

---

---

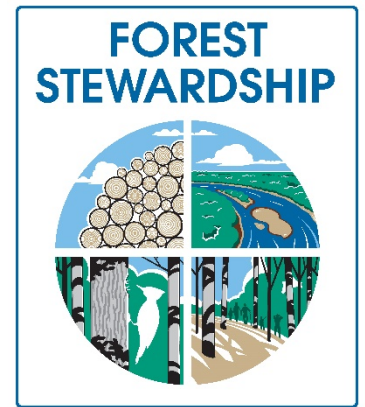
# Florida Forest Stewardship Tour: RFM Farms

## Property of Robert and Frances McGranahan

Suwannee County, Florida

---

---



**Date: Thursday, September 19, 2019**

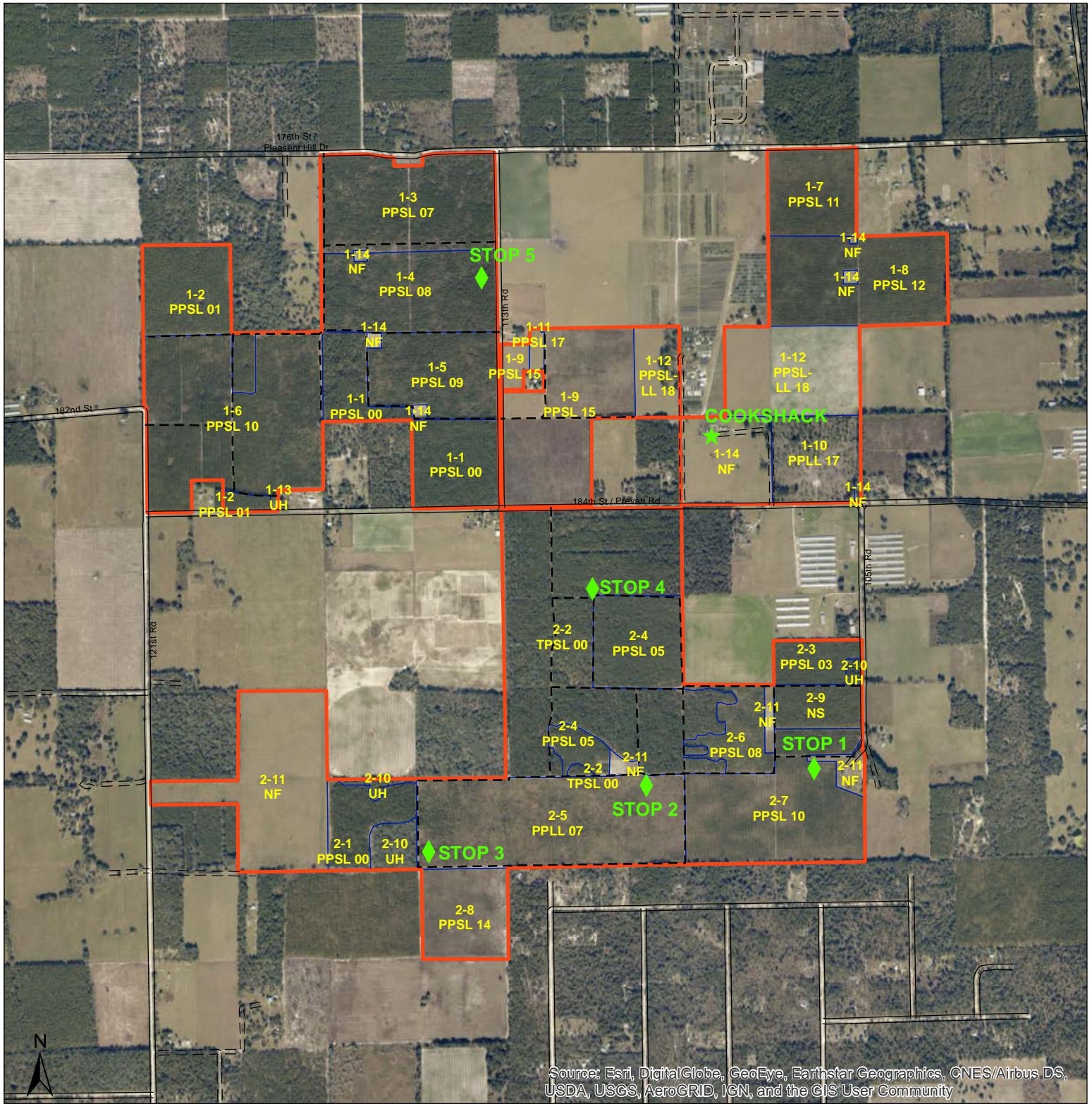
**Tour begins at 9:30 am, lunch at noon**

The McGranahan's primary management objectives for their Suwannee County property are timber production, grazing, and wildlife management. Timber management, including pine straw production, is given high priority in their planted pine stands and management practices optimize yields of both.

Wildlife management practices are primarily to improve habitat for game species such as white-tailed deer, wild turkey and bobwhite quail. Recreational use of the property includes hunting and wildlife viewing, and the habitat management practices they implement also improve those opportunities. They have also established stands of longleaf pine and have done some burning to improve habitat conditions there.



