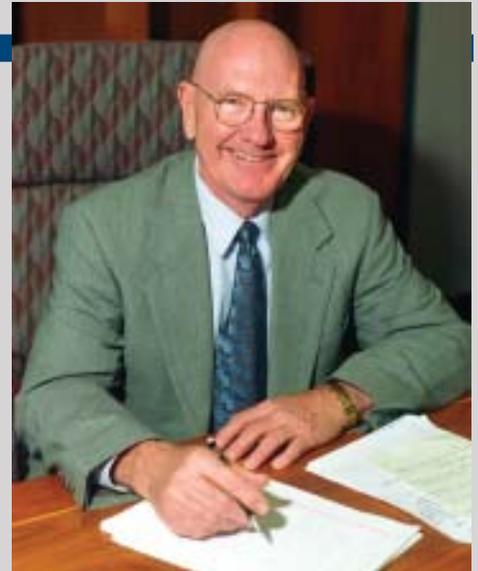
By the time this greeting reaches you, I will be starting my 28th year at MSU and a new class of students in the College of Forest Resources will have begun amid the cries of "This year is our year on the gridiron." That hope is ever present on university campuses. For students, it is the vision of better grades; for coaches, it is a winning season; and for administrators, it is a better budget. Enthusiasm is catching and before long students will have given faculty and staff a much needed boost of morale to meet the demands and stresses that lie ahead.

As I watch this renewed vigor on campus, I have an acute awareness of the changes occurring in our profession. I wonder if we are providing the education necessary for their professional growth and personal achievements in life.

Societal expectations for natural resource management are changing rapidly. Someone once said that to resist change is not only futile, but lethal. In current discussions with corporate managers and the U.S. Forest Service, I realize that there is a greater use of vendors for forest management. The Forest Service, and perhaps other natural resource agencies, will emphasize an expertise in sociology for future employees. These changes do not reduce the need for natural resource managers, but it does redefine future employers. We will be evaluating our curriculum over the next year to determine if we are providing the educational base that keeps our graduates on the competitive forefront.

The administration and leadership of the CFR and the Forest and Wildlife Research Center also have changed this year. We have assembled an outstanding administrative team that will actively and vigorously address the college and center's challenges and opportunities. Dr. Liam Leightley is heading the Department of Forest Products. He brings with him a wealth of industrial and academic experiences. Dr. Steve Bullard has accepted the position of interim head of the Department of Forestry. Dr. Bullard is widely known for his scholarly achievements in research and academics. Dr. Doug Richards is interim associate director of the FWRC and brings a wealth of administrative experience to the position. In the next few weeks, we will name a new CFR associate dean. In fact, Dr. Bruce Leopold as head of the Department of Wildlife and Fisheries, retains the only administrative position that did not change this year in the college and center. Dr. Leopold has been recognized as one of the most effective department heads on campus.

Along with changes in administration, we have a few changes in our infrastructure. The TimTek pilot plant has been constructed and, in fact, was the quickest building to be assembled on campus. By the time you receive this newsletter, the Franklin Center will only be weeks from completion. The addition of TimTek and the Franklin building adds some 35,000 square feet to the forest products complex. We also are the new home for the Mississippi Institute



Bob Karr

for Forest Inventory, housed at the forest operations on Blackjack Road.

I think you will agree that these are truly exciting times in the college and center. We have an exceptionally talented team of administrators whose leadership will greatly assist our growth and achievements in the exciting, but trying times ahead of us.

Sincerely,

Bob L. Karr

DEAN'S
COMMENTS

Blocker named CFR Alumnus of the Year



Oktibbeha County native **Adrian M. Blocker** (l) is the College of Forest Resources Alumnus of the Year at Mississippi State University. Blocker, who holds three MSU degrees, is the Savannah, Ga.-based director of strategic planning for International Paper Co. Blocker received bachelor's degrees in forestry and general business administration in 1979 and a master's in business administration in 1981. Presenting his honor is former college dean Sam Foster.

University names interim dean, director

Bob L. Karr, associate dean for the College of Forest Resources and associate director for the Forest and Wildlife Research Center, has been named interim dean and interim director.

Vance Watson, interim vice president for the Division of Agriculture, Forestry and Veterinary Medicine, and George Verrall, university provost, announced the appointment, effective June 9. This is the third time that Karr has served in an interim capacity in the college and center.

"Dr. Verrall and I have the utmost confidence in Dr. Karr and his ability to lead these two units," Watson said. "We pledge the university's full support as these units strive for a higher level of excellence."

Karr has been at MSU since 1976 when he began as an assistant professor in the Department of Forestry. He has served as associate dean/director for the College of Forest Resources/Forest and Wildlife Research Center for 11 years. A native of Stinnett, Texas, Karr holds a bachelor's degree from McMurry University, a master's from Texas Tech University and a doctorate from Texas A&M University.

The College of Forest Resources was founded in 1954 as the School of Forest Resources. It consists of educational programs in the

Departments of Forestry, Forest Products and Wildlife and Fisheries.

The Forest and Wildlife Research Center, a separately funded unit in the Division of Agriculture, Forestry and Veterinary Medicine, was authorized by

the Mississippi Legislature with the passage of the Renewable Natural Resources Act of 1994. The center's research expenditures totaled more than \$10.4 million for fiscal year 2002.

Award Winners



Smith and Singleton

Dibble, Jones, Demarais, and former college dean Foster

Administrative assistant to the dean/director Beverly Smith (l) and coordinator of student services Rachel Singleton are among College of Forest Resources employees honored recently. Both received the 2003 Doris Lee Memorial Staff Awards for outstanding service. The awards were presented at the annual banquet of the College of Forest Resources.

Three CFR faculty members have been honored with outstanding achievement awards. Receiving the 2003 awards are associate professor Eric Dibble (l) for teaching, associate professor Jeanne Jones for service, and professor Steve Demarais for research. All three are members of MSU's Department of Wildlife and Fisheries. The honors were presented at the recent annual banquet of the college and the Forest and Wildlife Research Center.

