Appointment: 60% Research/40% Extension  
Requested Action: Promotion to the Rank of Professor

Research Activities – Todd F. Shupe, September 1, 2005

1. Listing of research publications (published items only)
Note underlined names are T. Shupe’s graduate students

Refereed journal articles (52)


Refereed Conference Proceedings (3)


Choong, E.T., Y. Chen, and T.F. Shupe. 1996. Effect of steaming and hot-water soaking on the
movement of moisture in hardwoods during drying. 5th International IUFRO Wood Drying
13-17, 1996. Québec City, Québec, Canada pp. 419-426.

Refereed Abstracts (5)
Via, B.K., M. Stine, T.F. Shupe, and L.H. Groom. 2005. The covariance between mechanical and chemical
properties for longleaf pine (Pinus palustris). In: The International Forestry Review. Forests in
the balance: Linking tradition and technology. XXII IUFRO World Congress. Brisbane, Australia.
Via, B.K., T.F. Shupe, L.H. Groom, C.L. So, and M. Stine. 2003. The modeling of longleaf pine traits for a
partial diallel genetics study using near infrared spectroscopy. IAWA J. 24(3):332.
Rotorua, New Zealand. p. 55.

Feature Articles (not refereed) (4)
spectroscopy in the forest products industry. Forest Products Journal. 54(3):6-16.
Freeman, M.H., T.F. Shupe, R.P. Vlosky, and H.M. Barnes. 2003. Past, present, and future of
Shupe, T.F. and M.A. Dunn. 2000. The Formosan subterranean termite in Louisiana: Implications for the

Refereed Book Chapters (2)
plywood. In: (H.H. Lee and S.S. Jang, eds.). Better Utilization of Wood for Human, Earth and
and Eastern cottonwood species. In: (H.H. Lee and S.S. Jang, eds.). Better Utilization of Wood for
Science and Technology. Seoul, Korea.

Books (not refereed) (2)
Non-refereed Publications (49)
(Note: research publications only are listed. Extension publications are listed in Section 5 of the Extension section of this document.)


2. Listing of other publications accepted for publication but not yet published
Refereed Journal Articles (4)

Refereed Book Chapters (2)

Book Chapters (non-refereed) (2)

Refereed Conference Proceedings (1)

Non-refereed Conference Proceedings (3)
Refereed Abstracts (2)

Books (1)

3. Other creative and artistic contributions

Gratis Teaching (Academic Appointment: 60% Research, 40% Extension)

Documentation of teaching activities

Courses Taught

Semester: Fall 2005
Class: RNR 7029 Advanced Topics in Forestry (3 hr.)
Class: RNR 8000 Thesis Research
Class: RNR 8900 Research Problems in Natural Resources (3 hr.)
Class: RNR 9000 Dissertation Research

Semester: Summer 2005
Class: RNR 9000 Dissertation Research
Class: RNR 8900 Research Problems in Natural Resources (3 hr.)

Semester: Spring 2005
Class: RNR 7071 Forestry Seminar (1 hr.)
Class: RNR 8900 Research Problems in Natural Resources (3 hr.)
Class: RNR 9000 Dissertation Research

Semester: Fall 2004
Class: RNR: 4061 Selected or Assigned Forestry Problems (3 hr.)
Class: RNR 7071 Forestry Seminar (1 hr.)

Semester: Summer 2004
Class: RNR 9000 Dissertation Research
Class: RNR 8900 Research Problems in Natural Resources (3 hr.)

Semester: Spring 2004
Class: RNR 4061 Selected or Assigned Forestry Problems (4 hr.)
Class: RNR 7071 Forestry Seminar (1 hr.)
Class: RNR 8000 Thesis Research
Class: RNR 8900 Selected or Assigned Forestry Problems (3 hr.)
Class: RNR 9000 Dissertation Research
Semester: Fall 2003
Class: RNR 4061 Selected or Assigned Forestry Problems (2 hr.)
Class: RNR 7029 Advanced Topics in Forestry (3 hr.)
Class: RNR 7071 Forestry Seminar (1 hr.)
Class: RNR 8000 Thesis Research

Semester: Summer 2003
Class: RNR 4061 Southern yellow pine wood quality (2 hr.)
Class: RNR 8000 Thesis Research
Class: RNR 9000 Dissertation Research

Semester: Spring 2003
Class: RNR 4061 Tropical Wood Quality (3 hr.)
Class: RNR 7029 Advanced Topics in Forestry (3 hr.)
Class: RNR 7071 Forestry Seminar (1 hr.)
Class: RNR 8900 Selected or Assigned Forestry Problems (3 hr.)
Class: RNR 9000 Dissertation Research

Semester: Fall 2002
Class: RNR 4061 Southern yellow pine wood quality (2 hr.)
Class: RNR 8900 Thesis Research
Class: RNR 9000 Dissertation Research

Semester: Summer 2002
Class: RNR 8000 Thesis Research
Class: RNR 9000 Dissertation Research

Semester: Spring 2002
Class: RNR 8000 Thesis Research
Class: RNR 8900 Thesis Research
Class: RNR 9000 Dissertation Research

Semester: Fall 2001
Class: RNR 8000 Thesis Research
Class: RNR 9000 Dissertation Research

Semester: Summer 2001
Class: RNR 8000 Thesis Research
Class: RNR 9000 Dissertation Research

Semester: Spring 2001
Class: RNR 4061 Special Problems (3 hr.)
Class: RNR 7029 Advanced Topics in Forestry (3 hr.)
Class: RNR 8000 Thesis Research
Class: RNR 9000 Dissertation Research
Semester: Fall 2000
Class: FOR 8000 Thesis Research
Class: FOR 4061 Special Problems

Semester: Summer 2000
Class: FOR 8000 Thesis Research

Courses Assisted with Instruction
- FOR 3038 Field Studies in Timber Harvesting, Summer 1995
- Forestry 2043 Wood Science and Forest Products, Fall 1995, 1996; Guest lectures 1997-present

RNR 7071 – Graduate Seminar in Forestry

<table>
<thead>
<tr>
<th>Semester</th>
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<th>College Mean</th>
<th>School of RNR Mean</th>
<th>Instructor Score</th>
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</table>

Note: 5 = highest possible rating.