Funding for this event is provided by the Florida Tree Farm Program, USDA Forest Service through the Florida Department of Agriculture and Consumer Service's Florida Forest Service, and the Florida Sustainable Forestry Initiative Implementation Committee.

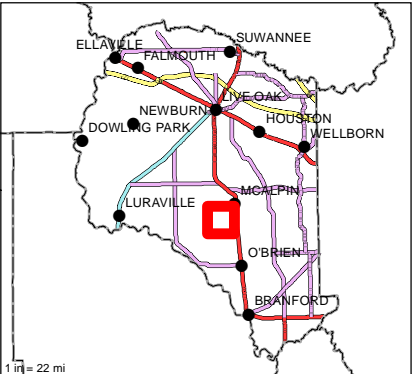


**RFM FARMS  
STEWARDSHIP TOUR  
SEPTEMBER 19, 2019  
SUWANNEE COUNTY, FL**

1 in = 2,000 ft      1 in = 0.38 mi

**Legend**

- Tract Boundaries
- Stand Boundaries



# Table of Contents

Page

## Tour Information

Tour Contacts	4
---------------	---

## Assistance

Florida Forest Stewardship Program Fact Sheet	5
Tree Farm Program Fact Sheet	6
Florida Tree Farm Program Contacts	7
Silviculture Best Management Practices	8
Forestry Wildlife Best Management Practices for State Imperiled Species	9
Got Invasives? Get Assistance.	10
USDA Natural Resources Conservation Service Assistance Fact Sheet	11

## References and Links

Prepare Your Property for Hurricane Season	12
Cogongrass Control	14
Enhancing Habitat for Wildlife	15
Longleaf Pine	16
Thinning Southern Pines	17
Pine Straw	18
UF/IFAS Forest Management and Stewardship Publications	19
Note space	20

We appreciate the support of our  
**2019 Florida Forest Stewardship Program Sponsors**  
-listed on the back cover-

## Resource Contacts

**Rhoda "De" Broughton**

Regional Specialized Agent  
UF/IFAS Suwannee Valley REC  
7580 CR 136  
Live Oak, FL 32064  
(386) 362-1725  
[deonne@ufl.edu](mailto:deonne@ufl.edu)

**Robin Holland**

Environmental Specialist II  
Florida Forest Service  
6675 NE 40th Ave Rd  
Ocala, FL 34479  
(352) 732-1781  
[Robin.Holland@freshfromflorida.com](mailto:Robin.Holland@freshfromflorida.com)

**Ginger Morgan**

North Central Regional Coordinator  
Landowner Assistance Program  
Florida Fish and Wildlife  
Conservation Commission  
3377 East US Highway 90  
Lake City, FL 32055  
(386) 758-0525  
[Ginger.Morgan@MyFWC.com](mailto:Ginger.Morgan@MyFWC.com)

**Chris Demers**

Extension Program Manager  
UF/IFAS School of Forest  
Resources and Conservation  
PO Box 110410  
Gainesville, FL 32611  
(352) 846-2375  
[cdemers@ufl.edu](mailto:cdemers@ufl.edu)

**Katrina Koning**

Suwannee County Forester  
Florida Forest Service  
7620 133rd Road  
Live Oak, FL 32060  
(386) 364-5314  
[Katrina.Koning@freshfromflorida.com](mailto:Katrina.Koning@freshfromflorida.com)

**Joe Shiver**

Owner  
Shiver Forestry Services  
PO Box 1373  
Lake City, FL 32056  
(386) 963-2315  
[Shiverforestry@windstream.net](mailto:Shiverforestry@windstream.net)

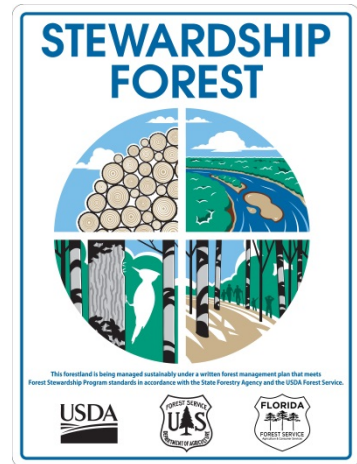
**Chris Menhennett**

District Conservationist  
USDA Natural Resources  
Conservation Service  
1525-B Ohio Ave South  
Live Oak, FL 32064  
(386) 362-2622 x 3  
[Chris.Menhennett@fl.usda.gov](mailto:Chris.Menhennett@fl.usda.gov)

# Florida's Forest Stewardship Program

**Forest Stewardship** is active management of forest land to keep it in a productive and healthy condition for present and future generations, and to increase the economic, environmental and social benefits of these lands. Forest Stewards are landowners who manage their forest lands on a long-term basis by following a multiple resource management plan.

*The Forest Stewardship Program addresses the improvement and maintenance of timber, wildlife, soil and water, recreation, aesthetics, as well as forage resources.*



## Eligibility

Private forest landowners with at least 20 acres of forest land and a desire to manage their ownerships according to Stewardship principles can participate in the Forest Stewardship Program. Also, adjacent landowners, with similar management objectives, may combine their holdings to meet this acreage limitation.

