raw Production - Stand Management nstructors:

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, \$60-\$80 million in 2013-2020, to \$138 million in 2021. During the period from 1999 through 2020 pine chip-n-saw and sawtimber stumpage revenues in Georgia have declined by roughly 25% - 35%. Many forest landowners and land managers are interested in managing their 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 and raking method) 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 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. David Clabo - Assistant Professor of Silviculture UGA-WSF&NR

ine Straw Production - Stand Management nstructors:

Registration Fee

The fee for this course is \$300 which includes lunch, refreshment breaks, and instructional materials. There is a \$50 discount for fees paid and postmarked by 1 Sept 2023.

Continuing Education Credits (applied for)

- 10 hrs Continuing Forestry Education (CFE) hours- Category 1
- 10 hrs Continuing Logger Education hours Environment (Category B)
- 1 hr Cat 23 and 1 hr Cat 10 Pesticide Applicator credits for GA

Full Attendance is Mandatory to Receive Credit

Tuesday, September 12, 2023

Time	Event	
8:15 a.m.	Welcome, instructor introductions, continuing education certificates, and other items - Dickens and Clabo	
8:30	Introduction Pine Straw Revenues vs. Stumpage Factors Affecting Pine Straw Yields - Dickens	
9:30	Cut-Over and Old-Field Pine Straw Studies (Loblolly, Longleaf, and Slash Pine) - Dickens	
10:15	Break	
10:30	Magnitude and Duration of Fertilization Benefits — Case Studies; Fertilization Payoffs; Weed Re-growth with Fertilization –Dickens	
11:20	Using Diagnostic Tools (Leaf Area Index Estimations, Soil, and Foliar Sampling), Soils, and Yield Information for Determining Effective Recommendations—Dickens	
Noon	Lunch break	
1:00	Forest Floor Nutrients—Dickens	
1:30	Raking Regimes (Semi-annual, Annual, Periodic) and Pine Straw Production, Stand Growth, and Soil Moisture— Dickens	
2:15	Adjourn	

Pine Straw Production - Stand Management Dickens& Dr. David Clabo Instructors: Dr. David I Wednesday, September 13, 2023

Time	Event
8:15 a.m.	Possible Stand Stressors imparted by pine straw raking—Clabo
9:00	Herbicides and Herbicide Use—Clabo
9:45	Break
10:00	Identification and Control of Invasive Exotic Species–Clabo
10:45	Forest Management Alternatives for Moving a Cut-Over Pine Stand into Pine Straw Production—Dickens
11:30	Sequencing Fertilization and Herbicide Use to Reduce Overall Costs—Dickens
12:00	Lunch Break
12:45 p.m.	Economics of Pine Straw at Various Returns per Acre in Overall Pine Stand Management on Cutover vs Old-Field Stands –Field Visit at an Active Straw Raking Operation —Dickens and Clabo
3:30	Adjourn

Special Needs

For special services contact David Dickens @ 912-690-1678 or e-mail him at ddickens@uga.edu prior to September 1, 2023.

Stand Management David Clabo -Conference Room atesboro, GA	Register online at https://conted.warnell.uga.edu/ Registration by Regular Mail Name - please print Preferred name for badge
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Pine Sand Edinstructor Bulloch 151 Lare Septemb	Mail payment to: Attn: Ruchika Bansal Warnell School of Forestry & Natural Resources University of Georgia
WARNELL SCHOOL OF FORESTRY AND NATURAL RESOURCES THE UNIVERSITY OF GEORGIA	180 East Green Street Athens, Georgia 30602