Published Abstracts (56)


LSU AgCenter Impact Reports (6)


Internet Publications (22)

Shupe, T.F. 2005. A new web site titled pallet phytosanitation - information for international trade has recently been launched. Southern Regional Extension Forestry web site.


Shupe, T.F. 2005. Iron stain in wood. AgCenter CMS.


Shupe, T.F. 2002. Wood Products Section on LSU AgCenter Extension Natural Resources Web Site. 2002-present.


Visiting Scientists Hosted (19)

- Mr. Liu Jun, Assistant Professor, Heilongjiang University, Harbin, China. 6/05 – 11/05.
- Ms. Langling Lin, Assistant Professor, Chinese Academy of Forestry. 06/2005-12/2005.
- Mr. Liu Jun, Assistant Professor, Heilongjiang University, Harbin, China. 6/2005 – 11/2005.
- Ms. Animin Huang, Assistant Professor, Chinese Academy of Forestry. 06/2005-12/2005.
- Ms. Wenjing Guo, Assistant Professor, Chinese Academy of Forestry. 06/2005-12/2005.
- Dr. Zhong Yang, Assistant Professor; Chinese Academy of Forestry. 8/2004-4/2005.
- Dr. Zhengjun Sun, Associate Professor; Chinese Academy of Forestry. 8/2004-8/2005.
- Dr. Ge Wang, Associate Professor; Chinese Academy of Forestry. 10/2004-4/2005.
- Dr. Rongjun Zhao, Associate Professor; Chinese Academy of Forestry. 11/2004-4/2005.
- Dr. Huaqiang Yu, Assistant Professor; Chinese Academy of Forestry. 11/2004-4/2005.
- Dr. Doachun Qin, Assistant Professor, Chinese Academy of Forestry. 12/2004-6/2005.
- Dr. Yurong Wang, Assistant Professor; Chinese Academy of Forestry. 12/2004-6/2005.
- Dr. Lin Ying, Professor, South China University of Technology. 12/2004-2/2005.
- Dr. Ximing Wang. Associate Dean, Department of Forestry, Inner Mongolia University. 1/004.1-6/2004.
- Ms. Song Hongzhu. Research Associate. Deputy Chief, Department of Technology & Science, State Forestry Administration, P.R.Chins (SFA), 2002.
- Mr. Zhou Jianren. 2000. Deputy Chief, Department of Technology & Science, the State Administration of Forestry. People’s Republic of China.
4. Participation in professional meetings, symposia, workshops, and conferences (other than artistic performances)

(Also see “Published Abstracts” under Section 3 in the Research section.)

Invited Presentations (49)


5. Other scholarly or creative activities or other contributions to the profession

U.S. Patents (1 awarded, 2 pending)


Japanese Patents (1)


6. Other awards, lectureships, or prizes that show recognition of scholarly or artistic achievement

- I have been recently asked to provide guidance for a new LSU AgCenter research program area at the Calhoun Research Station that will expand on research on closed loop recycling of treated wood developed cooperatively between the Louisiana Forest Products Development Center and the USDA Forest Service, Southern Research Station. I will provide leadership in drafting the position descriptions, interviewing candidates, and assisting the successful candidates to initiate their research program in early 2006.

- LSU Agricultural Center delegate to People’s Republic of China. August, 1999. Participated in the drafting of a Memorandum of Understanding between Chinese Academy of Forestry and the LSU Agricultural Center regarding collaborative wood science research projects. Invited by LSU Agricultural Center to spend 2 weeks in Beijing, Nanjing, and Shanghai.

- Member of USAID Forestry/Forest Products Development Project in Honduras. 2000 – present. A Forestry/Forest Products sector project, part of the Louisiana Alliance/Presidential Program for Investors in Honduras (ALIANZA), was conducted by a team from the School of Renewable Natural Resources and the School of Human Ecology. This project, primarily a technical transfer effort, focused on forest products utilization and processing, economic and rural development, marketing and business development and value-added wood processing. To accomplish this, the LSU team of specialists worked with counterparts in Honduras in each of these areas.
• Member of 2004/2005 Edition of the Empire Who’s Who Executive and Professional Registry.
• Chair (elected). MidSouth Section, Forest Products Society. 2004.
• President (elected) of LSU Chapter of the Honor Society of Phi Kappa Phi. 2004-2005.
• Primary Associate Editor for Wood Products Utilization in Southern Regional Extension Forestry Journal. 2004.
• Merit Award Winner for Research. 2005. LSU Chapter of Gamma Sigma Delta.
• Invited committee member for National Natural Science Award, P.R. China. 2004.
• Exceptional programming in international project. 2003. Honduras Hurricane Forestry and Wood Products Relief Efforts. Sponsored by the Southern Region of the Cooperative Extension Service.
• Exceptional programming in journal publication. 2001. The Formosan subterranean termite in Louisiana: implications for the forest products industry. Sponsored by the Southern Region of the Cooperative Extension Service.
• Exceptional programming in wood science journal publications 1999. Sponsored by the Southern Region of the Cooperative Extension Service.
• Exceptional programming in wood products technology transfer 1999. Sponsored by the Southern Region of the Cooperative Extension Service.
• Exceptional programming in administrative service in continuing forestry education 1999. Sponsored by the Southern Region of the Cooperative Extension Service.
• USDA Award for Individual Extension Program Excellence 1998

Honors and Awards for Graduate Students and Postdoctoral Researchers


7. Research support/grant activities
Total research grants/contracts received: $1,503,309

(Note – Research related only is listed, Extension grants are listed under item 9 in the Extension section)