## Benefits to Landowners

- A customized management plan that is based on the landowner's objectives. The plan will include forest stand characteristics, property maps, management recommendations, and a five-year time line for future planning. This plan also serves as documentation of active management on the property that may help reduce tax liability.
- An opportunity for public recognition as a certified "Forest Steward".
- Educational workshops, tours and the quarterly Florida Land Steward newsletter developed and distributed by the University of Florida, IFAS Cooperative Extension Service and other partners.

## How to Enroll

Contact your local Florida Forest Service County Forester and tell them that you would like to have a Forest Stewardship Plan prepared for your property. More information and application online at: <http://FreshFromFlorida.com/ForestStewardship>



## Tree Farm Program

The American Tree Farm System® is a program of the American Forest Foundation and was founded in 1941 to promote the sustainable management of forests through education and outreach to family forest landowners. Nearly 26 million acres of privately owned forestland and 80,000 family forest landowners in 46 states are enrolled in the program and committed to excellence in forest stewardship. About half of all Tree Farms are located in the South.

### Eligibility

Private forest landowners with at least 10 acres of forest land and have a desire to manage their ownerships according to sustainable forestry guidelines can participate in Tree Farm.

### Benefits to Landowners

Tree Farmers are good stewards of their forestland, committed to protecting watersheds and wildlife habitat and conserving soil. They manage their forestland for various reasons, including timber production, wildlife, recreation, aesthetics, and education/outreach. Florida Tree Farmers receive many benefits:

- Representation on local, state, and federal issues affecting forestland owners.
- Connection to a network of forestry professionals and landowners committed to sustainable forestry.
- Invitations to workshops, tours and the quarterly Florida Land Steward newsletter produced by University of Florida IFAS and other partners.
- Certification that meets international standards of sustainable forest management.
- Participation in local, state, regional, and national Outstanding Tree Farmer of the Year awards and recognition.

### Getting into the Program

Contact your local Florida Forest Service County Forester and tell them that you would like to join the Tree Farm program. More information is available at:

<https://www.treefarmssystem.org/florida>



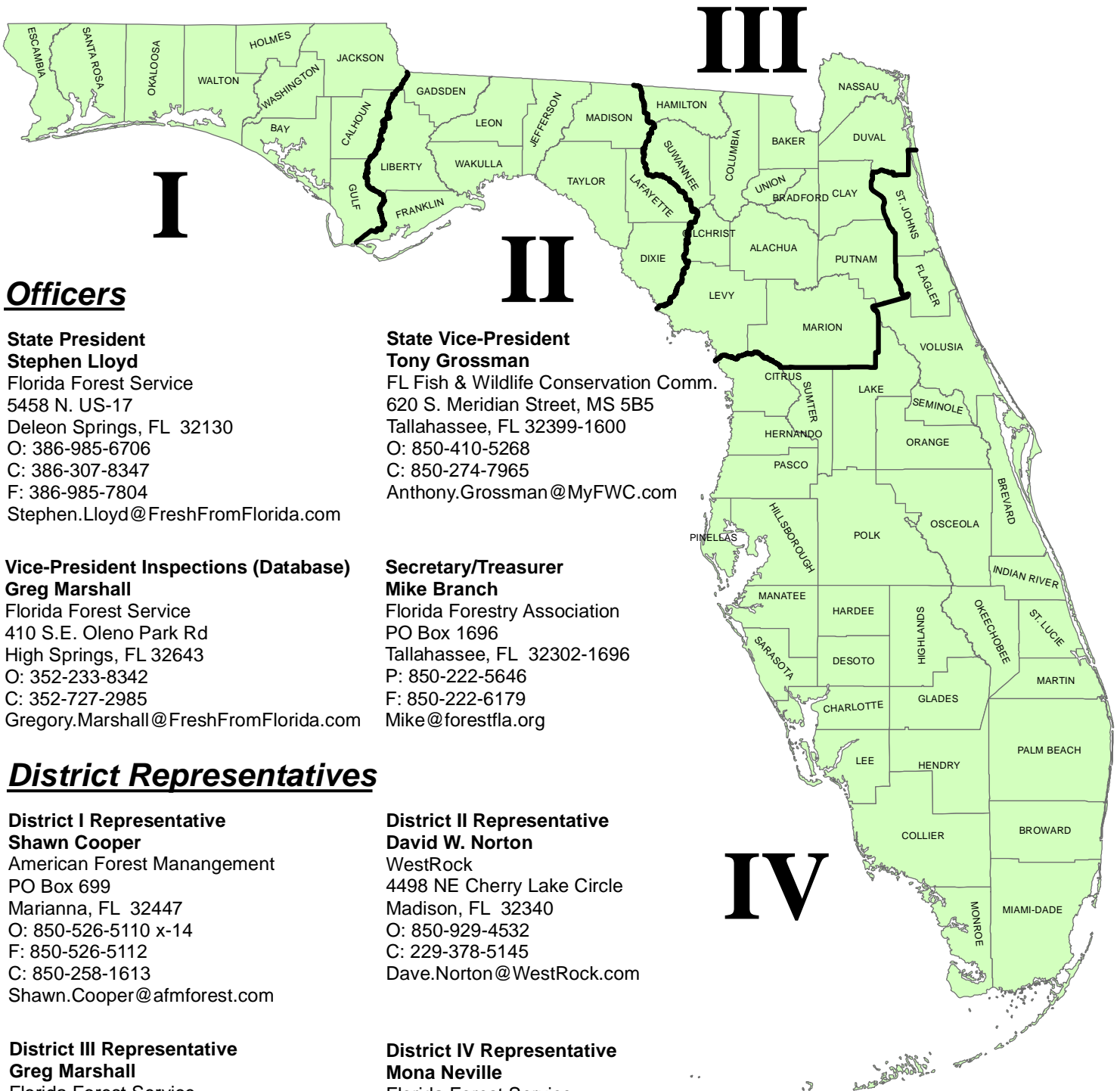
# Florida Tree Farm Program, Inc. Districts, Officers, and District Reps.

