

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
Tift County Ag Center – Conference Room
1468 Carpenter Rd, Tifton, GA
October 2 - 3, 2018



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, \$80 million in 2008 –2011, to \$60 million in 2012-2017. During the period from 1999 through 2017 pine chip-n-saw and sawtimber stumpage revenues in Georgia have declined by 25-45%. 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 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.
- 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, 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 September 23, 2018.

Continuing Education Credits

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

Full Attendance is Mandatory to Receive Credit

Tuesday, October 2, 2018

Time	Event
8:00 a.m.	Registration
8:30	Introduction Pine Straw Revenues vs. Stumpage 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	Forest Floor Nutrient Release Rates
1:30	Raking Regimes (Semi-annual, Annual, Periodic) and Pine Straw Production, Stand Growth, and Soil Moisture
2:15	Break
2:30	The added stress of intensive pine straw raking—impact on pine mortality and susceptibility to beetle outbreaks
3:15	Herbicides and Herbicide Use
3:45	Identification and Control of Invasive Exotic Species
4:30	Forest Management Alternatives for Moving a Cut-Over Pine Stand into Pine Straw Production
5:15	Adjourn

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Wednesday, October 3, 2018

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 Tift County
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, long-leaf growth rate through age 32-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](https://www.google.com/maps). 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 September 15, 2018.

Hotels in the Area Include:

Comfort Inn & Suites (229-382-8250)

Days Inn & Suites (229-382-8505)

Hampton Inn (229-382-8800)

Holiday Inn Express (229-382-3300)

Quality Inn (229-382-4410)

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Register online at

<http://conted.warnell.uga.edu/courses/pinestraw2018>

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 ☐ Please send me e-mails about other Warnell Continuing Education 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 14, 2018.....\$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 (ingvar@uga.edu) by 5:00 p.m. September 18, 2018 to receive a refund.

Mail payment to: Attn:

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