Shupe, T.F. and S. Lee. 2005. Heterogeneous nucleation on the fiber surface of a semicrystalline polymer. $6,102. National Science Foundation EPSCoR Links with Industry, Research Centers, and National Laboratories (LINK) and Louisiana Board of Regents.
Shupe, T.F. and Q. Wu. 2005. Formosan subterranean termite wood durability research. Status: accepted. LSU AgCenter Special Grant. $29,000.
Vlosky, R.P. and T.F. Shupe. 2005. Spatial mapping and analysis of Louisiana forest products manufacturers. Louisiana Department of Agriculture and Forestry. $12,000.
Shupe, T.F. 2004. Special grant – equipment. LSU AgCenter. $5,810.
Shupe, T.F. 2004. 3-D engineered fiberboard project. $65,065. USDA Forest Service, Forest Products Laboratory.
Shupe, T.F. 2004. FST preservatives from cedar wood extractives. $10,000. USDA Forest Service.
Smith, W.R., T.F. Shupe, and Q. Wu. 2003. Formosan subterranean termite wood durability research. LSU AgCenter Special Grant. $29,000.
Smith, W.R., T.F. Shupe, and Q. Wu. 2002. Formosan subterranean termite wood durability research. LSU AgCenter Special Grant. $29,000


Shupe, T.F. 2002. FST preservatives from cedar wood extractives. Louisiana Agricultural Experiment Station. $15,000.


Shupe, T.F. 2001. Travel grant. Louisiana State University Board of Regents. $1,000.


Smith, W.R., T.F. Shupe, and Q. Wu. 2001. Formosan subterranean termite wood durability research. LSU AgCenter Special Grant. $29,000


Pending ($45,109)


Grants/contracts participant ($600,00)


Funding Sources

- Adsil Corp.
- Albermarle Corp.
- American Wood Preservers Institute
- Arch Wood Protection
- Arnold Forest Products Corp.
- Aventis Corp.
- Bayer
- Boise Cascade
- Capital Resource Conservation and Dev. Council USDA
- Chemical Specialties, Inc.
- CraftMaster
- Elder Wood Preserving Company
- Fairfield Residential LLC
- Forintek Canada Corporation
- Georgia-Pacific Corporation-Gypsum
- Hickson Corporation
- Kop-Coat, Inc.
- Limestone Bluffs RC&D
- LSU AgCenter
- LSU Board of Regents
- LSU School of Renewable Natural Resources
- Louisiana Agricultural Experiment Station
- Louisiana Cooperative Extension Service
- Louisiana Department of Agriculture and Forestry
- Louisiana Forestry Association
- Louisiana Pacific Corp.
- Louisiana Society of American Foresters
- Martha Abshire
- McIntire Stennis Cooper Forestry Res. Program
- MeadWestvaco
- Microban Products Co.
- Ministry of Forestry of People’s Republic of China
- National Research Initiative
- National Science Foundation EPSCoR Links with Industry, Research Centers, and National Laboratories (LINK) and Louisiana Board of Regents.
- Norboard Industries
• Osmose, Inc.
• Quality Borate
• Roy O. Martin Co.
• Society of Wood Science
• Southern Forest Products Association
• Southern Regional Extension Forester
• State of Louisiana
• The Nature Conservancy
• Trust Joist – A Weyerhaeuser Company
• US Borax
• University of Illinois
• University of Maine
• University of Melbourne
• USAID
• USDA Forest Service, Forest Products Laboratory
• USDA Forest Service
• USDA Forest Service, Southern Research Station
• USDA RREA
• West Virginia University
• Wood Promotion Network
• WoodSmart Solutions

8. Theses/dissertations directed (numbers only)

• 2 – Ph.D. dissertations (completed)
• 4 – Ph.D. dissertations (on-going)
• 3 – M.S. theses (completed)
• 1 – M.S. theses (on-going)

9. Major areas of research interest

• Closed loop recycling of decommissioned preservative treated wood.
• Wood quality assessment using near infrared spectroscopy.

10. Outreach – field days, trade-shows, direct clientele contact

• Assisted with the establishment and expansion of numerous portable and stationary sawmill companies, value-adding secondary firms, and small dry kiln operators.

• Visited over 300 primary and secondary forest products companies in Louisiana.

• Reached scores of homeowners through on-site visits, personal communication, and other forms of communication.
Conferences, Workshops and Short Courses Organized - Forest Products (35)


Session Co-Chair. 5.01.00 Wood Quality. IAWA / IUFRO - All Division 5 Conference, Rotorua, New Zealand, 11-15 March 2003.


Workshops and Short Courses Organized and Co-organized – Continuing Forestry Education (27)

2000 Schedule (9)
• February 15. Improving Your Tax Position. Shreveport, LA
• April 18. Forest Measurement Techniques. Ruston, LA
• May 9. Wetlands Issues in Forestry. Hammond, LA
• July 18. Forest Herbicides Application and Use. Ruston, LA
• August 1. Basic Computer Applications. Pineville, Louisiana
• Cancelled. Hardwood Management and Silviculture. Woodworth, LA
• September 12. Wildlife Management. Shreveport, LA
• October 10. New trends in Forestry. Alexandria, LA
• October 17. Geographic Information Systems Short Course. Ruston, LA

1999 Schedule (13)
• April 22. Wildlife Techniques for Foresters. Pollock, LA
• May 27. Media Relations for Forestry Professionals. Hammond, LA
• June 10-11. Forest Pesticide Training and Certification. Monroe, LA
• June 24. Forest Insects and Diseases. Ruston, LA
• July 19. Media Relations for Forestry Professionals. DeRidder, LA
• August 12. Media Relations for Forestry Professionals. Alexandria, LA
• September 23. Media Relations for Forestry Professionals. Shreveport, LA
• October 4. Leadership for Forestry Professionals. Pollock, LA
• October 12. Media Relations for Forestry Professionals. Ruston, LA
• October 28. Forest Investment Analysis. Shreveport, LA
• November 9. Forest Investments. Shreveport, LA
• November 18. Wetlands Issues in Forestry. Ruston, LA

1998 Schedule (5)
• May 21. Computer Applications in Growth and Yield, Forest Finance and Forest Inventory. Shreveport, LA
• July 15. Wetlands Forest Management. Woodworth, LA
• August 11-12. Forest Economics, Taxes, and Estate Planning. Ruston, LA
• September 24. Developing a Competitive Advantage Through Leadership. Shreveport, LA

Alexandria, LA. (4)

Symposia Organized (1)

Public Seminars and Lectures (59)
(Also see the following sections in the Research portion: Published Abstracts under Section 3 and Nonrefereed Publications under Section 1 p. 7).

