2020 Short Course Webinar Series

Agenda:

Webinar 1: October 15, 2020, 2 pm ET; How to Sell Your Timber
Scott Sager, Forester, UF/IFAS School of Forest Resources and Conservation

Webinar 2: October 22, 2020, 2 pm ET; How to Integrate Wildlife and Forestry
Joe Vaughn and Megan Ellis, Landowner Assistance Program Biologists, Florida Fish and Wildlife Conservation Commission

Webinar 3: November 5, 2020, 2 pm ET; Using Biomass Harvesting for Reforestation & Restoration
Jib Davidson, Forester, Columbia Timber and Environmental Services

Webinar 4: November 12, 2020, 2 pm ET; Prepare for and Recover more quickly from the next Hurricane
Chris Demers, UF/IFAS School of Forest Resources and Conservation
2020 Short Course Webinar Series

Please use the Q & A function to ask questions, not the Chat. Questions will be answered after all presentations are complete.
Please complete **the very short evaluation** at end of the webinar – *Thanks!*

Presentation slides and other reading materials for this series are available online at:

[https://programs.ifas.ufl.edu/florida-land-steward/](https://programs.ifas.ufl.edu/florida-land-steward/)
2020 Short Course Webinar Series

SAF Continuing Forestry Education Credits:

1.0 Cat. 1 CFE approved
Verification by registration and Zoom Webinar attendance log
Webinar 3: Using Biomass Harvesting for Reforestation & Restoration

Jib Davidson, Certified Forester, Columbia Timber and Environmental Services

Make way for reforestation and/or forest restoration. Local and regional biomass markets can provide a much-needed market for low value wood that needs to be cleared for forest restoration purposes.
USING BIOMASS HARVESTING IN FOREST RESTORATION AND REFORESTATION

Presented November 05, 2020
BIOMASS HARVESTING AGENDA

• Landowner objectives
• What is biomass harvesting?
• Applications and case studies
  – Restoration
  – Reforestation
  – Real estate sales
LANDOWNER OBJECTIVES

You may or may not have a land management plan

It specifies a landowner’s goals and objectives...
LANDOWNER OBJECTIVES

Those goals and objectives will determine how biomass harvesting may be applied to your property.
LANDOWNER OBJECTIVES

Section I.
Short term or long-term holding period?

- Short-term < 5 years
- Long-term > 5 years

*Short-term holdings suggest selling the property so plan accordingly using land staging techniques*
LANDOWNER OBJECTIVES

Section II.
Establish financial needs → timber management plans

• Financial planner & diversification needs
• Future generations? Wealth transfer?
• IRS concerns (business vs investment)
• Cash flow needs? (Income & expenses)
  – Retirement or world cruise?
  – Agricultural Property taxes
LANDOWNER OBJECTIVES

Section III.
Establish ecological integrity
• Non-game wildlife habitats?
• Ecology/Soil/water/
• High Value Conservation areas?
• Sustainability concerns?
LANDOWNER OBJECTIVES

Section IV.
Other dominate objectives

• Recreation
• Game wildlife
• Aesthetics
• Conservation easements
• Sustainability concerns?
MANAGEMENT PLANS CAN PAY

- Standard/generic plan
  - GRU pays $0.00/ton
- Stewardship plans
  - GRU pays $0.50/ton
- FSC plan (Forest Stewardship Council)
  - GRU pays $1.00/ton
LAND MANAGEMENT PLANS

• County foresters & WFS
  • Ask for a Stewardship plan
  • Free (<160 acres)

• Consulting Foresters
  • Stewardship pays $500\(^1\) from State
  • Most charge fee, some accept the $500

• Timber Dealers & Mill LAPs
  • Landowner Assistance Programs
  • Stewardship pays $500\(^1\) from State
  • Free, no limit to acreage

\(^1\)Technically $500 first 100 acres + $4.50 > 100 acres.
LANDOWNER OBJECTIVES

Recording of webinar 3: **Keys to Success with Longleaf Pine and Enviva Biomass Partnership**

Go to Programs.ifas.ufl.edu/Florida-land-steward/bulletin-board/workshop-and-tour-materials
LANDOWNER OBJECTIVES

A Primer on Goals and Objectives

Management plans serve many functions. Its primary function is to identify the goals and objectives and then provide a written plan on how to achieve those objectives. A well-written land management plan integrates forest data with the landowner’s input and desires.

