Florida Land Steward

Forest Recovery Webinar Series

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Agenda:

Webinar 1: September 10, 2020, 2 pm ET, Hurricane Recovery Assistance Update
Daniel Stevens, Cooperative Forestry Assistance Supervisor, Florida Forest Service
Elias Mathes, Block Grant Project Manager, contractor on behalf of the Florida Dept. of Emergency Management
Laura Bosworth, Director of Forestry and Regulatory Affairs, Florida Forestry Association

Webinar 2: September 17, 2020, 2 pm ET, Which Pine is Right for My Property?
Stan Rosenthal, UF/IFAS Extension Forestry Agent, Emeritus; Forest Advocate, Florida Wildlife Federation, Natural Resource Planning Services

Webinar 3: September 24, 2020, 2 pm ET, Keys to Success with Longleaf Pine and Enviva Biomass Partnership
Ad Platt, Vice President for Operations, The Longleaf Alliance
Ben Larson, Director of Sustainability, Enviva
Shawn Cook, Sustainability Forester, Enviva
Billy Clark, Commodity Manger, Enviva

Webinar 4: October 1, 2020, 2 pm ET, Invasive Species Identification and Control
Brian Pelc, Restoration Project Manager, The Nature Conservancy

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Please use the Q & A function to ask questions, not the Chat. Questions will be answered after all presentations are complete.

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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/

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SAF Continuing Forestry Education Credits:

1.0 Cat. 1 CFE approved

Verification by registration and Zoom Webinar attendance log

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POLL QUESTIONS

- **First, a few questions about your experience with longleaf pine:**

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Webinar 3: Keys to Success with Longleaf Pine and Enviva Biomass Partnership

Ad Platt, Vice President for Operations, The Longleaf Alliance
Ben Larson, Director of Sustainability, Enviva
Shawn Cook, Sustainability Forester, Enviva
Billy Clark, Commodity Manger, Enviva

If longleaf pine is right for your objectives and your site, this presentation will share keys to success. This species once covered more of the South than any other, but to restore a longleaf pine forest we've learned to manage longleaf as longleaf. It is different, and so is our management. The Enviva biomass plant is partnering with The Longleaf Alliance to implement a longleaf restoration-oriented sourcing at Cottondale to help land managers and landowners in this region to restore longleaf pine forests.

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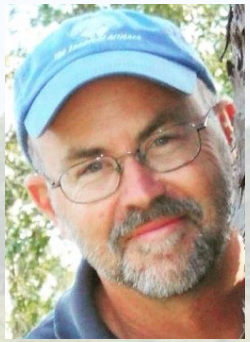
ESTABLISHING LONGLEAF PINE

Considerations for Landowners

Ad Platt

The Longleaf Alliance

About the Speaker, and The Longleaf Alliance



- **Ad is a forester, a landowner, growing longleaf.**
- **Lives in Santa Rosa Co., FL.**
- **With The Longleaf Alliance since 2011.**
- **40+ years working with private forestlands.**

- **The Longleaf Alliance is a 501C3 non-profit.**
- ***Mission:* to ensure a sustainable future for longleaf.**
- **We work Virginia to east Texas, all 9 longleaf states.**

- **If our advice helps you, we hope you'll become a member too!**

Once. Not long ago. Maybe again?

Photo: Bill Maynor©

THE LONGLEAF ALLIANCE

Reasons for owning land

1. Beauty (Aesthetics)
2. Wildlife
3. Water
4. Legacy
5. Nature
6. Privacy
7. Investment
8. Timber
9. Hunting
10. Family
11. Recreation
12. Firewood
13. NTFP*

50+ acres

Sustaining Family Forests Initiative (SFFI) - National Woodland Owners Survey, USFS

Know YOUR Management Objectives

- **Good Survival & Growth**
- **Aesthetics**
- **Risk Reduction**
- **Restore Native Plants & Animals**
- **Recreation**
- **A profitable forest that I can also enjoy every day**

- **Is this right for you?**

Is the Site Appropriate?

