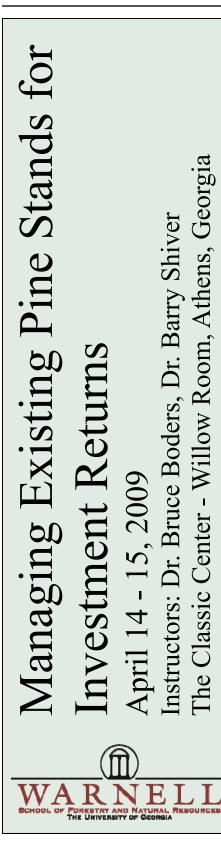
The Warnell Continuing Education Program

Daniel B. Warnell School of Forestry and Natural Resources



Purpose

Foresters, realtors, and landowners managing existing pine stands must make decisions every year that impact their investment returns for those stands. In most cases they must decide whether or not to spend money on a particular treatment based on their markets and on the expected response to the treatment. This course is intended to focus on those decisions and on how to estimate the expected responses, costs, and markets, and therefore the expected returns, so decisions made will be good ones. The course will also evaluate the trade-offs that invariably result from trying to simultaneously manage pine stands for investment returns from traditional products and from other sources of income such as pine straw, wildlife leases, and carbon credits

Benefits

• Learn how price fluctuations from common treatments such as fertilization and release impact best timing for those treatments and investment returns.

• Learn how the biological response of pine stands to different treatments are similar and different and how to use those differences to properly time treatments to increase investment returns.

• Learn how to use fire, particularly in combination with herbicides, to increase investment returns and simultaneously benefit wildlife management returns.

• Learn how responses to different treatments vary across the DBH distribution and what this means for investment returns.

• Learn how density interacts with cultural treatments to drive stand value development and investment returns.

Who Should Attend

Foresters managing timberland, realtors, or investors who own timberland and who want a thorough understanding of the cultural treatments available to them for existing stands along with the expected returns if they invest in those treatments. Attendees will leave with a good understanding of how stand value development can be accelerated or decelerated depending on decisions made throughout the life of the stand. Realtors who buy or sell timberland or who appraise timber will find the course useful.

Instructors

Bruce E. Borders and **Barry D. Shiver** have been teaching continuing education short courses across the South since 1989. Barry is now Professor Emeritus of forest management at the Warnell School of Forestry and Natural Resources of the University of Georgia. He is currently a partner in ForesTech International, a forestry consulting company and the developer of the *SiMS_2006* management decision-making software. Bruce is a professor at the Warnell School, where he teaches courses in timber management, inventory, and modeling. He is also a partner in ForesTech International. Both professors have had active research programs aimed at determining more efficient methods of growing Southern pines and modeling those silvicultural effects. Courses taught by Barry and Bruce are always popular! They deliver outstanding technical content in an understandable and enthusiastic manner.

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Pine Stands Classic Center - Willow Room, Athens, Georgia Dr. Bruce Boders, Dr. Barry Shiver nstructors:] he

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Registration Fee

The fee for this course is \$445, which includes lunch, refreshment breaks, and instructional materials. There is a \$80 discount for fees paid and postmarked by March 24, 2009. At this time we only accept personal or company checks for payment. A preregistration form must be accompanied by a check to guarantee your place in the course. Limited seating is available.

Continuing Education Credits

- 11.5 Continuing Forestry Education (CFE) hours Category 1
- Continuing Logger Education (CLE) hours applied for.

• Real Estate Appraiser Board credits will be applied for; also

accepted by the Georgia Real Estate Commission, if approved

* Please note that real estate credits entail an extra \$60 fee that can be included in the registration section.

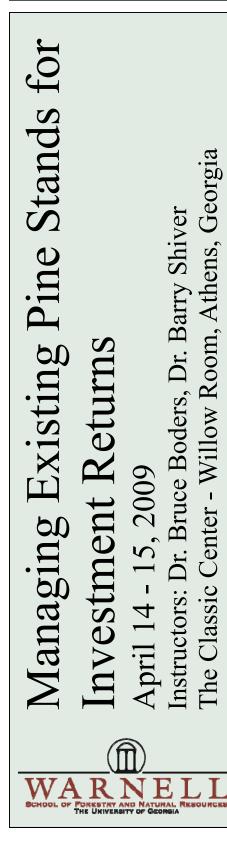
Full Attendance is Mandatory to Receive Credit.

Course Itinerary

Tuesday, April 14, 2009

Time	Event		
7:45 a.m.	Registration		
8:00	Introduction to and outline of the course		
8:15	Basics of Finance and Investment Returns		
9:00	The importance of Pine Density on Stand Development Pre-commercial thinning Timing, costs, response, returns		
10:00	Break		
10:15	Influencing Density by Thinning Effect of thinning on volume and product development Thinning Timing Should you wait to make the first thin? When should the second thin be made? Should you thin more than twice? The effect of markets Thinning intensity - When does it matter?		
12:15	Lunch		
1:00 p.m.	Pine Nutrition The need for and sources of important nutrients in southern pines Timing of fertilization on different sites Type of response and length of response to fertilization Fertilization responses across the DBH distribution Changes in product due to fertilization Investment returns for fertilization at different stumpage rates Fertilization costs		

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Tuesday, April 14, 2009 Continued

Time	Event		
3:00	Break		
3:15	Break Effect of Woody Competition of Pine Growth and Investment Returns The effect of woody competition on southern pine development How much hardwood is too much hardwood? How competitive are woody plants with pines? What determines whether stands will respond to release? Research and operational responses to release Release responses across the DBH distribution Timing of Woody Competition Control Traditional post plant woody release before age 5 Release from woody competition at older ages Type of response and length of response to release Investment returns from release costs at different stumpage rates		
5:15	Adjourn		

Wednesday, April 15, 2009

Time	Event		
8:00 a.m.	Fire for Woody Competition Control Frequency/timing/intensity/effectiveness Effect of prescribed fire on timber yields Combining herbicides and fire for competition control Fire as a tool for manipulating understory vegetation communities		
9:00	Combining Thinning with Release and/or Fertilization Thinning and Fertilization Why this combination works well Timing of the responses Thinning and Release Why this combination works well Timing of the responses		
10:00	Break		
10:15	Thinning and Fertilization and Release Timing of the individual responses makes this combination work well The effect of cost of the treatments on investment returns		
11:00	Alternative Management for Existing Stands Management for Wildlife Returns and Pine Returns - the trade-offs Pine Straw Raking and how management may be impacted Carbon Credits Lots of questions, but here is how much can be produced and what it might be worth		
12:15 p.m.	Adjourn		

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The University of Georgia Athens, GA 30602-2152