Administered by the Florida Forestry Association

Revised: June 27, 2019



## FLORIDA FORESTRY ASSOCIATION



### Officers

#### State President Stephen Lloyd

Florida Forest Service  
5458 N. US-17  
DeLeon Springs, FL 32130  
O: 386-985-6706  
C: 386-307-8347  
F: 386-985-7804  
Stephen.Lloyd@FreshFromFlorida.com

#### State Vice-President Tony Grossman

FL Fish & Wildlife Conservation Comm.  
620 S. Meridian Street, MS 5B5  
Tallahassee, FL 32399-1600  
O: 850-410-5268  
C: 850-274-7965  
Anthony.Grossman@MyFWC.com

#### Vice-President Inspections (Database)

##### Greg Marshall

Florida Forest Service  
410 S.E. Oleno Park Rd  
High Springs, FL 32643  
O: 352-233-8342  
C: 352-727-2985  
Gregory.Marshall@FreshFromFlorida.com

#### Secretary/Treasurer

##### Mike Branch

Florida Forestry Association  
PO Box 1696  
Tallahassee, FL 32302-1696  
P: 850-222-5646  
F: 850-222-6179  
Mike@forestfla.org

### District Representatives

#### District I Representative

##### Shawn Cooper

American Forest Management  
PO Box 699  
Marianna, FL 32447  
O: 850-526-5110 x-14  
F: 850-526-5112  
C: 850-258-1613  
Shawn.Cooper@afmforest.com

#### District II Representative

##### David W. Norton

WestRock  
4498 NE Cherry Lake Circle  
Madison, FL 32340  
O: 850-929-4532  
C: 229-378-5145  
Dave.Norton@WestRock.com

#### District III Representative

##### Greg Marshall

Florida Forest Service  
410 S.E. Oleno Park Rd  
High Springs, FL 32643  
O: 352-233-8342  
C: 352-727-2985  
Gregory.Marshall@FreshFromFlorida.com

#### District IV Representative

##### Mona Neville

Florida Forest Service  
36339 SR-52  
Dade City, FL 33525  
O: 352-523-5101  
C: 352-467-1588  
F: 352-523-5104  
Mona.Neville@FreshFromFlorida.com



# Florida Forest Service Silviculture Best Management Practices



## SILVICULTURE BEST MANAGEMENT PRACTICES (BMPs)

Silviculture BMPs are the minimum standards necessary to protect our state's waterbodies and wetlands from the degradation and sedimentation that can sometimes occur because of erosion during and immediately following recent forestry operations. Silviculture BMPs should be applied on all bonafide ongoing forestry operations, especially those adjacent to waterbodies and wetlands, and may be enforced by federal, state, and local authorities through reference of regulatory statute or rule.

## SILVICULTURE BMP COURTESY CHECKS

Silviculture BMP courtesy checks are available to give landowners, land managers, and loggers a "report card" on Silviculture BMP implementation for recent or ongoing forestry operations. This helps with future management planning as well as evaluating the performance of contractors on your property.

## SILVICULTURE BMP SITE ASSESSMENTS

On-the-ground Silviculture BMP site assessments are available to discuss which Silviculture BMPs will apply to planned operations on a specific site. This helps with harvest plan development, road layout, mitigation of existing problem areas, etc.

## SILVICULTURE BMP NOTICE OF INTENT

The Silviculture BMP Notice of Intent (Rule 5I-6 F.A.C.) is a voluntary one-time pledge that a landowner signs to indicate his or her intention to follow Silviculture BMPs on their property. Once a landowner has signed the Notice of Intent, he or she will become eligible to receive a *presumption of compliance* with state water quality standards during future bonafide ongoing forestry operations. This is very important if the landowner's property falls within an area covered by a Florida Department of Environmental Protection Basin Management Action Plan for impaired waters.

## ADDITIONAL SERVICES

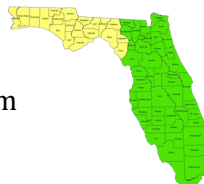
For information on the services listed above or any other services provided by the Florida Forest Service's Hydrology Section please contact your local **BMP Forester**.

