

Forest Roads
Columbia, South Carolina
June 3, 2008

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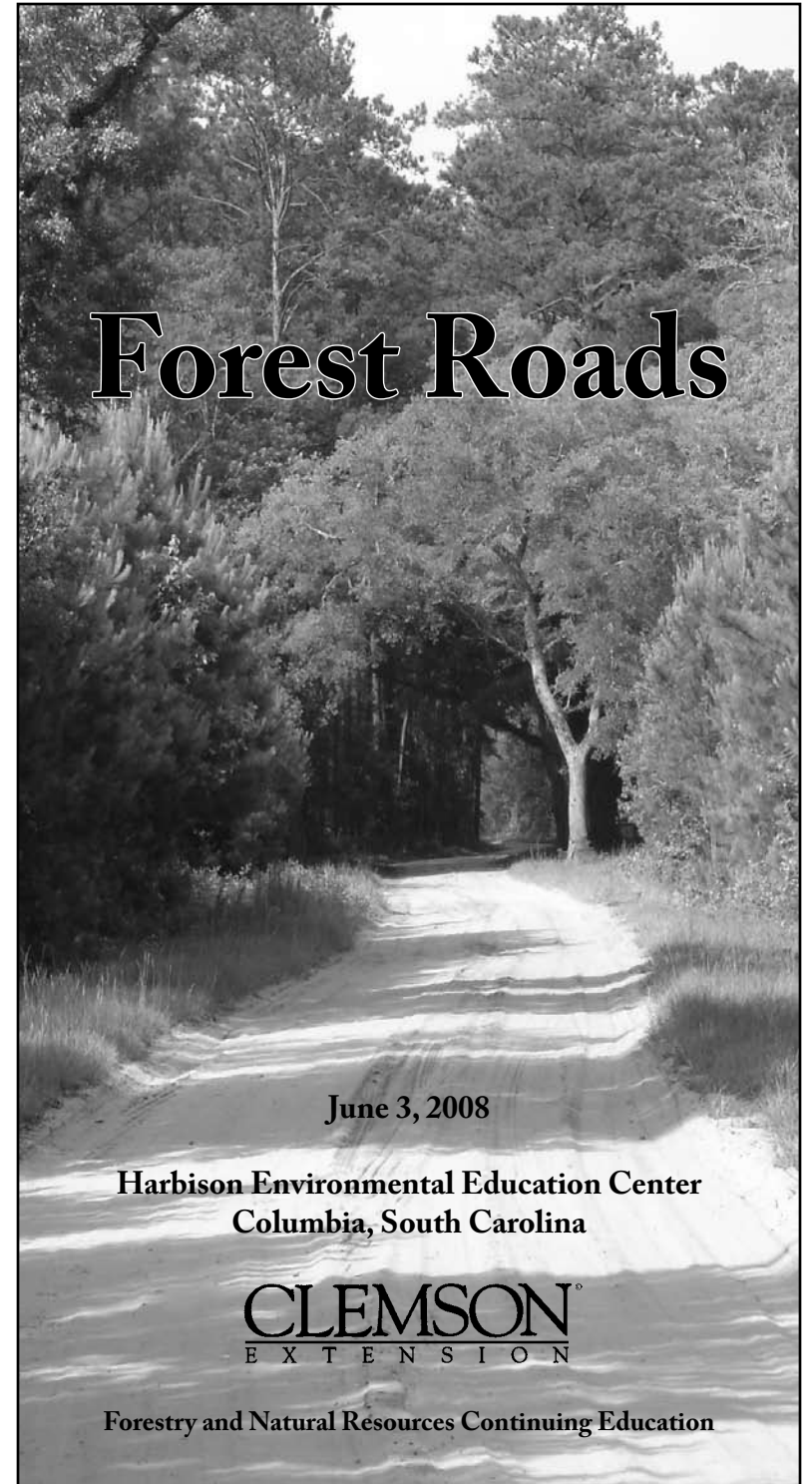
Clemson University
 Susan Guynn
 Department of Forest Resources
 272 Lehotsky Hall
 Clemson, SC 29634-0317

Phone (864) 656-0606
 FAX..... (864) 656-4786
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Forest Roads

June 3, 2008

Harbison Environmental Education Center
Columbia, South Carolina

CLEMSON[®]
 E X T E N S I O N

Forestry and Natural Resources Continuing Education

Forest Roads

○ About the Course

Access roads are a part of almost every timber harvesting operation. These roads have the potential to be a source of environmental problems, particularly when they cross streams or encroach on streamside management zones (SMZs). Best Management Practices (BMP) compliance checks and research studies have found that forest roads are a major contributor to sedimentation and reduced water quality.