DEPARTMENT Updates

FORESTRY

- The Society of American Foresters/Forestry Club student chapter placed seventh in the Southern Forestry Schools Conclave held at Clemson University.
- **Dr. Don Grebner** has been promoted to associate professor.
- **Juanita Mobley** has been promoted from research associate I to research associate II.
- **Dr. Richard P. Maiers**, assistant professor, joined the faculty in early July and specializes in forest hydrology and watershed management. **Dr. Changyou Sun**, assistant professor, began work Aug. 1 and specializes in forest policy and law.
- **Dr. Cetin Yuceer** began work as an assistant research professor on July 1 in the specialized area of forest biotechnology.
- **Dr. Scott Roberts** is on sabbatical leave until Dec. 31 with the USDA Forest Service, Pacific Northwest Experiment Station, in Olympia, Wash.
- Forestry undergraduate students and **Dr. Don Grebner** participated in the World Forestry Congress in Quebec City, Canada, Sept. 21-28.

FOREST PRODUCTS

- **Donan Eckles**, graduate student, received the MSU Women's Club 2003 Graduate Scholarship Award.
- The Department of Forest Products received the Wood-based Composite Graduate Fellowship in the amount of \$20,000. The scholarship was awarded to graduate student **John Kirkpatrick** this year.

- **M. Sridhar Balaji Bhaskar**, graduate student, was among three receiving the best student paper award. His paper, titled "Monitoring the Internal Structure of Barley Plants Subject to Metal Phytoremediation," was honored during the 2003 student challenge as part of a biennial symposium sponsored by Ohio-based Battelle Memorial Institute.
- **Dr. Mike Barnes** received the Forest Products Society's 2002 Fred W. Gottschalk Memorial Award. The award recognizes and honors exceptional service to the international organization by an individual member.
- **Dr. Jilei Zhang** has been promoted to associate professor.
- The TimTek pilot plant has been constructed. **Drs. Dan Seale and Terry Sellers Jr.** are overseeing the operation of the plant and the manufacturing of the product. This building was constructed faster than any other on the MSU campus.

WILDLIFE AND FISHERIES

- **Dr. Lou D'Abramo** is the newest William L. Giles Distinguished Professor. The distinction is the highest the university awards to a faculty member. **D'Abramo** also received the Exemplary Service Award from the World Aquaculture Society. This award is the highest honor bestowed by the international nonprofit organization.
- **Dr. Rick Kaminski** received the graduate-level teaching award at the 2003 Faculty Recognition Awards Program.

- **Dr. Bruce Leopold** received the research award at the 2003 Faculty Recognition Awards Program. **Leopold** also was named Outstanding 2003 Alumnus for the School of Renewable Natural Resources at the University of Arizona.
- **Judy Goodman**, accounting records assistant, received the Betty Douglas Memorial Staff Award.
- **Dr. Steve Demarais** received the MSU Office of Research Outstanding Research Scientist in the Forest and Wildlife Research Center Award.
- **Bronson Strickland**, graduate student, received the MSU Office of Research Outstanding Research Support Staff Award.
- **Josh Stafford** and **Scott Edwards**, graduate students, received Graduate Student Association Annual Awards for outstanding papers at the 2003 MSU Graduate Symposium.
- **Randy DeYoung**, graduate student, received the 2003 Outstanding Graduate Research Assistant, Doctoral Level at the 2003 Graduate Student Association Annual Award.
- **Dr. Anita Kelly** has resigned and accepted a faculty position at Southern Illinois University.
- **Dr. John Hargreaves** has resigned and accepted a faculty position at Louisiana State University.

College personnel moves announced

Two administrators in the College of Forest Resources and the Forest and Wildlife Research Center are assuming new duties for the next year.

Steven Bullard and Douglas Richards recently were appointed to interim positions at the university. Bullard now leads the forestry department, while Richards is holding the research center's associate directorship.

Bullard will continue as director of the Institute of Furniture Manufacturing and Management. The Department Head position is a joint appointment with the college and MSU Extension

Service. Richards has led the forestry department since 1977.

Their appointments were announced by Bob Karr, interim dean of the college and interim director of the research center, and extension service director Joe McGilberry.

Bullard joined the faculty in 1983, serving in the departments of forestry and forest products. A researcher in the areas of forest investment and furniture industry resources, manufacturing and marketing, he holds bachelor's and master's degrees from MSU and a doctorate from Virginia

Polytechnic Institute and State University.

Richards holds a bachelor's degree from the University of British Columbia and master's and doctoral degrees from Oregon State University.

As interim associate director, he will coordinate research efforts at the center, a separately funded unit in the Division of Agriculture, Forestry and Veterinary Medicine.

Created by the Mississippi Legislature in 1994, the center's research expenditures totaled more than \$10.4 million for fiscal year 2002.

Deer pens dedicated to former employee

The nearly 30-year-old animal care facility deer pens on campus were dedicated in June to the memory of longtime employee Rusty Dawkins of Starkville.

Dawkins, who died November 2002 at the age of 40, had served 15 years as facilities coordinator in the Department of Wildlife and Fisheries and was a 21-year veteran of the Starkville Fire Department, where he was battalion chief.

During the public ceremony at 965 Blackjack Road near MSU's animal care facility, Lt. Gov. Amy Tuck and state Sen. Tim Johnson were among those making comments. The Mississippi Legislature passed a resolution in the 2003 session commending the life of Dawkins and expressing sympathy for his death.

Dr. Bruce Leopold, head of the department of wildlife and fisheries, said the dedication will honor Dawkins' exemplary work as animal care facilities coordinator.

"We decided to dedicate our deer facilities—which have been in operation for almost three decades—to Rusty Dawkins because of his profound dedication and long-term support of our deer research and his love of Mississippi State University," Leopold said.

Dawkins was a native of Noxubee County and member of Adaton Baptist Church. He is survived by his wife Dana, daughter Lauren, son Tyler, father Johnnie Mack Dawkins, mother Betty Dawkins, sister Sandy Dawkins, and brother, Jeff Dawkins.