- **Avoid high pH soils (>7.0)**
  - Blackbelt/Prairie soils
  - Heavily limed soils (used in tomato production)
- **Avoid the wettest soils**
  - Sites that have standing water for weeks at a time
  - Pelhams, Gradys, etc.
- **If an Ag site, test soil nutrients first**
  - Excessive chicken litter applications may lead to toxic concentrations of some nutrients

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Soils

- Clays
  - Longleaf is tolerant of very heavy soils
    - Reduced incidence of little-leaf disease
    - Gulf States / Westervelt plantings on clay soils
- Loams
  - Better the soil, the faster longleaf grows
- Sands
  - Longleaf is tolerant of well-drained soils
    - More volume as compared to other southern pine
  - Occasionally, some sands are too poor for longleaf
    - Some Lakeland sands in Florida

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Deeper Considerations

- **If YES, Site Prep approach may be different**
  - **Forest vs. Plantation**
    - **Chemical vs. Mechanical**
      - **Cutover Sites**
      - **Old Field and Ag Sites**

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Most important

- Treat longleaf as longleaf
  - Take care of invasives first (site prep won't)
  - Prepare the site but retain the desirable species
  - Manage your fuels so you can burn
    - Avoid over-preparing your site
    - If you want native wildlife, think native foods
  - Plant early, plant correctly (plug elevated)
  - Fire is our most effective and efficient tool

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Fully address invasive species site preparation won't control

Photo: Ad Platt

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Avoid Long Term Management Concerns

Where Longleaf can have difficulty

- **Landowner who plants and forgets it**
- **Failure to burn**
- **Doing incorrect or no site prep**
- **Excess fertility**
- **Planted incorrectly**
- **Excessively wet sites**


THE
LONGLEAF
ALLIANCE

In longleaf restoration…

- Good site prep should:
  - Assist with the successful establishment of longleaf pine
  - Control hardwood competition
  - Conserve keystone species
  - Allow Rx fire soon after planting
  - Maintain botanical diversity or allow it to quickly recover
  - Discourage weeds

- Bad site prep may:
  - Prevent the successful use of Rx fire
  - Encourage weeds such as dogfennel, climbing fern, rattlebox and blackberry that compete with longleaf and deteriorate wildlife habitat
  - Eliminate much of the botanical diversity that makes longleaf pine forest the beautiful places that we enjoy

From: Nathan Klaus, GADNR

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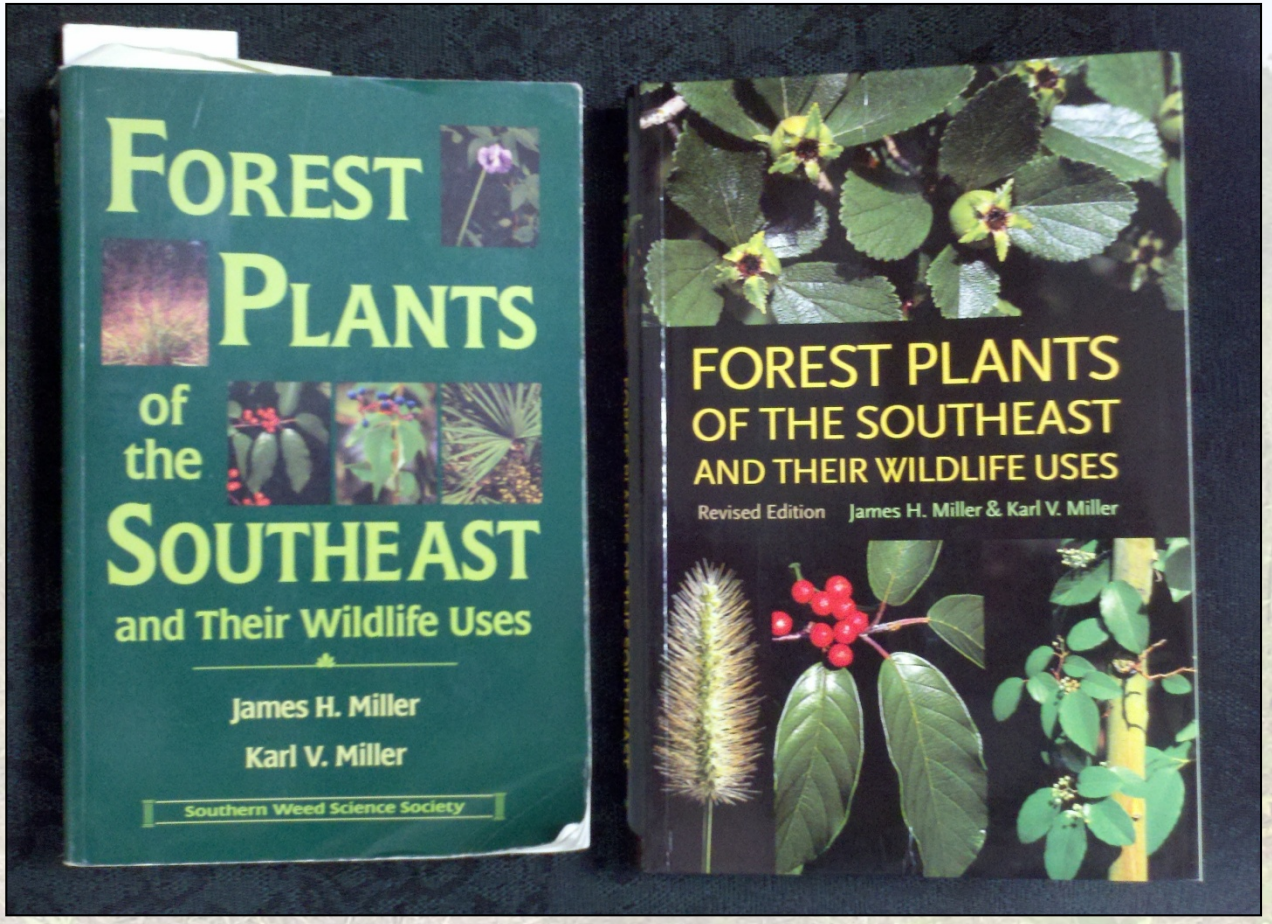
Suggested Reading