**William McCarthy**

Panhandle Area

William.McCarthy@FreshFromFlorida.com

(850) 681-5942



**Robin Holland**

Peninsula Area

Robin.Holland@FreshFromFlorida.com

(352) 732-1781



Florida Department of Agriculture and Consumer Services





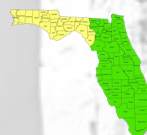
# Forestry Wildlife Best Management Practices



- Forestry Wildlife Best Management Practices for State Imperiled Species (WBMPs) were adopted into Florida Administrative Code (Rule 5I-8) on October 21, 2014.
- WBMPs were developed through a partnership between the Florida Department of Agriculture and Consumer Services' Florida Forest Service and the Florida Fish and Wildlife Conservation Commission (FWC).
- WBMPs are **voluntary** practices designed as a practical approach for avoiding and minimizing the loss of **State Imperiled Species** due to silviculture operations.
- WBMP practices address the 16 State Imperiled Species which are considered to be potentially vulnerable to silviculture operations including ten aquatic species, two burrowing animals, and four nesting birds.
- WBMPs are designed to supplement the existing water quality-based Silviculture BMPs which already provide many valuable benefits to the conservation and management of fish and wildlife in Florida.
- Landowners and other forestry resource professionals can enroll in the voluntary program by completing a WBMP Notice of Intent. Those who do not wish to enroll will continue to be subject to all current laws and regulations regarding State Imperiled Species.
- Once enrolled, applicants who **properly implement** WBMPs will no longer be required to obtain a permit authorizing the incidental take of State Imperiled Species during bonafide ongoing forestry operations. In addition, they will not be subject to any fines or penalties associated with an incidental take of the State Imperiled Species covered by the WBMP Manual.
- WBMPs are not designed to facilitate wildlife habitat restoration or species recovery and expansion. Also, they do not address any Federally Listed Species. For information on Federally Listed Species, refer to FWC's online "Florida Wildlife Conservation Guide."
- To obtain more information or a copy of the WBMP Manual and Notice of Intent, contact your local Florida Forest Service BMP forester (see below) or a FWC Landowner Assistance Program biologist (850) 488-3831.

## Florida Forest Service BMP Foresters

William McCarthy  
Panhandle Area  
(850) 681-5942



Robin Holland  
Peninsula Area  
(352) 732-1781

William.McCarthy@FreshFromFlorida.com    Robin.Holland@FreshFromFlorida.com



# Got Invasives?

## Invasive exotic plant problem? Find a program to help by using [FloridaInvasives.org](http://FloridaInvasives.org).

The Florida Invasive Species Partnership has collected, evaluated and categorized assistance programs into a single resource, making it easier to find the financial and/or technical assistance available to Florida landowners to prevent or control invasive exotic species problems. [FloridaInvasives.org](http://FloridaInvasives.org) has an online resource of management assistance programs to help in your fight against problematic plant species. This resource takes the guesswork out of finding the agencies or organizations offering assistance and will direct you to available programs. The Landowner's Incentives Database will also provide the requirements for each program, to help you decide if they are a good match for your needs.

### Why was [FloridaInvasives.org](http://FloridaInvasives.org) developed?

Invasive species have been identified as being costly ecologically and economically statewide in Florida. The Florida Invasive Species Partnership (FISP) is a collaboration of public and private entities in Florida, formed to link efforts at preventing and controlling invasive exotic plants across agency and property boundaries. FISP has developed an on-line tool of available financial and technical assistance sources to make it easier for landowners and land managers to find them.

### How does [FloridaInvasives.org](http://FloridaInvasives.org) help you?

FISP has created a searchable database, the [Florida landowner incentives database](http://FloridaInvasives.org), accessible at [FloridaInvasives.org](http://FloridaInvasives.org) that allows you to find an assistance program for your needs. Search by your county, target species or other pertinent information into the online tool, and you will retrieve a current list of available programs.

[FloridaInvasives.org](http://FloridaInvasives.org) will help provide focus to your search so that you can get the right person at the right program.

[FloridaInvasives.org](http://FloridaInvasives.org):

- Builds community awareness,
- Leverages limited resources through cooperation and
- May reduce individual land management costs.

This resource will be regularly updated with the most current program information to provide you the most up-to-date opportunities.

Go to [FloridaInvasives.org](http://FloridaInvasives.org) to find out more.

Species Shown from top to bottom:

Mexican Petunia, Boston Fern, Mimosa, Cogongrass, Camphor



*Think Locally, Act Neighborly*

invasive species know no boundaries!

# 5

# Steps to Assistance

How to Get Assistance from NRCS for Farms, Ranches and Forests

## 1 PLANNING

Visit your local NRCS field office to discuss your goals and work with staff on a conservation plan.

## 2 APPLICATION

With the help of NRCS, complete an application for financial assistance programs.

## 3 ELIGIBILITY

Find out if you're eligible for NRCS' variety of financial assistance programs.

## 4 RANKING

NRCS ranks applications according to local resource concerns.

## 5 IMPLEMENTING

Put conservation to work by signing a contract and implementing conservation practices.

## Get Started with NRCS

**Do you farm or ranch and want to make improvements to the land that you own or lease?**

Natural Resources Conservation Service offers technical and financial assistance to help farmers, ranchers and forest landowners.

### 1 Planning

**To get started with NRCS, we recommend you stop by your local NRCS field office.**

**We'll discuss your vision for your land.**

NRCS provides landowners with free technical assistance, or advice, for their land. Common technical assistance includes: resource assessment, practice design and resource monitoring. Your conservation planner will help you determine if financial assistance is right for you.

### 2 Application

**We'll walk you through the application process. To get started on applying for financial assistance, we'll work with you:**

- To fill out an AD 1026, which ensures a conservation plan is in place before lands with highly erodible soils are farmed. It also ensures that identified wetland areas are protected.
- To meet other eligibility certifications.