(l to r) Unveiling the new sign are State Senator Tim Johnson, Vance Watson, Lt. Gov. Amy Tuck, Steve Demarias, Bruce Leopold, and Harry Jacobson.

Plair legacy will live on through Illahee Tree Farm Endowment

To help Mississippians realize the full range of benefits available from their natural resource, Theodore and Katherine Plair of Walnut Creek, Calif., established a charitable remainder trust naming the MSU Foundation Inc. beneficiary.

The gift will provide financial support for the College of Forest Resources to ensure a margin of excellence in teaching, research and service.

Proceeds of the \$250,000 gift established the Illahee Tree Farm Endowment for the CFR. The assets for the endowment were derived from the wise management and stewardship of a 760-acre tree farm owned by the Plairs in Washington County, Ore. Known as The Illahee Tree Farm, the property is named for a Chinook Indian word meaning "beautiful country."

"Mr. and Mrs. Plair had a strong desire to assist our college in its focus and commitment to comprehensive teaching, research and service programs in forestry, forest products and wildlife and fisheries," said Interim Dean Bob Karr. "This new endowment, in their memory, will help take us to the next level of excellence."

According to Keith Gaskin, CFR director of development, the earnings from the endowment will be used to meet the priority needs of the college.

"These types of planned gifts can transform a good program into a national leader," Gaskin said. "This generous gift will have a major impact on our students and faculty."

Open for use in all three departments, the Plairs stipulated that the dean can direct the funds to be used for student enhancement, professional renewal and recognition of faculty,

equipment upgrades or other opportunities to improve the quality of programs in the college. Mr. and Mrs. Plair also wanted the gift to be used as challenge for other individuals or forest-based industries to match their support for the betterment of the CFR.

Ted Plair was born in Jackson and graduated from high school in Philadelphia in 1925. He graduated from MSU in 1929 with a general science degree. He was encouraged by his professors to study forestry and transferred to the University of California School of Forestry at Berkeley where he completed requirements for both a bachelor's and master's degree in forestry. He received a fellowship for advanced study in forest land economics, which he completed in 1932 and 1933.

Plair worked seasonally on field studies for the U.S. Forest Service Experiment Station at Berkeley during his fellowship. Following its completion, he was employed by the National Park Service as a forester for the western division headquartered in Berkeley. In 1935, he transferred to the USDA Soil Conservation Service



Katherine and Theodore Plair

as regional forester for the Pacific Southwest. At the time of his retirement, he was the head woodland conservationist.

During his tenure, he received the Superior Service Award for Soil Conservation Service by the Secretary of Agriculture. He was cited for unusually effective leadership in developing the concept of soil forest site relationship from a theory to an accepted and widely used procedure with profound effects on forestry and soil science.

Plair died in 1998 at the age of 93. Mrs. Plair died in January 2003 at the age of 94. They are survived by their daughter Gaynl Keefe.

Donor Memorial

Jane Player of Madison died this summer. A very special friend to the College of Forest Resources and MSU, Mrs. Player, along with her husband John, made the initial \$1 million pledge during MSU's first capital campaign. The CFR received the gift to establish the Jane and John Player Endowment to support walnut research and technology development at MSU. The endowment was established for funding research and graduate instruction applicable to the production of black walnut. Mr. and Mrs. Player devoted considerable time, effort and resources to the growing of walnut trees on their farm in Madison and on surrounding land in the area.

Furniture manufacturers donate \$25,000

The nation's largest trade organization for furniture manufacturers recently pledged \$25,000 to support the distance learning capabilities of MSU's Institute of Furniture Manufacturing and Management.

The American Furniture Manufacturers Association of High Point, N.C., is making the contribution through its foundation. AFMA is dedicated to fostering growth and development of the furniture industry in the United States.

Housed in the newly-constructed Franklin Center, the distance learning capabilities are extremely important for accomplishing the objectives of the IFMM, particularly in providing technical assistance, workforce education and training and providing an effective means for manufacturers, suppliers and distributors, to interact with students, educators and researchers.

The primary goal of the institute is to enhance the long-term competitiveness of the furniture industry. In the near future, many of the research and educational programs of the IFMM will be housed in the Franklin Center, a 35,000-square-foot campus facility. The facility will provide state-of-the art laboratories for engineering and automation, quality testing and assurance, lean manufacturing systems, and other areas of emphasis and it will include a showroom to highlight outstanding products and services of furniture and supplying industries and associations.

The IFMM is a collaborative effort of several colleges and units at MSU,

including the College of Business and Industry, the Bagley College of Engineering, the College of Architecture, the College of Forest

Resources, MSU Extension Service's Food and Fiber Center, and the Forest and Wildlife Research Center.

Johnsons recognized for continued support

The College of Forest Resources recently held a luncheon honoring the Johnsons for their continued support through private gifts.

In February, Col. Kenneth D. Johnson and his wife Catherine gave more than 120 acres of Scott County timberland to the CFR. This gift is part of the 400 acres in Scott and Leake counties valued at more than \$1 million that the Johnsons have bequeathed to the college through the MSU Foundation.

Future funds generated from the proper management of the timber will be added to the Col. Kenneth "K.D." Johnson Endowment for Excellence which he established in 1998. Over time, the endowment will be used to establish faculty chairs, professorships, fellowships, and other general enhancements for the Department of Forestry. The Johnsons also have endowed a scholarship in both of their names to support students majoring in forestry, as well as making contributions to support the CFR's international studies program.

In November 1942, while an engineering student at MSU, Johnson joined the Army Enlisted Reserve Corps.

One of Mississippi's most decorated military men, he served in the military for more than three decades. Upon his retirement, he was awarded the Legion of Merit, one of the highest awards presented to U.S. military personnel. After leaving the Air Force, he personally began to convert his family farmland to timberland. Johnson participated in the forestry summer field program under the direction of Dr. John Switzer.