It is important to recognize that the landowner’s inputs and desires form the foundation of setting the goals and objectives. Those inputs are combined with forest data and management recommendations. This is best achieved if the landowner keeps in mind the end result. Time spent discussing these issues is time well spent.

Forest data is an integral part of this plan. Once the objectives are known, the property’s natural resources are identified and assessed for their quantity and quality. The results of that assessment formulate the recommendations that in turn form the basis of the plan. Only the landowner can make this plan happen.

Stratification. The landowner’s goals may be reflected on two levels: the property as a whole and individual management units. The property as a whole may reflect general objectives while individual management units reflecting more specific and possibly different objectives. A management unit is a reasonably homogeneous area composed of similar vegetative conditions and/or similar geographic conditions that will be managed in a similar way. The process of dividing the property into individual management units is called stratification.
BIOMASS MARKETS

THERE MUST BE A MARKET... typically within 70 to 75 miles... by approved truck
BIOMASS MARKETS
Typically maximum distance = 75 miles from facility.
Expect to pay for any additional mileage plus a move-on fee.
Our restoration-oriented sourcing at Cotตอนdale, FL

Practical considerations
Not all restoration projects will be financially viable for a logger. These aren’t absolute constraints, but a few rules of thumb include:

Proximity: 75 miles

Size of tract: 40 acres or larger. Or two smaller tracts need to be located within one-quarter mile, so a logger doesn’t have load up equipment on trailers to move between tracts.

Amount of biomass per acre: 20-25 tons (or one load) per acre.
BIOMASS MARKETS
G-P BIOMASS MARKETS

[Map of Florida showing the location of the Georgia-Pacific Buckeye Plant in Perry, FL]
BIOMASS MARKETS
BIOMASS MARKETS
BIOMASS MARKETS

Gainesville Regional Utilities uses forest biomass to generate renewable electricity

- Must be woody material
- No treated or painted materials
- Must meet sustainability standards
- Must comply with Best Management Practices
- Comply with Endangered Species Act
- All biomass source is reported to GRU
BIOMASS FUEL

BIOMASS IS ANY WOODY MATERIAL THAT HAS NO VALUE TO A PULP MILL OR ANY OTHER WOOD MANUFACTURING FACILITY

IT MUST BE RENEWABLE
BIOMASS FUEL

IT MUST BE CLEAN FUEL ...
BIOMASS FUEL

MINIMUM ACERAGE = 30

ITS NOT THE ACERAGE THAT IS IMPORTANT, IT’S THE NUMBER OF TONS...

BUT 30 ACRES TEND TO BE THE MINIMUM SIZE - AND OFTEN TIMES 40 ACRES IS MINIMUM. BUT...
Our restoration-oriented sourcing at Cotondale, FL

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BIOMASS FUEL
BIOMASS FUEL
CASE STUDY 1

LANDOWNER BENEFITS:

PINE & BIOMASS HARVESTING
(FREE SITE PREPARATION)
CASE STUDY 1 – PINE & HARDWOOD
CASE STUDY 1 – PINE & HARDWOOD

Tons of Pine CNS & Pulpwood Timber

Tons of Hardwood Understory
CASE STUDY 1 – PINE & HARDWOOD
CASE STUDY 1 – PINE & HARDWOOD
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CASE STUDY 1 – PINE & HARDWOOD

LOOK – THE HARDWOODS ARE ALL GONE...