Once complete, we'll work with you on the application, or CPA 1200.

Applications for most programs are accepted on a continuous basis, but they're considered for funding in different ranking periods. Be sure to ask your local NRCS district conservationist about the deadline for the ranking period to ensure you turn in your application in time.

### 3 Eligibility

**As part of the application process, we'll check to see if you are eligible.**

**To do this, you'll need to bring:**

- An official tax ID (Social Security number or an employer ID)
- A property deed or lease agreement to show you have control of the property; and
- A farm tract number.

If you don't have a farm tract number, you can get one from USDA's Farm Service Agency. Typically, the local FSA office is located in the same building as the local NRCS office. You only need a farm tract number if you're interested in financial assistance.

### 4 Ranking

**NRCS will take a look at the applications and rank them**

according to local resource concerns, the amount of conservation benefits the work will provide and the needs of applicants.

### 5 Implementing

**If you're selected, you can choose whether to sign the contract for the work to be done.**

Once you sign the contract, you'll be provided standards and specifications for completing the practice or practices, and then you will have a specified amount of time to implement. Once the work is implemented and inspected, you'll be paid the rate of compensation for the work if it meets NRCS standards and specifications.

*USDA is an equal opportunity provider and employer.*

To find out more, go to: [www.nrcs.usda.gov/GetStarted](http://www.nrcs.usda.gov/GetStarted)

# Prepare Your Property for Hurricane Season

DRAFT

By Chris Demers

Hurricane season is June 1 through November 30. As we have learned in recent years, powerful hurricanes can make their way inland and do considerable damage to forest and agricultural lands and enterprises. It's never too early to start planning for a major hurricane that could make a direct hit on your land. There is no way to fully prepare for major devastation in advance, but there are some strategies and steps you can take to prepare you and your land for a major storm and recover more smoothly.

## Connect with Professionals

Don't go it alone. There are resources and services available to help with your land management activities, and these connections can give you a leg up in the event of a hurricane or other natural disaster.

### Work with a Consulting Forester and Get a Forest Inventory

Consulting foresters provide technical assistance in all phases of forest management for a fee. Their services include management plan preparation, forest inventory, timber sales, thinning, tree planting, herbicide and fertilizer application, and prescribed burning. The expertise, guidance, and connections of a consultant can be invaluable in the recovery process after the storm. If you have a lot of value in standing timber, a forest inventory will provide a detailed account of that value, which can be important for documentation for financial assistance after a hurricane or other natural disaster.

### Get Connected to Assistance before the Storm

Don't wait for disaster to strike to contact the people and agencies that can help and provide management and recovery assistance. Get to know your University of Florida IFAS County Extension Agent and Florida Forest Service County Forester. They can provide valuable management assistance and will be knowledgeable about local recovery efforts, workshops, and available assistance after a hurricane.

Also contact your USDA Natural Resources Conservation Service and Farm Service Agency to see what assistance they can offer to help you reach your land management goals. Having your land or farm enrolled in an assistance program will help you get connected to recovery assistance when it is available after a natural disaster.

## Pre-Storm Preparation

**Do some pruning** —Trees, especially those over structures and fences, should be pruned regularly to reduce broken or dead limbs that could cause damage.

## DRAFT

**Fill the tanks** — Tanks containing fuel, herbicides, fertilizer, and other materials should be kept full, or otherwise secured, and to ensure that sufficient fuel is available for machinery used in recovery efforts after the storm.

**Keep ditches clean** — If present, ditches should be kept clean so excess storm water can drain properly.

**Emergency equipment** — Make sure that all emergency equipment; including generators, chain saws, air compressors, and other equipment; is on hand and in good working order.

**Communications equipment** — If you have them, ensure that radios are in good working order. Have hand-held portable radios with extra charged battery packs available for family or hired help after the storm. Direct truck-to-truck radio communication is most reliable when phone lines are down, but cellular phones with radio capabilities and standard cellular phones can help family and workers save valuable time during the recovery process, as opposed to communication systems that require communications to be relayed through a base unit.

**Hazardous materials**—Hazardous materials should be secured prior to a storm, and gasoline pumps, if present, should be shut down.

**Emergency contacts** — Have a list of phone numbers you might need in an emergency, including numbers for phone and internet service, utilities, fire department, police, and medical facilities.

**Take photos** – Take photos of your stands and/or fields before the storm so you can have a record of the condition of these areas before damage occurs. This could help with records needed for insurance claims and/or government assistance programs.

**Time for harvest?** – If in line with your management plan and objectives, consider harvesting mature timber stands to capture the full market value of the products you have. A salvage sale of a storm-damaged stand will only yield 10-15% of the normal market value. See Steps to Marketing Timber, <https://edis.ifas.ufl.edu/fr130>, for important considerations for selling your timber.