"K.D. and Catherine have become members of the CFR family," said Interim Dean Bob Karr. "We consider it an honor to be associated with such a fine family and we felt that if the colonel made it through summer camp with Dr. Switzer, that he had more than earned a spot as an honorary member in the CFR Alumni Society."



Catherine Johnson (l) and Charles Lee (r) join former dean Sam Foster as he presents Col. K.D. Johnson with an honorary membership in the CFR Alumni Society.

features

New equation adds up to better weight estimates

A forestry professor is providing a better way to predict the “delivered” weight of standing Southern pines.

Associate professor Robert C. Parker and other scientists at the Forest and Wildlife Research Center have developed a mathematical formula that gives forest resource managers the ability to accurately predict the weight of standing trees very early in the production process.

Parker said the MSU-developed equation, which was tested through extensive field research, should be especially helpful in estimating weight of the green wood preferred by most mills in the hot, humid South for its ability to be stored for long periods with little deterioration.

“There currently are weight functions and tables available to estimate standing trees,” Parker said. “Most predict green-weight immediately after trees are felled, rather than weight once delivered to the woodyard or mill.”

Because of moisture loss, weight differs significantly after delivery to even the first processor, he explained.

The MSU-produced equation predicts the weight of trees at delivery, as well as providing compatible field measures to predict conventional units such as cubic feet, cords and board feet.

In testing their approach, the team began by measuring a sample of standing trees at the university’s John W. Starr Memorial Forest near Starkville. Once the trees were felled, more intensive measurements were conducted on the ground.

To minimize operational delays, half the sample trees—designated “full profile” trees—were measured both inside and outside the bark at specified intervals along the stem. The other half—“partial profiles”—were measured only outside the bark on the felled stem at fewer specified intervals.

Parker said the samples then were limbed, topped and moved to the loading site, where they were weighed and measured for stem length and merchantable top diameter—that portion of the tree that can be used for forest products.

“We determined that the full- and partial-profile equations were about the same, meaning that forest resource managers now can take fewer

diameter measures and still obtain reliable volume estimates,” Parker said.

The new equation also can be used to predict the weight of any merchantable top-diameter, thus providing an additional tool for forest inventory and administrative planning, he said.

For additional information about the study, contact Parker at (662) 325-2775 or rparker@cfr.msstate.edu.



Researcher outlines ‘lean’ system for furniture production

Lean production—an engineering term for the ability to produce more with less—is the subject of a new book co-authored by a faculty member.

Associate professor Steve L. Hunter of the Forest and Wildlife Research Center has collaborated with J.T. Black on a reference work titled “Lean Manufacturing Systems and Cell Design.” The 336-page edition is published by the Society of Manufacturing Engineers.

In addition to serving in MSU’s Institute of Furniture Manufacturing and Management, Hunter works with Mississippi and Southeastern furniture manufacturers to improve their productivity and international competitiveness.

Based on decades of study and firsthand observations of prominent companies, he and Black—an Auburn University professor emeritus of industry and systems engineering—detail how to design and introduce lean cellular systems in commercial furniture operations.

“Lean processes first were pioneered by Toyota Motor Co. and have become the modern standard for creating value while eliminating waste in manufacturing,” Hunter said. “The Japanese developed lean production techniques to reduce inventory levels, thus increasing cash flow.”

Using a 10-step methodology, the authors demonstrate how lean processes can produce superior quality products at a low cost while increasing the competitiveness of manufacturers who adopt the concept.

“Lean processes involve a linked-cell manufacturing system that provides for a continuous flow of materials through a plant,” Hunter said. “Implementing lean manufacturing requires a systems-level change for the factory that will impact every segment of the company, from accounting to shipping.”

Hunter said the 15-chapter book outlines steps to the process, which begins with re-engineering of the manufacturing system as the foundation for lean

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Researchers seek to restore disappearing walleye populations

The Gulf Coast strain of walleye is a freshwater fish renowned for sweet, fine-textured meat. Native to the Deep South and once abundant throughout most of Mississippi, it now has virtually disappeared.

A two-year research project under way in the Forest and Wildlife Research Center is seeking to reverse that trend by restoring walleye populations.

While the walleye is the leading inland sport fish of Canada and part of the Northern United States, the Gulf Coast version is genetically different from its Northern cousins. Inhabiting drainages of Northeast Mississippi, most of Alabama and Northwest Georgia, it can live up to 10 years while growing as long as 29 inches and weighing up to 10 pounds.

"In Northeast Mississippi, the abundance of Gulf Coast walleye has been upset by habitat alterations such as impoundment and channelization," said Hal Schramm, fisheries biologist in the Wildlife and Fisheries Department. As a result, he added, the fish now is rare in the Tombigbee River and the rest of the Mobile Basin.

In response to the observed declines, the Mississippi Department of Wildlife, Fisheries and Parks has developed a conservation plan that will receive assistance from Schramm and MSU research colleagues Anita Kelly and Steve Miranda.

"We will develop hatchery techniques to efficiently produce young walleye and identify methods to enhance the survival of stocked fish," Kelly explained.

Miranda said the Alabama Department of Conservation and Natural Resources no longer stocks walleye and Mississippi only irregularly has produced and stocked the fish into tributaries of the Tennessee-Tombigbee Waterway, a 234-mile north-south controlled course stretching from Northeast Mississippi to West Central Alabama. Recent surveys of the Luxapalila Creek in Lowndes County, one of those tributaries, found walleyes of hatchery origin, he said.

To improve hatchery and survival techniques, MSU scientists are developing a system to spawn, hatch and culture the walleye. Once the best method to produce fingerlings is

determined, they will focus on developing the most effective method to enhance survival of stocked fish.

"Although strategies for achieving high survival of stocked walleyes in lakes and reservoirs have been extensively investigated, factors affecting survival of Gulf Coast walleye remain poorly understood," Schramm said.

Miranda said the inability to locate and collect juvenile fish has presented a major challenge to their study in native streams. To deal with this, the MSU team will limit the stocking and search area to blocked sections of streams that discharge into the Tombigbee River.

Added Kelly: "Not only will limiting the area increase the success of recapturing fish after stocking, but this approach also could be a suitable restoration strategy."