Host and Presentation Co-Author. Baton Rouge. Cabinda, Angola delegation including Vice-Governor, Director of the Provincial Cabinet and Director of Industry, Commerce and Tourism. Tour of Louisiana Forest Products Development Center facilities and presentation "Forest Sector Team Skills, Experience, and Approach." School of Renewable Natural Resources, LSU AgCenter. October 31, 2003. Baton Rouge, LA.


Proposed research program. At: Louisiana Forest Products Laboratory Annual Steering Committee Meeting. June 1999. Ruston, LA.

Overview of the Louisiana forest products industry. At: Urban Forestry class from Southern University visiting LSU. October 1999. Baton Rouge, LA


Differences in moisture content and shrinkage between outerwood, middlewood, and corewood of two yellow-poplar trees, Louisiana State University. School of Forestry, Wildlife, and Fisheries Seminar Series. March 1995. Baton Rouge, LA.


The effects of various relative humidities on the adsorption and desorption and equilibrium moisture content of Kempas (Koompassia malacensis) wood. University of Illinois, Department of Forestry Seminar. October 1992. Urbana, IL.

11. Cooperative/collaborative efforts with other faculty

A USDA NRI grant was completed in conjunction with Dr. M. Stine (Co-PI) from the LSU SRNR. Several collaborative projects have been completed and are on-going with other members of the LFPDC.
12. Community involvement (as it relates to the AgCenter mission)

Media Feature Interviews/Articles (7)

- KRRV, 100.3, FM. Alexandria, LA. June 5, 1999

Other Service
Member of St. Andrew’s Methodist Church, American Humane Society, Society for the Prevention of Cruelty to Animals, Woodland Ridge Homeowners Association, LSU Alumni Association, LSU College of Agriculture Alumni Association, University of Illinois Alumni Association, LSU Forestry, Wildlife, and Fisheries Alumni Association (Executive Secretary, 2003-present)

13. Overall program impact

This research program has largely had two major areas of focus: (1) closed loop recycling of preservative-treated wood and (2) wood quality. Both research areas have received extramural funding, resulted in refereed journal articles, and supported graduate students, research associates, and postdoctoral research scientists. In addition, both areas are addressing issues that are critical for the long-term viability of the forest products industry and have environmental stewardship benefits as well.

Large volumes of preservative-treated wood are decommissioned each year. Historically, the most common treatment options for this material were either incineration or landfilling. Neither option is particularly economically viable or without potential adverse environmental consequences. Thus, recycling options, both removal of the toxic preservatives from the preservative-treated wood and recycling of the detoxified preserved wood are of great importance to those concerned with the life cycle management of treated wood. Moreover, there is great economic development potential if a cost effective recycling system can be successfully developed. The closed loop recycling program area has steadily developed over the years to a comprehensive, multiple-product, closed loop recycling program for the major wood preservatives. The program area has established the technical feasibility of using decommissioned preservative-treated wood waste for engineered wood composite panels and composite poles. A recent doctoral student won first place in the 2003 Wood Award Completion from the Forest Products Society for a paper based on the composite pole technology. Additional research in this area has focused on the use of liquefactrion and supercritical water technology to remove residual preservatives from decommissioned preservative-treated wood. Current results of the liquefaction technology are showing that over 99% of all three metals (Cr,
Cu, and As) in CCA-treated wood can be removed. The economic feasibility is currently being explored in a collaborative USDA SBIR project with a Louisiana wood treater. Since liquefaction of wood is a method by which wood can be rapidly liquefied in the presence of an organic solvent at mild temperatures (120-250°C) using an acid as the catalyst, the economic viability of the process is high. The industry cooperator is prepared to hire additional personnel and expand current treating operations based on the early success of the project.

The wood quality research program is using state-of-the-art technology in the form of near infrared (NIR) spectroscopy to model mechanical, physical, anatomical, and chemical properties of longleaf pine wood. The volume of longleaf pine in southern U.S. forests has steadily decreased over the years. However, longleaf pine offers unique ecological benefits that are not possessed by other SYP species. Longleaf pine originally was found on a diverse range of habitats from flatwoods to dry sandy hills, and as such, it is associated with many plants and animals, including the federally listed red-cockaded woodpecker (RCW), gopher tortoise, and bobwhite quail, the later of which is an important game species. These species all benefit from either longleaf pine itself, as in the case of RCW which requires mature longleaf pine with red heart disease for nest cavities, or the plant communities associated with frequently burned longleaf pine ecosystems (gopher tortoises and quail). Many of the current problems in SYP forests, from the decline of RCW, gopher tortoises, and quail, to the increase in bark beetle outbreaks and the increase incidence in fusiform rust, can partially be attributed to the conversion of longleaf pine forests to loblolly and other SYP. Indeed, activities that can facilitate an increase in longleaf pine planting will have a positive impact on the environment. The relationships between the NIR spectra and wood properties established from this work have allowed for the rapid and accurate assessment of numerous longleaf pine wood properties. This information can be used to assist future tree improvement programs for longleaf pine and facilitate increased planting of this species.