## References

Zekri, M., R. Rouse, and J. Crane. 2017. Hurricane Preparedness for Citrus Groves. HS-804. Gainesville: University of Florida Institute of Food and Agricultural Sciences. Available online: <https://edis.ifas.ufl.edu/ch178>

Demers, C. and A. Long. 2019. Selecting a Consulting Forester. SS-FOR-16. Gainesville: University of Florida Institute of Food and Agricultural Sciences. Available online: <https://edis.ifas.ufl.edu/fr125>

# Cogongrass Control

Cogongrass (*Imperata cylindrical*) is a warm-season perennial grass species found throughout tropical and sub-tropical regions of the world. Native to Southeast Asia, cogongrass is an aggressive invasive plant that has spread to all continents except Antarctica and is considered among the worst problematic weeds in the world. In the United States, it is naturalized in Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, and Oregon. It was first accidentally introduced in the United States near Mobile Alabama in 1912 and subsequently intentionally introduced from the Philippines into Mississippi as a forage crop in 1921. Early regional introductions contributed to the establishment of cogongrass in the Southeast. Cogongrass is regulated as a federal noxious weed.

Control of cogongrass is difficult because it spreads in two ways: by extensive rhizome systems and by seeds. Cogongrass rhizomes can comprise more than 60% of the total plant biomass. The rhizomes support rapid re-growth following mowing or burning.

## **Control in Pine Forests**

Chemical control is required. Glyphosate, imazapyr, and combinations of the two herbicides are most effective. Eradication requires multiple applications. In many instances, selective control of cogongrass without damage to desired vegetation is not possible, but where the canopy of shrubs and trees is above that of cogongrass, glyphosate sprays may be directed to cogongrass in the understory with fair selectivity to the taller vegetation. Imazapyr, however, used in the quantities and at the application frequencies necessary to eradicate cogongrass, will kill hardwood trees and shrubs.

## **Control in Hardwood Forests**

To avoid injury to hardwood trees or shrubs in mixed pine-hardwood stands, glyphosate alone is commonly used at 3 to 4 lb ai/acre (3 to 4 quarts per acre for many common 4 lb ai/gallon product formulations), and selectivity is obtained by spraying cogongrass in the understory and avoiding any spray contact near the crowns of trees and shrubs. Imazapyr will kill hardwood trees and shrubs.

**Biology and Control of Cogongrass in Southern Forests:** <https://edis.ifas.ufl.edu/fr411>

**Cogongrass Biology, Ecology, and Management in Florida Grazing Lands:**  
<https://edis.ifas.ufl.edu/WG202>

## Enhancing Habitat for Wildlife

Southern forests have the potential to provide productive wildlife habitat for a variety of species. Landowners interested in promoting wildlife must recognize that each wildlife species requires a specific set of habitat conditions. Animals will frequent your property depending on the condition, type, and variety of food and cover that are present.

Production of timber products and enhancement of wildlife diversity are compatible objectives. However, some tradeoffs may be necessary because strategies that maximize timber growth are typically not exactly the same as strategies that will provide habitat for a wide variety of wildlife species. For this reason, it is important to prioritize your objectives and decide where wildlife ranks relative to timber production in your land use planning.

### **Ten Tips for Increasing Wildlife Biodiversity in Your Pine Plantations:**

<http://edis.ifas.ufl.edu/uw319>

### **Ten Tips for Encouraging the Use of Your Pine Plantations by Game Species:**

<http://edis.ifas.ufl.edu/uw318>

### **The Importance of Bottomland Hardwood Forests for Wildlife:**

<http://edis.ifas.ufl.edu/uw316>

### **Establishing and Maintaining Wildlife Food Sources:**

<http://edis.ifas.ufl.edu/fr062>

### **Making the Most of Your Mast: <https://edis.ifas.ufl.edu/fr036>**

### **Managing Oaks to Produce Food for Wildlife: <http://edis.ifas.ufl.edu/uw293>**

### **Providing Wildlife Cover: <https://edis.ifas.ufl.edu/fr124>**

## Longleaf Pine

Longleaf pine (*Pinus palustris*) has many favorable characteristics for landowners who have long-term, multiple-use resource management objectives. Of all the southern pine species, longleaf pine is the most adapted to fire and has the greatest longevity. When burned regularly, longleaf pine forests develop a stable grass savannah ecosystem, providing ideal habitat for a diverse array of plants and animals.

Longleaf pine is a pioneer species on a variety of sites but is intolerant of competition and flooding during its grass stage, when it appears like a clump of grass. Historically, fire and moisture have been the principal factors controlling longleaf distribution within its natural range. In the lower Coastal Plain longleaf grows on sandy, well-drained to excessively well-drained soils where loblolly or slash pine perform more poorly. **Prescribed fire** is an important part of longleaf pine management. Fire reduces competing vegetation, exposing the bare soil necessary for successful seedling establishment. In the historic fire-dominated longleaf pine grass savannah ecosystem, relatively stable plant communities are characterized by an overstory of uneven-aged, widely spaced longleaf pines and fire-tolerant oaks such as bluejack oak (*Quercus incana*) and turkey oak (*Quercus laevis*) and a predominate ground cover of bunch grasses such as wiregrass (*Aristida stricta*) and bluestems (*Andropogon* spp.) which facilitate ignition and spread of periodic fires (Landers 1991).

