

The Warnell Continuing Education Program

Daniel B. Warnell School of Forestry and Natural Resources

Pine Straw Production - Stand Management and Economics

Instructors: Drs. David Dickens, Dave Moorhead, and Dave Coyle
Bulloch County Ag Center – Conference Room
151 Langston Chapel Rd, Statesboro, GA
October 11- 12, 2016



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 to \$60 million in 2012-2015. During the period from 1999 through 2015 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 and raking method) relates to soil moisture status, nutrient cycling, stand growth, added stress factors, and understory vegetation.
- 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 and recommendations.
- Learn herbicides that can be used in pine stands to control unwanted vegetation and herbicides that are grass friendly
- 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, practices to ready a stand prior to the first rake, 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
Dr. Dave Coyle—Forest Health Specialist—So. Region Ext. Forestry

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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 September 23, 2016.

Continuing Education Credits

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

Full Attendance is Mandatory to Receive Credit

Tuesday, October 11, 2016

Time	Event
8:00 a.m.	Registration
8:30	Introduction Pine Straw Revenues vs. Stumpage Revenues Generated in Georgia, 1999 - 2015 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	Magnitude and Duration of Fertilization Benefits — Case Studies; Fertilization Payoffs; Weed Re-growth with Fertilization
11:20	Using Diagnostic Tools (Leaf Area Index Estimations, Soil, and Foliar Sampling), Soils, and Yield Information for Determining Effective Recommendations
Noon	Lunch
1:00	Pine Straw Nutrient Levels and Release Rates
1:30	Raking Regimes (Semi-annual, Annual, Periodic) and Pine Straw Production, Stand Growth, Soil Moisture & Nutrients
2:15	Break
2:30	Pine Straw Raking types and Intensities for where Native Vegetation is Present or Absent —> Land Use History & Stand age
3:15	Sequencing Fertilization and Herbicide Use to Reduce Overall Costs
3:45	Forest Management Alternatives for Moving a Cut-Over Pine Stand into Pine Straw Production & prepping a stand prior to the first rake
4:30	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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Wednesday, October 12, 2016

Time	Event
8:15 a.m.	Herbicides for Pine Straw Production—Including the use of Grass Friendly Herbicides
8:45	Control of Invasive Plants & Other Problem Weeds
10:15	Break
10:30	Biological Limits to Raking – How long can a Stand be Raked before a Thinning is Needed?
11:15	Beetles, Roots, and Raking: Multiple Factors Impact Tree Health in Pine Straw Production Stands
12:00	Lunch
12:45—1:00	Travel to Bulloch Co site —> Pine stand discussion points: pine straw management, basal area, stand management pre- and post-thin, understory native vegetation, prescribed fire use, thinning, herbicide use, fertilization, and economics
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 11, 2016.

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.

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Early registration through Sept 23, 2016:.....\$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. Oct 1, 2016 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