A portion of this research explored the use of NIR for process control of wood density for a paper mill that needed to maximize pulp yield without compromising paper strength properties. Models were developed from the absorbance at wavelengths in the NIR region to provide density histograms. The fiber supply personnel can now rapidly and accurately monitor chip density variation as the chips enter the mill. This program area also examined the effect of blue stain on NIR spectra. An understanding of how blue stain influences the absorbance at different wavelengths is critical when modeling wood properties. Recent research has developed modeling techniques to accurately account for the presence of blue stain on an increment core. Recent research also developed a theoretical model to predict the relationship between microfibril angle and lignin content at the Angstrom (Å) level.

Service Activities

1. Organizations advised
2. Recruitment of students and faculty

Graduate Students
1999 - Participated in 10 day trip to Beijing, Nanjing, and Shanghai, China to participate in Memorandum of Understanding with Chinese Academy of Forestry and recruited former M.S. student (Ms. Wei Li). Also, high quality graduate students are constantly recruited at professional meetings.
Undergraduate students

Volunteered and participated in Tiger Day on September 14, 2002 to assist in new student recruitment to the School of RNR.

Faculty
Search committee chair for two new faculty positions for Preservative-Treated Wood Closed Loop Recycling Program at the Calhoun Research Station. 2005.

Served on search committee for the selection process of an Assistant/Associate Specialist of Forest Ecology and Silviculture for LCES and SRNR. 2001.

3. University service (department, region, station, parish, committees, etc.)

Professional Service
AgCenter
Service Unit Advisory Committee Member for Sponsored Programs and Accounting Services. 2005 – 2007.
Shupe, T.F. LSU AgCenter treated wood recycling initiative. Senate Agriculture and Forestry Committee. June 7, 2005.
External unit reviewer and Chair for promotion and tenure for Drs. M. Abbington-Cooper (4H), and external unit pre-tenure review for Dr. M. Blazier, LSU AgCenter (Hill Farm Research Station). 2005.
Search committee chair for two new faculty positions for Preservative-Treated Wood Closed Loop Recycling Program at the Calhoun Research Station. 2005.
LaHouse Core Committee Member. 2005 – present.
LSU AgCenter Faculty Council. 2004-2006, Executive Committee 2004.
Accounting Services Advisory Committee. 2004-present.
Organized meeting on August 17, 2004 at Pollock, LA to develop plan for 4H agents to attract Forest Service funds for local programming.
Selected by Executive Vice Chancellor to 2002 LSU AgCenter’s Chancellor’s Evaluation with LSU System President
LSU AgCenter Spring Picnic Planning Committee. 2002.
LCES Continuing Natural Resources Education Committee. 2001-present.
Ag Center Oversight Committee. 2001-present.
LaFete Committee 1999, 2004. Participated in LaFete at State Capitol to educate state legislators on the value of the LSU AgCenter, SFWF, and natural resources to the State.
Coordinator of the annual Louisiana 4-H forestry summer camp program. Approximately 8,000 youths attend each year. 1996-2001.

College of Agriculture
Alternate Member of Faculty Senate. 2002.
**School of RNR**

See gratis teaching under “3. Other creative and artistic contributions.”

Committee member of Standard V: Students for 2005. SAF accreditation.

Assisted with establishment of the Norwin Linnartz Memorial Scholarship, helped raise over $25,000. 2004.

Established the Elvin Choong Memorial Lecture Series, raised over $10,000. 2004.

Executive Secretary of FWF Alumni Association. 2003 – present.


Volunteered and participated in Tiger Day on September 14, 2002 to assist in new student recruitment to the School of RNR.

Continuing Education. 2000-present.

Member of Gilbert Fellowship. 2002.

Member of Undergraduate Advising. 2002-present.

Seminar and Lecture, Community of Scholars. 2002-present.

Elvin Choong Memorial Garden. 2002.

Academic Advising. 2002-present.

Scholarship. 2004-present.

SRNR Faculty Representative. Fall 2001, Spring 2003, Spring 2004 Commencement Ceremony.

Coordinator of Choong Endowed Lecture Series. 2001-present

Guest lectured at Dr. Don Deckard’s Forest Economics class at Louisiana Tech University regarding graduate opportunity at SFWF. October 15, 1999.

SFWF Xi Sigma Pi Nu Chapter President (Forester). 1995-1996. Created new plaques and restored old plaques to honor each new Nu Chapter yearly initiates and outstanding sophomore award winners.

Frequent guest lecturer in RNR 2043 (Forest Products and Wood Science)

**University**

Member of Gamma Sigma Delta Distinguished Service to Agriculture Committee. 2003.

Chair of Phi Kappa Phi Non-Tenured Faculty Award: Natural and Physical Sciences Award Committee; Member of Graduate Fellowship Award Committee 2003.

Member of The Honor Society of Phi Kappa Phi Graduate Fellowship Committee. 2003.

Secretary/Treasurer of The Honor Society of Phi Kappa Phi 2002-2003.

Gamma Sigma Delta Distinguished Service to Agriculture Committee. 2002-2005.

Vice President of LSU Chapter, The Honor Society of Phi Kappa Phi. 2002-2003.


**Other Service**

See Section 12 in the Extension section.

**4. Professional service**


Outside reviewer for promotion and tenure of Dr. Terry Conners (University of Kentucky, 2004), Dr. Laurie Schimleck (University of Georgia, 2005).


Education Committee Chair. Southern Pressure Treaters Association. 2004-present.


Planning Committee Member. Wood Products Recent Developments. Southern Regional Extension Forestry Workshop. 2005.


Session Chair. 5.01.00 Wood Quality. IAWA / IUFRO - All Division 5 Conference, Rotorua, New Zealand, 11-15 March 2003.


Session Organizer and Chair. IAWA meeting Pan-American Regional Group Meeting of IAWA, Portland, Oregon, USA 13-17 July 2003.


Elected Vice Chair. Forest Products Society. MidSouth Section. 2002.

American Wood Preservers’ Association Committees - T-3 Piles and Ties, T-8 Composites, N-5 Composites Wood Products, S-3 Treated Wood Use, Handling and Disposal/Recycle. 2001 – present.