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A Lot of Help Available

Including:

- **Florida Forest Service (FFS)**
  - **www.floridadisaster.org/timber**
- **Non-profits**
  - **The Longleaf Alliance (LLA)**
  - **The Nature Conservancy (TNC)**
  - **FPNCRA**
- **Enviva Corporation – an opportunity**
- **Federal – Hurricane Michael Partners:**
  - **USDA FSA**
  - **USDA NRCS-FL**

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Remember:
Keys for Success

- **Pick the right site**
- **Do a good job of site preparation upfront to avoid the need for a release later**
- **Use a good, hot, site prep fire if burning**
- **Select high quality seedlings**
- **Plant them early in the winter**
- **Plant them correctly**

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Fire Only – 2 Years old

Garlon/Escort – 19 mos.

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Waiting period prior to planting behind soil active herbicides

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Over preparation of the site?

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Brownspot needle blight is easily cured by a winter prescribed burn

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Consequences!

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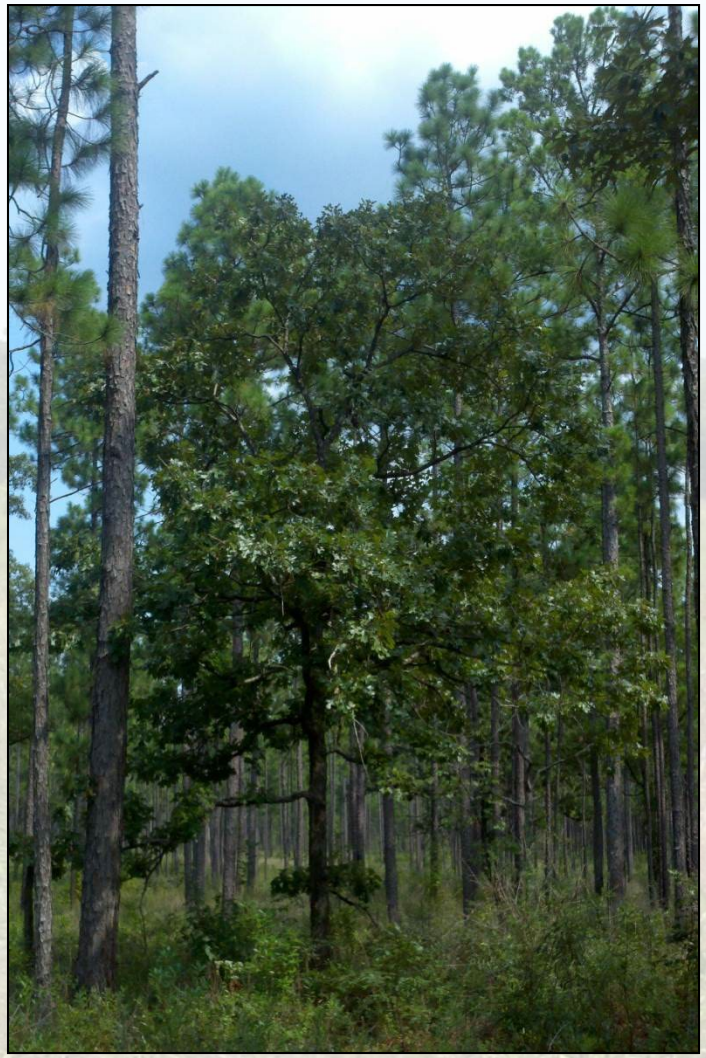
Post oak