“Low-Volume Roads Engineering” on road construction and maintenance by Keller and Sherar will be emphasized throughout the course. Key sections of the BMP guidelines on water quality, stream crossings and streamside management zones will also be covered.

This course is designed for foresters, timber buyers, loggers and others with road construction responsibilities. It is a practical, hands-on course with numerous classroom and field exercises designed to improve the skills used in timber access road planning, design and location.

○ Location

The workshop will take place at the Harbison Environmental Education Center, 5600 Broad River Road, Columbia, South Carolina.

○ Registration Information

Registration for the workshop, if postmarked by May 23, 2008, will be \$205.00 and includes the manual “Low-Volume Roads Engineering” by G. Keller and J. Sherar, catered lunch and breaks. Registration after this date will be \$230.00. **Registration is limited to 50 people per location so early registration is encouraged.**

○ Continuing Education Credits

- 7.0 Hours – Continuing Forestry Education (CFE) – Category 1
- 7.0 Hours – SFI TOP Logger
- 5.0 Hours – SFI Top Logger BMP

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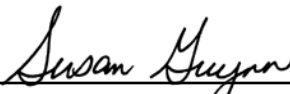
○ Cancellation Policy

Cancellation of registration must be made 10 business days prior to the workshop to obtain a full refund. Refunds after that time will be subject to a \$50 service charge. Refunds will not be given less than 72 hours prior to the class. If cancellation becomes necessary, substitution in lieu of cancellation is recommended. For cancellation, please call 864-656-0606. Should Clemson University cancel this course for any reason, a full refund of registration will be made. Clemson University will not be responsible for any other cost the registrant may incur. For refunds paid by check, the registrant must provide a social security number or Federal Tax ID, if paid on company funds.

○ About the Instructors

Jim Sherar is owner of Treetrans Systems in Arden, North Carolina. Mr. Sherar has extensive experience in logging systems and roads throughout the Southeast, Northwest and Central America. He served as a forest roads and timber harvesting expert for the US Forest Service for over 30 years.

Chad Bolding is an Assistant Professor of Forest Operations and Harvesting in the Department of Forestry and Natural Resources at Clemson University. Chad teaches undergraduate courses in forest operations, timber harvesting processes, and wood procurement. He has a B.S. and M.S. in forestry from Auburn University, and an M.F. in silviculture and Ph.D. in Forest Engineering from Oregon State University. Chad conducts research in the areas of supply chain management, mechanical forest fuel reduction, and small diameter utilization. He is active in professional organizations such as the Society of American Foresters and the Council on Forest Engineering.



Susan Guynn, Coordinator, Continuing Forestry Education
Clemson University Cooperative Extension Service
(864) 656-0606 or FAX (864) 656-4786

Agenda

- 8:00 Registration
- 8:30 Introduction
 - Purpose and Goals
 - Best Management Practices related to roads
 - Low Volume Roads Manual (Keller and Sherar)
- 9:00 Road and Harvest Planning
 - Road Access
 - Deck location
 - Skidding pattern
 - Water quality considerations
 - Cost estimation
- 10:00 Break
- 10:15 Road Design, Construction and Cost
 - Road Costs
 - Surface Drainage
 - Typical road sections
 - Grades/Curves
 - Log Trucks
- 11:15 Stream and Wet Site Crossings
 - Best Management Practices
 - Stream crossing options – advantages and disadvantages
 - Drainage design
- 12:00 Lunch (catered)
- 12:30 Road Location Techniques (field exercises)
 - Basic measurements and use of measuring tools (GPS)
 - Grade lines and compass lines
 - Measuring and laying out curves
 - Evaluation of stream crossing sites
 - Road location exercise
- 4:00 Summary and critique (field or classroom closeout)
 - Review and discussion of concepts demonstrated in field exercises
- 4:30 Adjourn