Special Adviser to State Sen. Romero (D-CA) for Senate Bill – 1393 regarding hazardous wood waste, playground equipment, and arsenical preservatives at Request of AWPI. 2002.

Member of Capital Regional Competitive Strategy Forest Products Cluster. 2002.

Member of Louisiana Department of Economic Development Secondary Wood Products Industry Cluster. 2002.

Chair for the Regional Programs Committee, one of eight new Strategic Issues Standing Committees (SISCs) in the Forest Products Society. 2002-2005.
Grant reviewer – (1) USDA National Research Initiative (NRI) Competitive Grants Program. Improved Utilization of Wood and Wood Fiber, (2) USDA Small Business Innovation Research for Rural and Community Development Competitive Research Grants.
Member of Louisiana Commissioner of Agriculture and Forestry task force on subterranean termites.
Member of lumber, engineered wood products, and economic impact subcommittees. 1999.
Session Co-Chair of “Is it changing fiber resources or changing resource requirements for the pulp and paper industry?” Pulp and Paper/Biology joint TIG at Forest Products Society Annual Meeting. June 30, 1999. Boise, ID.
Session Chair of “New developments in particleboard, fiberboard, and molded wood products.”

5. Other external and community service

See Section 12 of the Extension section.
1. Documentation of major program areas and initiatives

1. I have led the *Wood Products Extension Program* from 1996-present. A comprehensive and cooperative educational program has been developed to target individuals that are involved in the processing as well as in-service utilization of wood and wood products. The program has targeted Louisiana companies and home owners. However, interested parties from outside Louisiana and the U.S. frequently receive educational information. The major thrust of this program is on value-added wood processing. The first step in adding value to wood is correctly identifying the species of wood. Drying schedules and end-use options of wood are largely governed by the species of wood. Therefore, wood identification workshops have been held and several wood specimens are identified for interested parties each year. Fundamental in adding value to wood is kiln drying. Accordingly, several lumber drying workshops have been held throughout the state in cooperation with the Louisiana Forest Products Development Center, LSU School of Renewable Natural Resources, Louisiana Tech University, University of Kentucky, University of Tennessee, Roy O. Martin Lumber Co., Louisiana Forestry Association, and dry kiln manufacturers. A newsletter that highlights wood-moisture relationships such as lumber drying and wood decay is published quarterly that researches a growing audience of over 3,000 individuals throughout Louisiana and North America. The program also educates wood business owners on sound business practices such as record keeping and marketing. In addition, home-owners are educated on proper end-use utilization of wood and wood products in and around the home, farm, or ranch. The key component of this program is to educate home owners on cases and control of wood-moisture problems.

2. I coordinated the *Continuing Forestry Education (CFE)* program for the Louisiana Cooperative Extension Service (LCES) from 1998-2000. This initiative was developed in response to a need identified by the five areas forestry agents as well as direct input from stake holder groups throughout the state.

For a listing of specific workshops, conferences organized, see section 10 of Research document - Outreach – field days, trade-shows, direct clientele contact.

3. I coordinated the *forestry 4H activities* for LCES from 1996-2001. During this time, I developed the educational program for 4H Summer Camp, recruited program delivery volunteers, established weekly schedules for instructors, and obtained all educational program delivery materials. The camp last for 10 weeks and attracts youth from all over the state with as many as 300-500 youths attending each week. I also was actively involved with the forestry component of 4H short course, now known as 4H University.

2. Advisory process and critical issue responsiveness

The CFE program had an engaged steering committee that met annually following a Louisiana Forestry Association Board Meeting. The Wood Products Extension Program has received advisory input in conjunction with the annual steering committee meeting of the Louisiana Forest Products Development Center.
The development of the CFE program was in response to an identified critical need from stakeholders and field faculty. The entire Wood Products Extension program is geared at increasing value-added Louisiana. This is a response to a critical issue because Louisiana has continues to lag behind other southern states in terms of value-added wood processing.

3. Innovative teaching methods, knowledge and application of new technology

WebMaster of Extension Natural Resources (ENR) web site.
http://www.lsuagcenter.enr
The site contains research-based educational information from campus and field faculty in the Extension Natural Resources Project covering a wide array of topics from urban forestry, wildlife, forest management, and wood products.

WebMaster of Pallet Phytosanitation web site.
http://www.agctr.lsu.edu/enr/palletsanitation/index.asp
The objective of this website is to increase awareness of ISPM 15 for wood packaging phytosanitary requirements for international shipments. In this educational website you will find technical information and new technologies for manufacturers and others involved in manufacturing wood packaging for international shipments. It also provides projects focused on showcasing existing technologies to wood packaging manufacturers and others dealing with phytosanitary compliance issues. This website provides audio of PowerPoint presentations and technical papers in pdf format that summarize various research projects and allows individuals to submit questions that will be sent to the web masters. All questions and answers will ultimately be placed on the web site. All information presented here can also be obtained via a DVD from the web master.


4. Program delivery effectiveness demonstrated by evaluation, change, and adoption

A comprehensive survey of workshop attendees in 2002 revealed that the average LCES wood products extension workshop was valued at $10,000 and approximately 2/3 of attendees were planning business expansions in the form of hiring additional employees or adding additional equipment and/or facilities. Subsequent follow-ups revealed that approximately ½ of those originally indicating expansions actually had followed through and completed expansions one year after receiving educational programming. The average value of the workshops was assessed again in 2004. Again, approximately 2/3 of the participants planned business expansions and 60% of those planning expansions had done so one year later.

5. Development and presentation of research-based materials (28)
(Note: extension publications only are listed.)


Shupe, T.F. 1997-present. Louisiana Dry Kiln Club Newsletter. Issued quarterly. Highlights current research efforts and educational workshops on understanding the effect of moisture on wood decay and physical properties. Louisiana State University Agricultural Center. Cooperative Extension Service

6. Publications (print and electronic)

(Also see Section 1 in the Research section.)