Blackjack oaks

Scrub oaks are natural components of upland longleaf ecosystems: sand post, turkey, bluejack, sand live, etc.

The goal

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Dr. Joan Walker

Can biomass harvesting replace a mechanical site prep treatment?

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Separating the biomass from the pulpwood and chipping on site

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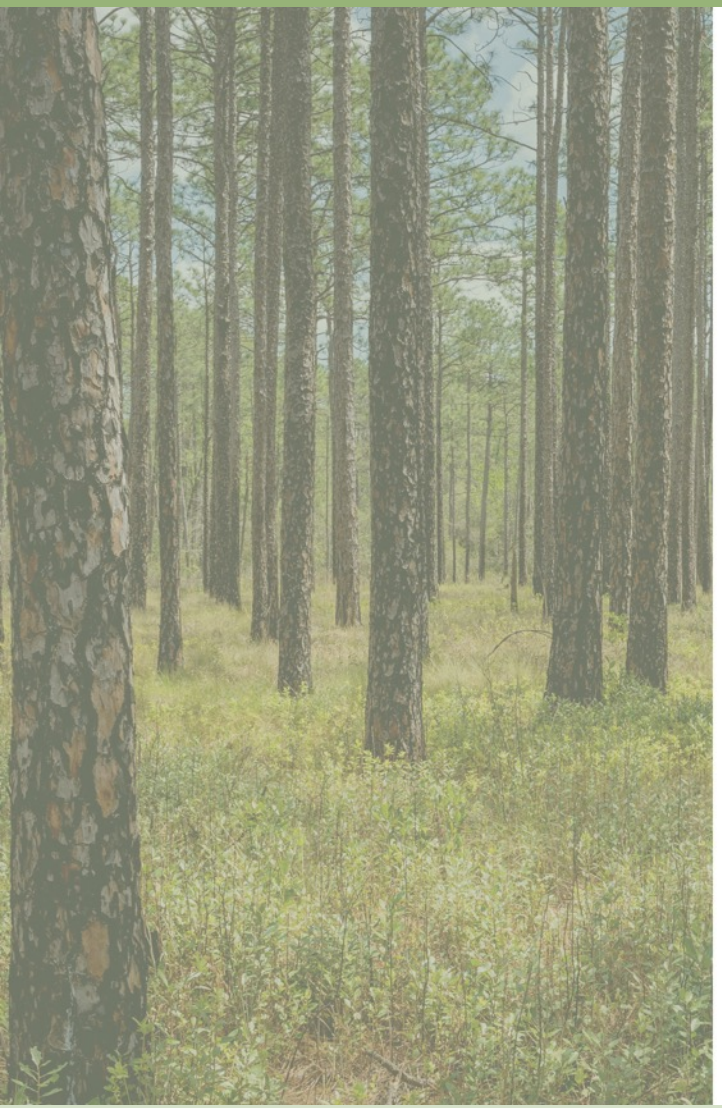
Questions?