AND THE PINE TIMBER AWAITS LOADING FOR THE MILLS.
CASE STUDY 1 – PINE & HARDWOOD BIOMASS HARVESTING IN ACTION

https://youtu.be/8uoGjjm91ks
CASE STUDY 1 – PINE & HARDWOOD

OPTIONS

1. Remove all biomass and harvest the pine timber simultaneously
CASE STUDY 1 – PINE & HARDWOOD

OPTION 1

- The tract will be site prepared and planted, so site preparation begins with the timber harvest
- Eliminate raking, windrowing, piling & burning costs
- Increase herbicide effectiveness
- Increase planting access
CASE STUDY 1 – PINE & HARDWOOD

OPTIONS

2. Remove all biomass and thin the pine timber
CASE STUDY 1 – PINE & HARDWOOD

OPTION 2

• No site preparation needed
• Aesthetics or wildlife objectives
• No piling or raking expenses
• Larger pine timber
CASE STUDY 2 – SITE PREPARATION
CASE STUDY 2 – SITE PREPARATION
CASE STUDY 2 – SITE PREPARATION
CASE STUDY 2 – SITE PREPARATION
CASE STUDY 2 – SITE PREPARATION

RAKING, PILING AND BURNING IS A LONG-STANDING SITE PREPARATION COST
CASE STUDY 2 – SITE PREPARATION

OPTIONS

1. Remove all biomass at time of harvest and get paid\(^1\) or
2. Rake, pile and burn, or windrow and pay for the site preparation

\(^1\)Assuming Stewardship Designation
CASE STUDY 2 – SITE PREPARATION

OPTIONS

- Raking, piling and windrows can use 4 to 15% of the land area
- Piles and windrows last for decades
- Eliminate further soil compaction
- Keep topsoil intact
CASE STUDY 2 – SITE PREPARATION
ELIMINATE PILING & BURNING COSTS
CASE STUDY 3 – AESTHETICS
CASE STUDY 3 – AESTHETICS
CASE STUDY 3 – AESTHETICS
CASE STUDY 3 – AESTHETICS
CASE STUDY 3 – AESTHETICS
CASE STUDY 3 – AESTHETICS
CASE STUDY 3 – AESTHETICS
CASE STUDY 4 – BEFORE
Objective: AESTHETICS
CASE STUDY 4 – AFTER
Objective: AESTHETICS
CASE STUDY 3 – AESTHETICS
IN SUMMARY
LAND MANAGEMENT ADVANTAGES

• Restoration and reforestation tools
• Eliminates raking, piling, burning and windrows
• Decreases site preparation costs
• Increases plantable acreage
• Retains and keeps topsoil on site
• Improves aesthetics
• Improves tree planting accessibility
• Improves wildlife habitats & diversity
• Promotes sustainability
QUESTIONS?

Columbia Timber Company
Certified Foresters • Land Managers • Real Estate
United Country Real Estate Property and Auctions
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QUESTIONS?

- Please use the Q&A function for questions
Forest Recovery Webinar Series

Please fill out the Evaluation for this Webinar
https://www.surveymonkey.com/r/RFDVZHW

Recordings, presentation slides, and other materials for all Florida Land Steward Webinars are available at:
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THANKS PARTNERS AND SUPPORTERS!
Florida Land Steward
2020 Short Course Webinar Series

November 12, 2020
Webinar 4: Prepare for and Recover more quickly from the next Hurricane
2:00-3:00 pm ET (1:00-2:00 pm CT)

Chris Demers, Extension Program Manager, UF/IFAS School of Forest Resources and Conservation

As we have learned in recent years, powerful hurricanes can make their way inland and do considerable damage to forest lands and agricultural enterprises. It’s never too early to prepare. Learn some strategies to make your property resilient and steps you can take to recover from a storm more quickly.
THANKS FOR JOINING US!

FLORIDA LAND STEWARD

UF IFAS Extension UNIVERSITY OF FLORIDA