For additional information, e-mail Miranda at smiranda@cfr.msstate.edu or Schramm at hschramm@cfr.msstate.edu.

"Lean" system continued

production.

"Just as the first step in home construction is to build a strong and sustainable foundation, the first step in manufacturing is to build a strong and linked-cell system that integrates production, inventory and quality control with machine-tool maintenance," Hunter explained.

The publication also highlights the use of advanced automation and three-dimensional software in simulating manufacturing flow, as well as the

impact ergonomics has on employee productivity.

"Lean manufacturing is the manufacturing system of the future," Hunter said. "Companies today need to be more productive than the competition at providing customers with high-quality goods and services. If these goods are provided at a low cost and in a timely manner, a company will thrive and become a factory with a future."

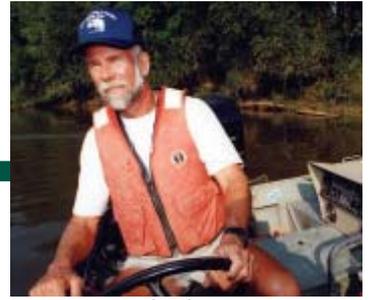
Hunter, a faculty member in the Forest Products Department, holds a

bachelor's degree in manufacturing engineering technology from Berry College. His master's and doctoral degrees in industrial engineering were completed at Auburn.

For more information on the book or how lean processes can be implemented in a manufacturing plant, contact Hunter at (662) 325-8344 or shunter@cfr.msstate.edu.

features

Professor co-authors handbook



Hal Schramm

A professor is the co-author of a detailed new guidebook for fishing tournament organizers and the anglers who compete in the wildly successful aquatic challenges.

Hal Schramm of the university's Forest and Wildlife Research Center has collaborated with Gene Gilliland of the Oklahoma Fishery Research Laboratory to produce *Keeping Bass Alive: A Guidebook for Anglers and Tournament Organizers*.

Focusing on ways to maximize the survival of bass caught and released during tournaments, the 44-page booklet is published by BASS/ESPN Productions Inc. The guide also is designed as an aid to tournament hosts and bass boat owners, dealers and manufacturers.

"All of these groups have interests in and responsibilities for maximizing the survival of bass caught and released during tournaments," Schramm said. "By following procedures described in this book, we believe survival of bass caught and released in tournaments can

consistently be over 90 percent, even under the toughest conditions."

In addition to leading the MSU-based U.S. Geological Survey Cooperative Fish and Wildlife Research Unit, Schramm is a professor of fisheries in the academic Department of Wildlife and Fisheries. A member of the faculty since 1993, he holds degrees from the University of Illinois and Southern Illinois University.

Gilliland said the catch-and-release concept was introduced by BASS—Bass Angler Sportsman Society—30 years ago. The conservation ethic caught on and now is practiced worldwide.

"Our guidebook emphasizes the least stressful ways to handle captured bass, as well as live-well management techniques, weigh-in procedures and release strategies," said Gilliland, an Oklahoma Department of Wildlife Conservation fishery biologist and graduate of Texas A&M and Oklahoma State universities.

Keeping Bass Alive is divided into three chapters: "Why Bass Die (Initial and Delayed Mortality)," "The Angler's

Role in Improving Survival of Released Bass" and "How the Tournament Organizer Ensures High Survival."

Begun in 1967 by Montgomery, Ala., resident Ray Scott, BASS now enrolls more than 600,000 members worldwide. Since its beginnings, the organization has worked to create "a credible and honorable tournament trail, improve the environment by uniting and amplifying the voices of anglers, and secure the future for youth."

BASS is a wholly owned subsidiary of ESPN, the Entertainment Sports Programming Network. The national multimedia sports entertainment company purchased BASS in 2001.

Copies of *Keeping Bass Alive* may be obtained by contacting the BASS Conservation Department at (334) 272-9530 or conservation@bassmaster.com.

Scientists produce wood protection guide

The latest information about wood decay and its prevention are the subjects of a new reference book co-edited by two Mississippi State faculty members.

Wood Deterioration and Preservation: Advances in Our Changing World is the culmination of two years' work by university forest products professors Darrel D. Nicholas and Tor P. Schultz, along with University of Maine colleague Barry Goodell.

Published by Oxford University Press and the American Chemical Society, the guide provides more than 400 pages of expertise from around the world, as well as an overview of

current knowledge about wood degradation processes. New developments in the rapidly changing field of wood protection also are covered.

Both doctoral graduates of North Carolina State University, Nicholas and Schultz have earned wide recognition for their work in wood protection. They jointly hold five patents for work in synergistic and enhanced wood preservative compositions.

"In anticipation of a U.S. Environmental Protection Agency ban on chromated copper arsenate, we have conducted a number of projects to develop environmentally-friendly wood preservatives that ensure both

durable and safe lumber," said Schultz, whose specialty is wood chemistry and wood preservation.

A mixture of three chemicals, CCA, as it's commonly known, is used widely to protect wood from fungal decay and insect attack. Last year, EPA ruled that CCA-treated lumber cannot be used after Dec. 30 for products in residential settings. Play structures, picnic tables, decks, and fences are among the affected items.

Goodell, a professor of wood science and technology, works at Maine's Advanced Engineered Wood Composites Center.

For more information, contact Schultz at (662) 325-3136 or t Schultz@cfr.msstate.edu.

features

Studies focus on needs, benefits of urban forestry

In two separate but related projects, Mississippi State is working to help small state and regional municipalities strengthen their urban forestry plans and programs.

Simultaneous efforts of the Forest and Wildlife Research Center, each will focus on the relatively new area of forestry that emphasizes uses and benefits of trees in cities and towns, said Dr. Stephen C. Grado, an associate professor of forestry who directs both projects.

Using a statewide survey, the first investigation will seek to identify both current involvement in and future interest for urban forestry programs and assistance among Mississippi's small- to mid-sized communities.