Ad Platt
850-982-8480
Ad@longleafalliance.org

THE LONGLEAF ALLIANCE

ENVIVA'S PARTNERSHIP WITH THE LONGLEAF ALLIANCE, PILOTING OUR NEW LONGLEAF PROCEDURES, AND OUR RESTORATION SOURCING AT COTTONDALE, FL

OVERVIEW



- Enviva's partnership with The Longleaf Alliance

  - Ben Larson, Enviva Director of Sustainability, Bethesda, MD

- Piloting our new longleaf policies and procedures at Cottondale, FL

  - Shawn Cook, Enviva Regional Sustainability Forester, Cottondale, FL

- How our longleaf restoration-oriented sourcing at Cottondale can help land managers and landowners restore their longleaf

  - Billy Clark, Enviva Commodity Manager, Cottondale, FL

OUR PARTNERSHIP WITH THE LONGLEAF ALLIANCE

5-yr MOU with annual funding for The Longleaf Alliance's assistance on our shared goals:

1. Provide strategic guidance, e.gs., on our five-year longleaf restoration plan
2. Provide technical assistance on:
   - ✓ longleaf management guidelines and forest management plans
   - ✓ GIS mapping of longleaf stands
   - ✓ development of stand-level monitoring protocol
3. Training Enviva staff, primarily through Longleaf Academies
4. Connecting Enviva with landowners, primarily through workshops and materials
5. Special LLP restoration projects such as LLP seedlings or RCW inserts
6. Jointly assessing and reporting our annual restoration sourcing (quality & quantity)

Ben Larson, Director of Sustainability

PILOTING OUR NEW LONGLEAF PROCEDURES AT COTTONDALE, FL

1. Enviva is adding longleaf as a new type of high conservation value forest (HCV) to our policy and procedures
   A. All our sourcing on stands where longleaf is dominant or co-dominant canopy will need to maintain or improve them as longleaf stands
   B. We will use best-available mapping in our states
      - FL longleaf ecosystem occurrence (LEO) mapping
      - And will ground-truth mapping in our monitoring (below)
   C. Indicators of landowner intent to maintain longleaf
      - ✓ At a minimum, the harvest plan needs to specify maintain longleaf canopy
      - ✓ We encourage and support landowners to have a management plan written

Shawn Cook, Regional Sustainability Forester

PILOTING OUR NEW LONGLEAF PROCEDURES AT COTTONDALE, FL

2. Good longleaf management guidelines into management plans
   - ✓ Developed management guidelines with The Longleaf Alliance, Milliken Forestry, and others
   - ✓ Enviva will pay for Tree Farm or Forest Stewardship Council (FSC) certification
   - ✓ Milliken Forestry will write plans in some regions

3. Monitoring our longleaf restoration sourcing
   - ✓ To ensure that our sourcing is moving stands toward desired conditions, we will use the LEO rapid assessment tool
   - ✓ Conduct pre- and post-harvest assessments in all stands
   - ✓ The Longleaf Alliance has begun training our foresters in use of the LEO rapid assessment tool
   - ✓ We will also take photos at all the sampling sites

