

The Warnell Continuing Education Program

Daniel B. Warnell School of Forestry and Natural Resources

Pine Straw Production - Stand Management and Economics

Instructors: Dr. David Dickens & Dr. Dave Moorhead
Bulloch County Ag Center – Conference Room
151 Langston Chapel Rd, Statesboro, GA
November 5- 6, 2014



WARNELL
SCHOOL OF FORESTRY AND NATURAL RESOURCES
THE UNIVERSITY OF GEORGIA

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 –2011. During the period from 1999 through 2012 stumpage revenues in Georgia have declined by roughly 35%. 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 manage 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 – 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 17 October 2014.

Continuing Education Credits

- 12 Continuing Forestry Education (CFE) hours- Category 1
- 12 Continuing Logger Education hours - Environment
- — Pesticide Applicator credits for GA (applied for)

Full Attendance is Mandatory to Receive Credit

Wednesday 5 November , 2014

Time	Event
8:00 a.m.	Registration
8:30	Introduction Pine Straw Revenues vs. Stumpage Revenues Generated in Georgia, 1999 - 2012 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	Magnitude and Duration of Competition Control Benefits
3:00	Sequencing Fertilization and Herbicide Use to Reduce Overall Costs
3:30	Forest Management Alternatives for Moving a Cut-Over Pine Stand into Pine Straw Production
4:15	Economics of Pine Straw at Various Returns per Acre in Overall Pine Stand Management -Case study reviews – old- field and cut-over sites
5:00	Adjourn

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Thursday, 6 November 2014

Time	Event
8:15 a.m.	Herbicides and Herbicide Use
8:45	Identification and Control of Invasive Exotic Species
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, prescribe fire use, planting spacing, thinning, % defect, longleaf growth rate through age 21-yrs, growing poles, herbicide use, fertilization, and economics.
12:30	Lunch
1:30	Visit an 8-yr old longleaf stand that is close to producing pine straw annually; mgmt activities to do list. 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 October 15, 2013.

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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Register online at

<http://conted.warnell.uga.edu/courses>

Registration by Regular Mail

Name - please print

Preferred name for badge

☐ Business mailing address or ☐ Home address (please check one)

City State Zip County, if Georgia

Home phone Work phone Fax

Email address Education ☐ Please send me e-mails about other Warnell Continuing programs.

Position Organization/employer

By registering for this event I agree to comply with all event and lodging cancellation policies.

Pine Straw Production - Stand Management and Economics

5-6 November 2014

Early registration through 17 October 2014\$185.00

Regular registration:.....\$210.00

Enclosed is a check #____ (payable to Warnell School of Forestry and Natural Resources). Fee must be received to process payment.

Cancellations: Notify Ingvar Elle at 706-583-0566

(ielle@warnell.uga.edu) by 5:00 p.m. 15 October 2014 to receive a refund.

Mail payment to: Attn:

Ingvar Elle
Warnell School of Forestry & Natural Resources
University of Georgia
180 East Green Street
Athens, Georgia 30602