With assistance from MSU's John C. Stennis Institute of Government, researchers recently sent more than 250 e-mail and fax surveys to community leaders. The responses of mayors, public works and parks and recreation directors, as well as public safety officials, will help measure the success of existing urban forestry projects, Grado explained.

"This information will lead to programs and activities enabling

professionals, governmental organizations, agencies, and communities to initiate or better promote urban and community forestry programs," he said.

The second project will use the City of Hattiesburg to develop a predictive model for relating the benefits and costs for small Southern cities to the character and distribution of their urban forests.

Though funded primarily by the Mississippi Forestry Commission and U.S. Forest Service, the second study also is receiving support from the Southern Group of State Foresters and Mississippi Urban Forest Council.

While cost-benefit models exist for large urban areas in the Northeast and Pacific Northwest, Grado said "there's not a model for small- to medium-sized towns and cities in the South."

Large-city models can't be applied to most Southern cities because of differences in administrative structures, climate and size, he added. The MSU research team will use the Forrest County seat to document the physical and aesthetic effects of trees in each of its diverse neighborhoods. Specifically, investigators will relate

the presence of trees to such factors as residential property values, rate of pavement degradation, storm runoff, and the costs of removing damaged or decayed trees.

"The City of Hattiesburg has a tree ordinance requiring developers to have one tree per 3,000 square feet, provide green space in front of buildings and maintain vegetative buffers," said Mark Anderson, an MSU alumnus now serving as the Hub City's urban forester.

"Trees here do more than provide aesthetics," Anderson said. "They also protect our roads by shading them and helping manage storm water runoff."

Grado said researchers also will look at the costs and benefits of trees in other city-specific properties, including noise absorption, mitigation of perceived traffic proximities and potential energy savings from the deflection of intense sunlight.

Once the project is complete, Grado said regional municipalities "will have a new tool to evaluate, develop and implement urban forestry activities in ways that benefit their community."

For more information, contact Grado at (662) 325-2792 or sgrado@cfr.msstate.edu.



2003 Mid-South Forestry Equipment Show a huge success

Machines and technology that keep the South's forest industry booming were on display at the 2003 Mid-South Forestry Equipment Show held September 12 and 13. Demonstrations of bulldozers, fire plows, log loaders, skidders, and other heavy equipment operating in a variety of timber types and stand conditions were highlighted. Approximately 2,600 attended the 2003 show, including many high school, vo-tech, and junior college students.

FEATURES

EVENTS

Alumni

Greetings from Bellamy, Ala.

As the 2003 president of the MSU CFR Alumni Society, let me introduce myself and our other officers to you. My name is Stephen May, although while I was in forestry school at MSU, the other students called me "the old man" because I was so much older than the other students. Being a veteran, and already married with a couple of kids, I was just a tad older—and maybe a little more settled.

I graduated in 1977 and after several different jobs, including a stint at the Alabama Forestry Commission, I ended up in my current position working at Delaney Development Corp. in Bellamy. I am surrounded by women—my wife Terri and daughters Stephanie, Brooks and Emily. This past year our family finally acquired another male presence, my son-in-law, husband of Brooks. I am very proud to have been elected to serve you as the president of the CFR Alumni Society and especially proud to follow Ruth Cook as president—she's been a catalyst for action on behalf of MSU CFR.

Ruth Cook (forestry, 1982) served as our president last year and is now on the board. Ruth has been a fellow Alabaman for a while, working for Kimberly Clark and then Scott Paper Co. in South Alabama until those companies sold out. She now is with Molpus Timberlands in Hattiesburg, much closer to her hometown of Canton.

Our first vice president is Don Burnham (forest products, 1978). Don currently is employed by Holmes Community College. He recently left Georgia-Pacific when the Oxford mill closed. He also is the son of one of our early foresters, the late James Burnham of Laurel. Don has been attending that other school in North Mississippi, and soon should be known as Dr. Burnham.

Second vice president is Skip McCollough (forestry, 1979), owner and president of South Mississippi Forest Products since its beginning in 1990. Prior to this venture, he

worked with Container Corp. of America for more than eight years. Skip was named MSU CFR Alumnus of the Year in 2001. Skip and his wife Julie have made a serious commitment to MSU CFR, having endowed a scholarship in the college. He and wife Julie have a daughter and son-in-law and make their home in Hattiesburg.

Secretary-treasurer is Tom Morgan (forestry, 1986). Tom recently filled the position of woodlands manager for Norbord in Guntown, responsible for procuring and managing the raw material for this OSB facility. Prior to joining Norbord, Tom owned and operated Faith Forestry Services based in his hometown of Pontotoc.

Ivan Q. Eubanks (forestry, 1971) is one of our directors. A veteran, Ivan went to school on the G.I. bill and was lucky enough to have even more support from his very sweet wife Sylvia, who is a registered nurse. They have two grown children, Brian and Robin. After college, Ivan worked for Mississippi Power Co., then for Masonite until their land was sold to Leaf River. He spent some time buying hardwood sawtimber for Al-Tom and then buying wood for ALMiss in State Line. Ivan now works independently.

After 14 years of working as a forester and environmental analyst, Sharon Hatch Hodge (forestry, 1981) went to New York to study law with a specialty in environmental law. She currently is a special assistant attorney general, providing legal counsel in the areas of environmental and administrative law to the Mississippi Department of Marine Resources.

Director Walter Dennis (forestry, 1962) obtained his master of biological sciences degree in 1968. Walter is a wildlife biologist with Walter Dennis and Associates, a private consulting firm in Natchez. Walter not only provides forestry and wildlife consulting, but also environmental consulting. He also is a licensed real estate broker, registered forester and certified wildlife biologist. Walter

retired from International Paper Co. several years ago.

Director George Paris (forestry, 1956) is a native of the Delta. George retired after a long career with the USFS and currently resides in Brandon with his lovely wife. He enjoys flying and building planes in his spare time.

Director Sid Moss (forestry, 1958) is another old-timer. Sid worked many years for International Paper Co. and his career as a forester culminated with his term as State Forester with the Mississippi Forestry Commission.