Shawn Cook, Regional Sustainability Forester

Our restoration-oriented sourcing at Cottondale, FL

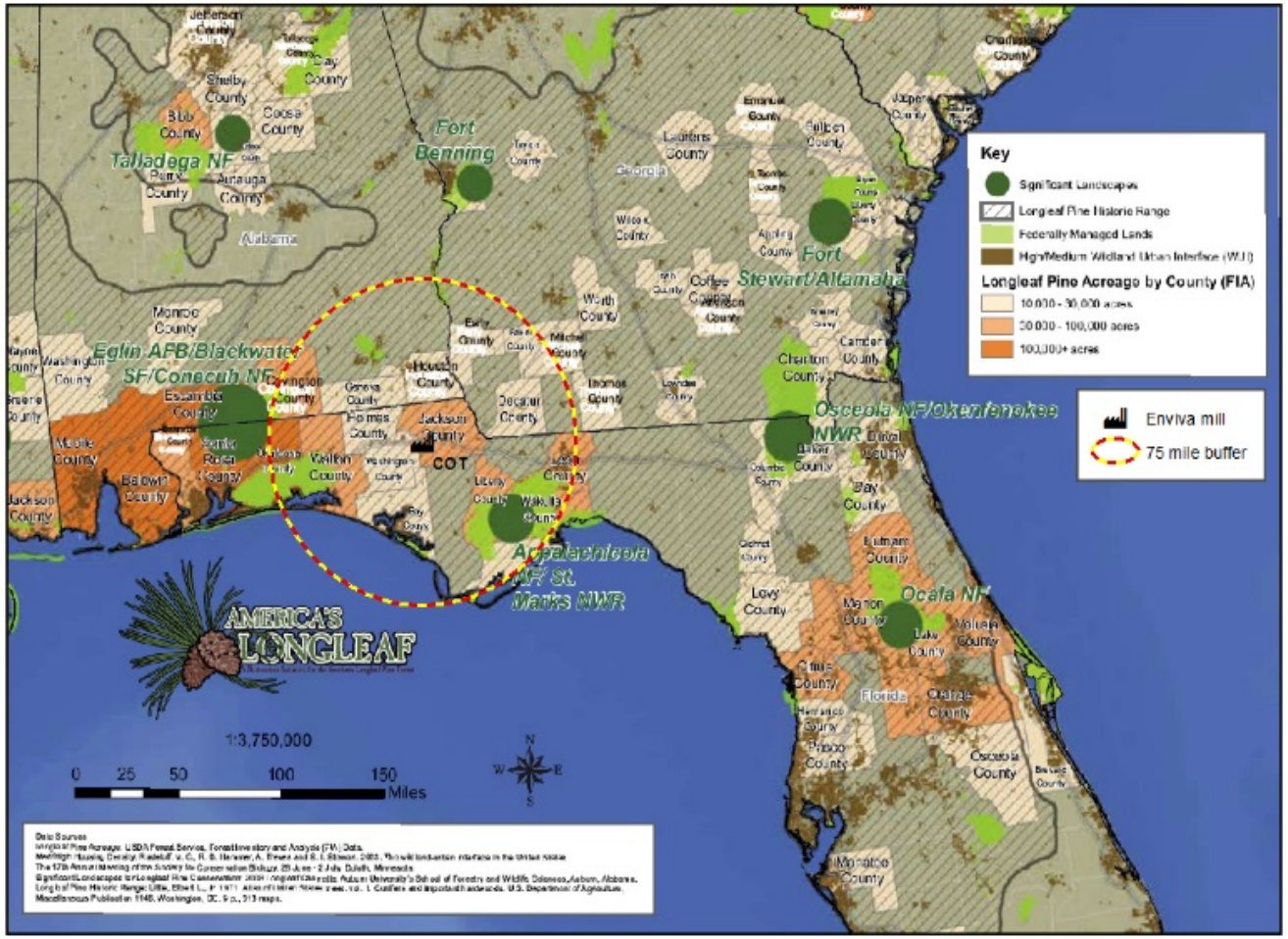
Practical considerations

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.



Billy Clark, Commodity Manager

OUR RESTORATION-ORIENTED SOURCING AT COTTONDALE, FL

Forestry operation	Restoration goals	Examples
Hurricane recovery	Removing leaning or downed trees	• 700+ acre private tract in Bay County, FL • Apalachee Wildlife Management Area

Billy Clark, Commodity Manager

OUR RESTORATION-ORIENTED SOURCING AT COTTONDALE, FL

Forestry operation	Restoration goals	Examples
Final harvest (either roundwood or chipping) of canopy and midstory	On longleaf soils/sites, removing small-diameter sand pine or loblolly or scrub hardwood to restore longleaf	• Private parcel in Houston CO, AL where the landowners are going to establish longleaf as part of NRCS' gopher tortoise program • Private parcel near Crystal Lake (below right) • Falling Waters and Torreya State Parks (below left)

Billy Clark, Commodity Manager

OUR RESTORATION-ORIENTED SOURCING AT COTTONDALE, FL

Forestry operation	Restoration goals	Examples
Thinning canopy	Get light on understory	1,000+ acres at Eglin Air Force Base (FL)
Microchipping hardwood midcanopy	Restoring habitat, including gopher tortoise	800+ acres at Geneva State Forest Wildlife Management Area (AL)

Billy Clark, Commodity Manager

QUESTIONS?

- **Please use the Q&A function for questions**

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Please fill out the Evaluation for this Webinar
https://www.surveymonkey.com/r/BN389BJ

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THANKS PARTNERS AND SUPPORTERS!

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Next Webinar: October 1, 2020
Webinar 4: Invasive Species Identification and Control
2:00-3:00 pm ET (1:00-2:00 pm CT)

Brian Pelc, Restoration Project Manager, The Nature Conservancy

Sites disturbed by the storm have been the perfect medium for invasive plants to establish. Existing and new infestations of invasive plants like cogongrass will be inadvertently spread by heavy equipment during the cleanup and site preparation phases. Be on the lookout for invasive plants and treat them as soon as possible.

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THANKS FOR JOINING US!

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