*Newsletter and Mass Media Articles (39)*


Shupe, T.F. 2005. The LSU AgCenter will be hosting the Louisiana Natural Resources Symposium. SWST Newsletter. March/April. p. 4.


Shupe, T.F. 2003. LSU AgCenter to offer three lumber workshops. Louisiana Forest Products Development Center Newsletter. Fall 2003. p. 3.
Shupe, T.F. 1999. Worked with 4-H Division to revise 4-H Forestry and Forest Products Junior and Senior Work Books.
7. Mass media

LSU AgCenter Communications News Releases (29)

<table>
<thead>
<tr>
<th>Date</th>
<th>Title - 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/01/05</td>
<td>LSU AgCenter To Host Lumber Drying Workshop</td>
</tr>
<tr>
<td>07/01/05</td>
<td>Lumber Drying Workshop Set For Aug. 17-19</td>
</tr>
<tr>
<td>06/27/05</td>
<td>Natural Resources Symposium Set For July 18-20 In Baton Rouge</td>
</tr>
<tr>
<td>05/25/05</td>
<td>LSU AgCenter Recycling Could Keep Treated Wood Out Of Landfills</td>
</tr>
<tr>
<td>07/13/05</td>
<td>Experts Say Forest Management Requires Environmental Component</td>
</tr>
<tr>
<td>06/27/05</td>
<td>Forestry Experts Say Katrina Losses Exceed $600 Million</td>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Title - 2004</th>
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<tbody>
<tr>
<td>05/19/04</td>
<td>Seminar Participants Told Lumber Drying Adds Value To The Project</td>
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<tr>
<th>Date</th>
<th>Title - 2003</th>
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</thead>
<tbody>
<tr>
<td>09/18/03</td>
<td>LSU AgCenter Offers Lumber Drying Workshops</td>
</tr>
<tr>
<td>01/22/03</td>
<td>Workshop To Focus On Competitive Advantage In Wood Products Business</td>
</tr>
<tr>
<td>09/18/03</td>
<td>LSU AgCenter Offers Wood-related Workshops</td>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Title - 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/25/02</td>
<td>LSU AgCenter Announces Workshop for Wood Products Businesses</td>
</tr>
<tr>
<td>09/25/02</td>
<td>Treated Lumber to Highlight Meeting, Says LSU AgCenter Forest Products Professor</td>
</tr>
<tr>
<td>02/01/02</td>
<td>LSU AgCenter Forester Announces Lumber Drying Workshop</td>
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<thead>
<tr>
<th>Date</th>
<th>Title - 2000</th>
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<tr>
<td>1/20/2000</td>
<td>Lumber Drying Workshop Set for March 1-3</td>
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<tr>
<td>07/20/2000</td>
<td>Advanced Hardwood Lumber Drying, Solar Wood Drying Topics of Workshops</td>
</tr>
<tr>
<td>08/10/2000</td>
<td>LSU AgCenter to Offer Series of Educational Programs on Hardwood Management</td>
</tr>
<tr>
<td>04/13/2000</td>
<td>Building Homes to Resist Termites To Be Topic of Two-day Conference</td>
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<tr>
<th>Date</th>
<th>Title - 1999</th>
</tr>
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<tbody>
<tr>
<td>12/11/99</td>
<td>Drying lumber for quality, profit workshop scheduled for Feb. 24-26 in Baton Rouge</td>
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<tr>
<th>Date</th>
<th>Title - 1998</th>
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<tbody>
<tr>
<td>02/01/98</td>
<td>Improving wood utilization focus of workshop</td>
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<tr>
<td>04/09/98</td>
<td>LSU Ag Center offers course on computer applications in forestry</td>
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<tr>
<td>09/10/98</td>
<td>Ag Center offers course on leadership skills</td>
</tr>
<tr>
<td>04/16/98</td>
<td>LSU Ag Center to sponsor workshop on forested wetlands management</td>
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<tr>
<td>02/02/98</td>
<td>Global positioning systems can be used in forestry</td>
</tr>
<tr>
<td>08/20/98</td>
<td>LSU Ag Center sponsors wood products workshop Nov. 19 in Ruston</td>
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<tr>
<td>08/23/98</td>
<td>Understanding lumber grade marks helps you make proper selection</td>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Title - 1997</th>
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</thead>
<tbody>
<tr>
<td>05/22/97</td>
<td>Wood ID Workshop Registration Under Way</td>
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<tr>
<td>07/17/97</td>
<td>Learn to Identify Woods at Aug. 7-8 Workshop</td>
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<tr>
<td>12/11/97</td>
<td>LSU Ag Center to Host Lumber Drying Workshop</td>
</tr>
<tr>
<td>Date</td>
<td>Title - 2005</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>5/29/1997</td>
<td>Club Expected to Increase Lumber Drying in State</td>
</tr>
<tr>
<td>11/6/1997</td>
<td>Extension Service Schedules Workshop on Improving Utilization of Wood</td>
</tr>
</tbody>
</table>

**Web Page Development and Maintenance (2)**

- WebMaster of Extension Natural Resources (ENR) web site. http://www.lsuagcenter.enr

8. Cooperation/collaboration with other faculty

The Wood Products, CFE, and 4H program have all been developed and implemented with assistance of field faculty (area forestry agents and county agents) in LCES. The Wood Products program enjoys a close relationship with faculty in the Louisiana Forest Products Development Center at LSU and Louisiana Tech. The CFE program utilized numerous faculty members from the LSU School of Renewable Natural Resources as instructors. For example, I organized a meeting with LCES field faculty on August 17, 2004 at 4H Camp Grant Walker in Pollock, La to develop plan for 4H agents to attract Forest Service funds for local programming. I have successfully recruited industry, government, NGOs, etc. to participate in 4H forestry program delivery. Feedback from youths and volunteers has been very positive.