Past-president director is Harold Gordon (forestry, 1973). Harold has a busy career as owner of Louisville Timber Co. Harold and his wife Deborah have two sons and live in Sturgis. Harold also is a sports photographer and is often on the sidelines at MSU football games.

Our focus for this year is preparation for the 2004 Golden Anniversary of the College of Forest Resources. Yes, back in 1954, we had our first graduates from the School of Forestry. Interestingly, the building that first housed the forestry school, Montgomery Hall, is under renovation. We hope to be able to include a tour of this "new-old" building in one of our special 50th anniversary celebration events.

Our alumni society is only as effective as we make it—and that depends on each of us doing our share. Please volunteer to help in any way you can—paying dues, buying and wearing a shirt, or volunteering to help with planning or hosting alumni events, recruiting good students for the CFR, or contributing your photos and stories to our history projects. Don't wait to be asked to help—call and volunteer!

Stephen May

The CFR Alumni Society is focused on supporting the College of Forest Resources. Although we work cooperatively with the MSU Alumni Association, we are an entirely separate organization. To be a full-fledged member of the CFR Alumni Society, you must pay yearly dues of \$25. These are not the same dues that you pay to the MSU Alumni Association and the MSU Alumni Association does not collect dues for the CFR Alumni Society. Membership is on an annual basis beginning in October of each year. If you would like to support the CFR Alumni Society and its activities, please tear off this application and return it with a check or money order for \$25 to:

MSU College of Forest Resources Alumni Society
Box 9681
Mississippi State, MS 39762

Name _____ Year Graduated _____ Department _____
Address _____ City _____ State _____ ZIP _____
Telephone _____ E-mail _____

Student **Services**



2003 GRADUATES

A special reception and ceremony honoring spring 2003 graduates and their families was held in May. The dean presented the students with a certificate of completion as they marched in, and a class photo was taken for the students.

STUDENT WILDLIFE RESEARCH RECEIVES TOP REGIONAL HONOR

A study of state-mandated deer conservation strategies is earning a first-place regional honor for a Mississippi State graduate student.

Bronson K. Strickland of Athens, Ga., a doctoral student in the Department of Wildlife and Fisheries, recently was honored with the top prize for a research report presented at the 2003 Southeast Deer Study Group meeting in Chattanooga, Tenn.

Founded in 1977 and affiliated with the Wildlife Society, the group is a professional association of Southeast deer biologists.

Funded by a federally subsidized grant from the Mississippi Department of Wildlife, Fisheries and Parks, Strickland's project evaluated the impact of Mississippi laws governing deer harvesting practices.

In 1995, the Mississippi Legislature took steps to limit the harvesting of white-tailed bucks to those with at least four antler points. Strickland's research involved a statewide comparison of harvest rates.

Based on his analysis of state wildlife management-area data, Strickland found that the "four-point rule" is reducing the harvest of one-and-a-half year-old bucks and shows limited improvement in the harvest rates of bucks two-and-a-half to three-and-a-half years old.

His research concluded, however, that the effectiveness of imposed antler-based harvest criteria has limits and that successful buck management requires the hunting public use restraint in harvest decisions.

Strickland holds bachelor's and master's degrees from the University of Georgia and Texas A&M University-Kingsville, respectively.

DOCTORAL STUDENT TAKES FIRST PLACE IN COMPETITION

The research report of a Mississippi State doctoral student in the department of forest products is being praised by an international body.

M. Sridhar Balaji Bhaskar's evaluation of the use of ferns to extract metals from contaminated soils recently earned first-place honors from the Society of Wood Science and Technology. A native of India, he was among 15 students whose research reports were considered for judging this year.

The challenge was part of the organization's recent 2003 meeting, whose theme focused on wood science and technology in the bio-based economy.

The society was established in 1958 by scientists and engineers working in academia, government, consulting, and the forest products industries. Among other missions, members work to provide education and expertise that will improve the use and production of wood products.

Balaji Bhaskar is scheduled to graduate from MSU in May 2004. He holds bachelor's and master's degrees in agriculture from the Acharya N.G. Ranga Agricultural University in Hyderabad, a southeastern city in his native country.

Web site earns kudos

A Web site introducing the academic resources of Mississippi State's College of Forest Resources is earning recognition from a national organization.

The academic portion of university site www.cfr.msstate.edu recently received an Outstanding Electronic Publication Certificate of Merit from the National Academic Advising Association. Developed by College of Forest Resources student services coordinator Rachel L. Singleton and Web designer Karen A. Brasher, it was among four honored this year.

Entries were judged on content, presentation, clarity, and creativity. Other winners included the universities at Albany-State University of New York, Maryland-Baltimore and Central Florida.

Headquartered in Manhattan, Kan., the advising association annually recognizes outstanding individual and institutional efforts in providing academic guidance for students. The organization represents more than 6,700 members, including faculty members, professional advisers, counselors, and others working in academic and student affairs areas.

The CFR Web site, which contains sections both for prospective and current students, earlier was honored with a Golden Triangle Advertising Federation citation of excellence. The academic sections provide entry to individual course Web sites, links to other MSU sites, and frequently needed student forms.

Featuring a frequently rotating photo and the latest college news, the eye-catching presentation also links to individual departments and research activities.



Updates

L. Kent Robbins (forestry, 1964) is living in Picayune.

Robert Clanton (forestry, 1969) and wife Karen live in Hattiesburg.

Curtis Hopkins (forestry, 1971, and wildlife and fisheries, 1973) is the director of conservation programs for Ducks Unlimited Inc. He and wife Sharon reside in Jackson and have two children: Shannon, 30, and Elizabeth, 22. Curtis received his doctorate from Texas A&M in 1981.

Roy V. West Jr. (forestry, 1972) is living in Laurel.

Carl Mason (forestry, 1976) resides in Union.

Keith Allan Blatner (forestry, 1977) is a professor and chair at Washington State University. He and wife B.J. live in Pullman, Wash.

