### The Warnell Continuing Education Program

Daniel B. Warnell School of Forestry and Natural Resources

# raw Production - Stand Managemen Dickens & Dr. Dave Moorhead

County Ag Center – Conference Room

Chapel Rd, Statesboro, GA

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August 16

Purpose

Revenues for pine straw paid to forest landowners in Georgia have increased from an estimated \$15.5 million in 1999, to \$25 million in 2003, \$50 million in 2007, and \$80 million in 2008 and 2009. During the period from 1999 through 2009 stumpage revenues in Georgia have declined by roughly 45%. Many forest landowners and land managers are interested in managing their loblolly, longleaf, or slash pine stands for pine straw. This course will provide information necessary to effectively mange pine stands for pine straw.

### Participants will:

- Learn about pine straw yields by species, site quality, land-use history, and basal area.
- Review cut-over and old-field pine straw studies, as well as other factors that affect pine straw yields.
- Learn how the effect of pine straw raking (semiannual, annual, periodic) relates to soil moisture status, nutrient cycling, and stand growth.
- Learn the effect of fertilization on pine straw yields on cut-over and old-field sites.
- Learn how to use diagnostic tools and soils information to determine fertilizer needs, herbicide use, and recommendations.
- Learn how to control invasive exotic species.
- Learn management alternatives to moving a cut-over pine stand into pine straw production, hear about sequencing fertilizer and herbicide use, and discuss the economics of pine straw in overall pine stand management.

### How One Will Benefit

Upon completion of this course, a forest landowner or land manager will be able to make effective silvicultural and economical management decisions on managing loblolly, slash, and longleaf stands for pine straw.

### Who Should Attend?

Foresters, land managers, forest landowners, pine straw contractors, and others interested in effectively managing their pine stand for pine straw.

### Instructors

Dr. David Dickens – Associate Professor of Forest Productivity UGA-WSF&NR

Dr. Dave Moorhead - Professor of Silviculture UGA-WSF&NR

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### **Registration Fee**

The fee for this course is \$210, which includes lunch, refreshment breaks, and instructional materials. There is a \$25 discount for fees paid and postmarked by July 26, 2011.

### **Continuing Education Credits**

- 12.5 Continuing Forestry Education (CFE) hours Category 1 (approved)
- 9.0 Continuing Logger Education hours Environment (approved)
- 3.5 Continuing Logger Education hours Bus Mgmt (approved)
- 4.0 Pesticide Applicator credits for GA and 3.0 for SC (approved)

### Full Attendance is Mandatory to Receive Credit

Tuesday, August 16, 2011

Time	Event	
8:00 a.m.	Registration	
8:30	Introduction Pine Straw Revenues vs. Stumpage Revenues Generated in Georgia, 1999 - 2010 Factors Affecting Pine Straw Yields	
9:30	Cut-Over and Old-Field Pine Straw Studies (Loblolly, Longleaf, and Slash Pine)	
10:15	Break	
10:30	Raking Regimes (Semi-annual, Annual, Periodic) and Pine Straw Production, Stand Growth, and Soil Moisture	
11:20	Magnitude and Duration of Fertilization Benefits — Case Studies; Fertilization Payoffs; Weed Re-growth with Fertilization	
Noon	Lunch	
1:00	Nutrient Cycling and Forest Floor Nutrient Release Rates	
1:30	Using Diagnostic Tools (Leaf Area Index Estimations, Soil, and Foliar Sampling), Soils, and Yield Information for Determining Effective Recommendations	
2:15	Break	
2:30	Herbicides and Herbicide Use	
3:00	Magnitude and Duration of Competition Control Benefits	
3:30	Identification and Control of Invasive Exotic Species	
4:15	Forest Management Alternatives for Moving a Cut-Over Pine Stand into Pine Straw Production	
5:00	Adjourn	

## The Warnell Continuing Education Program Daniel B. Warnell School of Forestry and Natural Resources

ne Straw Production - Stand Managemen Dickens & Dr. Dave Moorhead Wednesday, August 17, 2011

Time	Event
8:15 a.m.	Sequencing Fertilization and Herbicide Use to Reduce Overall Costs
8:45	Economics of Pine Straw at Various Returns per Acre in Overall Pine Stand Management -Case study reviews – old-field and cut-over sites
10:15	Break – depart for study area visit in Oliver
10:45	Travel to a thinned old-field longleaf stand (planted in December 1986) where pine straw production was a management objective prior to thinning.
11:00	Old-field longleaf pine stand discussion points: pine straw management, stand management pre- and post-thin, pre-scribe fire use, planting spacing, thinning, % defect, long-leaf growth rate through age 21-yrs, growing poles, herbicide use, fertilization, and economics.
12:00	Lunch
12:30	Continue with above discussion points while in the field.
3:00	Adjourn

### **Directions**

For directions we suggest using googlemaps.com. You may also contact David Dickens 912-690-1678 or e-mail him at ddickens@uga.edu.

### Special Needs

For special services or dietary considerations contact David Dickens at 912-690-1678 or e-mail him at ddickens@uga.edu prior to August 14, 2011.

### Hotels in the Area Include:

Baymont Hotel (912-489-7368) Holiday Inn (912-489-4545) Hampton Inn (912-681-7700) LaQuita Inn (912-871-2525) Quality Inn (912-489-3995)

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	Name - please print
<b>36</b>	Preferred name for badge
ans rhead n	Business mailing address or Home address (please check one)
Mooi	City State Zip County, if Georgia
Stand Managemer r. Dave Moorhead erence Room oro, GA	Home phone Work phone Fax
	Email address  Please send me e-mails about other Warnell Continuing Education programs.
On Ls & L- C	Position Organization/employer
Production nics avid Dickens & Ag Center – Colhapel Rd, Statesl	By registering for this event I agree to comply with all event and lodging cancellation policies.
	Pine Straw Production - Stand Management and Economics August 16-17, 2011
r Promics David y Ag C Chapel	Early registration through July 26, 2011: \$185.00 Regular registration: \$210.00
traw cono rs: Dr. Count gston 16 –	Enclosed is a check # (payable to Warnell School of Forestry and Natural Resources). Fee must be received to process payment.
Pine Stand Ecanstructors  Sulloch C  151 Langs  August 1	Cancellations: Notify Ingvar Elle at 706-583-0566 (ielle@warnell.uga.edu) by 5:00 p.m. August 2, 2011 to receive a refund.
H WHW H	Mail payment to: Attn:  Ingvar Elle
	Warnell School of Forestry & Natural Resources
WARNEII	University of Georgia 180 East Green Street
SCHOOL OF FORESTRY AND NATURAL RESOURCES THE UNIVERSITY OF GEORGIA	Athens, Georgia 30602