9. External funding, material support and grants ($150,550)

(Note – Extension related only is listed. Research grants are listed under Section 7 of Research section)


**Shupe, T.F.** 2005. Louisiana natural resources symposium sponsorship. The LSU School of Renewable Natural Resources. Status: approved. $3,000.


**Shupe, T.F.,** W.R. Smith, and R.P. Vlosky. 2004. A regional educational program to increase awareness of wood packaging phytosanitary requirements for international trade. USDA Forest Service Wood Education and Resource Center and Limestone Bluffs RC&D, Inc. $45,000.
Shupe, T.F. and R.P. Vlosky. 2003. Market potential for high value-added products manufactured from forest fuels from Louisiana forests. USDA RREA. $6,000.


Shupe, T.F. and R.P. Vlosky. 2003. Market potential for high value-added products manufactured from forest fuels from Louisiana forests. USDA RREA. $6,000.


Pending ($251,320)


Grants/contracts participant ($422,000)


10. Refereed journal articles
(See Section 1 of Research section)

11. Presentations at professional and clientele targeted conferences

Also, see following sections in the Research section: Published Abstracts under Section 3, Invited Presentations under Section 4, and Public Seminars and Lectures under Section 10.
12. Participation in and leadership of professional organizations/committees

(Also see Section 4 Professional Service under Service Activities of Research document, p. 35.

Membership in professional societies and honorary fraternities

- American Society for the Advancement of Science*
- American Wood Preservers’ Association*
- Alpha Lambda Delta
- Alpha Zeta
- Association of Natural Resources Extension Professionals*
- Forest Products Society*
- Gamma Sigma Delta*
- Golden Key
- International Association of Wood Anatomists*
- International Network of Bamboo and Rattan*
- International Research Group on Wood Preservation*
- International Society of Tropical Foresters*
- International Union of Forest Research Organizations*
- Japan Wood Research Society*
- Louisiana Forestry Association*
- National Association of County Agricultural Agents*
- Phi Kappa Phi*
- Phi Eta Sigma
- Renewables Council of Louisiana*
- Sigma Xi*
- Society of American Foresters*
- Society of Wood Science and Technology*
- Southern Pressure Treaters Association*
- Structural Board Association*
- Technical Association of Paper and Pulp Industry*
- Xi Sigma Pi*

*Denotes currently an active member.

13. Continued coursework, in-service training, sabbaticals, professional improvement

- Extension Education 7122 (1 hr.) - Program Development. Fall, 2000.
- Professional improvement is obtained by active participation in many of the professional societies and organizations listed above. I also attend local, regional, national, and international meetings and conferences to present my extension and research findings and interact and learn from others as well.
14. Participation in public policy and community issues

The majority of my participation in public policy and community issues has been related to preservative-treated wood recycling and consumer perceptions. Specific examples are as follows.

Appeared before Louisiana Senate Agriculture, Forestry, Aquaculture, and Rural Development Committee to discuss treated wood recycling. June 7, 2005.


LaFete Committee 1999, 2004. Participated in LaFete at State Capitol to educate state legislators on the value of the LSU AgCenter, SFWF, and natural resources to the State.

Special Adviser to State Sen. Romero (D-CA) for Senate Bill – 1393 regarding hazardous wood waste, playground equipment, and arsenical preservatives at Request of AWPI. 2002.

Member of Louisiana Commissioner of Agriculture and Forestry task force on subterranean termites. Member of lumber, engineered wood products, and economic impact subcommittees. 1999.


15. Awards and recognition
See Section 6 of Research section.

16. Multi-institution, agency, and state collaboration

The Wood Products Extension Program and CFE Program have cooperated with several other institutions, agencies, and state agencies to deliver educational materials. Some of the more frequent cooperators are listed below.

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Federal Agencies</th>
<th>State agencies</th>
<th>NGO</th>
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<tbody>
<tr>
<td>LSU School of RNR</td>
<td>USDA FS</td>
<td>LDAF</td>
<td>La Forestry Assoc.</td>
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<tr>
<td>Louisiana Tech</td>
<td>US EPA</td>
<td>LDWF</td>
<td>La Logging Council</td>
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<td>Louisiana Forest Products Dev. Ctr.</td>
<td>USDA RC&amp;D</td>
<td>DED</td>
<td>La Society of American Foresters</td>
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<td>Mississippi State Univ.</td>
<td>US DOE</td>
<td>LDEQ</td>
<td>Natchitoches Forestry Assoc., Inc.</td>
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<td>Univ. of Tennessee</td>
<td>USDA Forest Products Lab</td>
<td>LA Dept. of Insurance</td>
<td>Louisiana Furnishings Industry Association</td>
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<td>Univ. of Kentucky</td>
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<td>Louisiana Work Force Commission</td>
<td>Southern Loggers Cooperative</td>
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<td>Northwestern</td>
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<td>Louisiana Department of Labor</td>
<td>WoodLinks</td>
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<td>Louisiana Univ., Small Business Dev. Ctr.</td>
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<td>Southeastern Louisiana</td>
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<tr>
<td>Univ., Small Business</td>
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<tr>
<td>Dev. Ctr.</td>
<td>Louisiana Technical College, Oakdale, La.</td>
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<td></td>
<td>Jones County Junior College, Ellisville, Miss.</td>
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<td></td>
<td>Louisiana Small Business Development Center, Thibodaux, La</td>
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</table>

17. **Other scholarly or creative activities or other contributions to the profession**
See Service Activities in Research document.

- Assisted with the establishment and expansion of numerous portable and stationary sawmill companies, value-adding secondary firms, and small dry kiln operators.

- Visited over 300 primary and secondary forest products companies in Louisiana.

- Reached scores of homeowners through on-site visits, personal communication, and other forms of communication.

- I have been called upon to assist in the pre-promotion and tenure evaluation of a majority Extension faculty member in the SRNR. 2005.

**Service Activities**
See Service Activities in Research section.