Larry D. Wasfaret (forest products, 1986) is a technical specialist for Southeastern Adhesives Co. He and wife Beth reside in Lenoir, N.C., and have two daughters and eight grandchildren. Larry has been in composite wood products for more than 25 years.

Stephen C. Neal (forest products, 1987) is working as an assistant quality supervisor at Riverwood International Corp. He and wife Karen live in West Monroe, La.

Elizabeth Rooks Barber (forestry, 1987) is a wildlife biologist and vice president of Barber and Mann Inc., a firm that specializes in conservation easement appraisals, real estate, consulting, and land planning. Elizabeth and husband Gerald live in Ridgeland.

Rick Magee (forest products, 1990) is a market applications specialist for Eaglebrook Inc. He and wife Martha reside in Killen, Ala., and have three sons: Joshua, 3; Caleb, 5; and Ethan, 7.

Brad Robison (forestry, 1991) is working as an assistant general manager for Tallahatchie Valley Electric Power Association. He and wife Kelley live in Batesville.

William D. Hammons (forest products, 1992 and 1994) is working as a sawmill manager for Roy. O Martin Lumber Co. He and wife Kathy have recently moved to Lemoyen, La.

Dave Edwards Jr. (wildlife and fisheries, 1996) is the project manager for Westervelt Wildlife Services where he provides wildlife consulting to landowners throughout the Southeast. He and wife Heather have two sons: Clayton, 3, and Dalton (born in April), and live in Demopolis, Ala.

Jeffrey Todd Hamner (forestry, 1997) is a procurement forester for Southern Timber Products Inc. He and wife Kristin live in Tuscaloosa and have two sons: Foster, 4, and Andrew, 1.

Stephen D. Cook (forestry, 1998) is the owner of Southern Land and Timber Co. LLC. He and wife Kelly live in Canton and have one daughter, Bowers, who is 18 months old.

Lance H. Dean (forestry, 2000) is a consulting forester for Dean Forestry Services. He and wife Emily live in Chunky.

Justin H. Laughlin (forestry, 2000) was married May 3 to Katherine Elizabeth Knotts. Justin is working on his graduate degree in wildlife and

fisheries at the University of Tennessee.

Matthew Vrazel (forest products, 2000 and 2002) and wife Caroline are expecting their first child in November.

Bill Howell (forestry, 2001) is working as an associate forester with International Paper in Double Springs, Ala.

Matthew Voitier (forestry, 2001) is pursuing a master's degree in forest products at Louisiana State University. He currently works as a graduate assistant for LSU.

Jeremy S. Tew (forestry, 2002) is self-employed, contracting timber cruising and other services. He lives in Marion.

Chaiwat Kongsom (forestry, 2002) is living in Thailand and working for the Sukhothai Thammathirat Open University as deputy dean of agricultural extension and cooperatives.

F.R. Ahmed Kabir (forest products, 1989) died in April at his home in Burlington, Wash.

ALUMNI Updates

We want your news!

To be included in the update, complete and return the form to Melissa Montgomery, Box 9680, Mississippi State, MS 39762-9680 or e-mail mmontgomery@cfr.msstate.edu.

As part of the College of Forest Resources newsletter, the alumni updates help keep us all connected. Please let us know about you, your careers, and family so we can let your friends and classmates keep up with you. Please use the form below to share career changes, recognitions or honors received, family updates, or other news. If you need more space, include a separate sheet of paper.

Name _____ Spouse _____

CFR Degree(s) and Year(s) Received _____

Address _____

City _____ State _____ ZIP _____

Home Phone _____ Business Phone _____

E-mail _____

Occupation _____

Name of Business _____

Children/Grandchildren _____

Update Information _____

Become a member of the CFR Alumni Society

The CFR Alumni Society helps support the College of Forest Resources. Although we work cooperatively with the MSU Alumni Association, we are an entirely separate organization. To be a full-fledged member of the CFR Alumni Society, you must pay \$25 dues annually. These dues are separate from any paid to the MSU Alumni Association. The alumni association does not collect dues for the CFR Alumni Society. CFR society dues are valid from October 1 to September 30. If you would like to support the CFR Alumni Society, you may remit this form with a \$25 check or money order. You do not, however, have to be a member of the CFR Alumni Society to have your news included in "Alumni Updates."

New publications available via the Web



Mississippi's Recreational Fisheries Resources

<http://www.cfr.msstate.edu/fwrc/fisheries.pdf>

A look at the economic values of Mississippi fisheries. Mississippi's aquatic resources are abundant and productive. The state has 14,000 miles of streams, 345,000 acres of ponds and 295,000 acres of larger lakes and reservoirs.

Standing Tree Weight and Volume Tables for Natural Loblolly Pine at the First Delivery Point

<http://www.cfr.msstate.edu/fwrc/equation.pdf>

*The intent of this bulletin is to provide weight and volume tables for loblolly pine (*Pinus taeda*L.) growing in mature, fully-stocked, natural stands. Field foresters and foresters alike should find these tables useful for looking up volumes and weights to common merchantability limits.*

Wood Composites are Enhancing our Quality of Life

<http://www.cfr.msstate.edu/fwrc/comp.pdf>

This publication details a series of research projects on composite wood products.

Illegal Waterfowl Hunting and Ways to Reduce It

<http://www.cfr.msstate.edu/fwrc/waterfowl.pdf>

Waterfowl biologists survey hunters to determine illegal waterfowl hunting in the Mississippi Flyway.

Forestry in Mississippi: The Impact of the Forest Products Industry on the Mississippi Economy

<http://www.cfr.msstate.edu/fwrc/econ.pdf>

This study evaluates the importance of the forest products industry to the state's economy and the economy of three regions within the state: North Mississippi, South Mississippi and the Delta. Based on 1999 data.

Reducing wear of wood-machining tools

<http://www.cfr.msstate.edu/fwrc/tool.pdf>

The machining required when wood is cut, planed and shaped into useful products is a significant cost factor for the wood products industry. This research addresses that issue and indicates that significant progress is being made toward an understanding of the "wear mechanisms" involved.

PUBLICATIONS