**More on Longleaf Pine Regeneration:** <https://edis.ifas.ufl.edu/fr064>

**Opportunities for Uneven-Aged Management in Second Growth Longleaf Pine Stands in Florida:** <https://edis.ifas.ufl.edu/fr132>



## Thinning Southern Pines

Many landowners plant pines with the intention of harvesting them at some point in the future. When pulpwood markets are favorable, a complete stand harvest within 15 to 20 years is possible and may bring an acceptable return. However, longer rotations can bring higher financial returns on larger diameter trees if landowners are willing to begin thinning their pine stands when trees are 10 to 15 years old. Pine sawtimber, poles, and/or plylogs are most often the forest products with the highest value and, if economic returns are a priority, the most desirable products to come out of a timber stand. Thinning is a partial tree harvest in an immature stand to maintain or accelerate diameter growth of the remaining trees. If it is done properly, thinning can bring substantially higher revenues when trees are harvested at 25 to 40 or more years of age. Trees will respond to thinning best if they are thinned before 16 or 17 years of age.

The increased diameter growth after thinning results from the greater availability of light, water, and nutrients to the remaining trees. Ideally, the best and biggest trees should be retained to assure the most rapid increase in timber value. For best results, thinning should favor the tallest, best-formed trees over those that are overtopped, crooked, forked, diseased or otherwise undesirable. Timberland owners who wish to harvest high-value sawtimber-, plylog-, or pole-sized products at the end of the rotation should consider thinning a necessity.

### **For the landowner, thinning can bring**

1. increased return on investment from the sale of higher-value forest products;
2. periodic income from the multiple harvests that lead to those higher-value forest products;
3. improved access for equipment, people, and wildlife;
4. a healthy, vigorous forest with less risk of insect infestation, destructive fire, and wind damage; and
5. enhanced wildlife habitat with increased herbaceous ground cover

**More on thinning:** <http://edis.ifas.ufl.edu/fr159>

**Marking First Thinnings in Pine Plantations: Potential for Increased Economic Returns:** <http://edis.ifas.ufl.edu/fr410>

## Pine Straw

Pine straw has gained popularity as a mulch in residential and commercial landscaping with increased interest in natural landscaping in urban and suburban areas. It is attractive, relatively low-cost, easy to work with, and suitable for various locations, including slopes. It plays an important role in water-efficient landscaping (xeriscaping) as water becomes an increasingly limited resource.

In Florida, pine straw raking has become an important industry, with an output similar to the value of pulpwood. **Longleaf and slash pines are the favored southern pine species** because their long needles bale well. However, loblolly plantations can be raked when demand is not met by the preferred species. Pine straw raking **may begin when stands are as young as seven or eight years old**, when pine straw yield is expected to be between **100 and 150 bales per acre**. **Trees yield the most pine straw at the age of about fifteen years, potentially producing between 200 and 300 bales per acre**, depending on site quality, pine species, and management intensity.

### The Importance of Pine Straw in Pine Stands and Potential Consequences of its Removal

Pine straw is the uppermost layer of forest floor consisting of recently fallen pine needles that have not yet decayed. Pine needles fall year-round with the **peak fall in southern pines occurring late in the growing season and early winter**, two years after the needles are produced. Pine straw used as mulch in landscaping has the same positive effect on plant growth that it has in the forest. The layer of pine needles, fresh and at various stages of decomposition, has many important functions in the forest, affecting its productivity.

- Pine straw plays an important role in **nutrient cycling** - as the needles decompose, the nutrients revert to available forms (available meaning that they can be absorbed by plant roots again) in a process called mineralization.
- After mineralization by soil fungi, bacteria, insects, and earthworms, pine straw contributes **organic matter** to the soil and improves its nutrient- and water-holding capacity.
- Pine straw reduces water loss from the soil surface, and it has great water-holding capacity, two qualities that help **ensure that pine trees have the water they need to grow**.
- Pine straw helps **insulate the soil from temperature extremes** and reduces the rate of moisture and temperature change.
- It **reduces erosion and weed growth**.
- Pine straw **provides habitat and food for many animals** and microorganisms that are important to the forest ecosystem because they contribute to litter decomposition or are a source of food for many wild life species.

### Harvesting Pine Straw for Profit: Questions Landowners Should Ask Themselves:

<https://www.aces.edu/blog/topics/business-opportunities-forestry/harvesting-pine-straw-for-profit-questions-landowners-should-ask-themselves/>

### Guide to Fertilization for Pine Straw Production on Coastal Plain Sites:

<https://edis.ifas.ufl.edu/fr395>

[http://edis.ifas.ufl.edu/TOPICTopic\\_Forest\\_Management\\_and\\_Stewardship](http://edis.ifas.ufl.edu/TOPICTopic_Forest_Management_and_Stewardship)

- [Assessing the Economic Feasibility of Short-Rotation Woody Crops in Florida](#)
- [Assessment and Management of Hurricane Damaged Timberland](#)
- [Beyond the Trees: A Systems Approach to Understanding Forest Health in the Southeastern United States](#)
- [Carbon Stocks on Forest Stewardship Program and Adjacent Lands](#)
- [Cooperation and Communication: Benefits for Non-Industrial Private Forest Landowners](#)
- [Dead Wood: Key to Enhancing Wildlife Diversity in Forests](#)
- [Florida's Forest Stewardship Program: An Opportunity to Manage Your Land for Now and the Future](#)
- [Forest Management in the Interface: Forest Health](#)
- [Forest Management in the Interface: Practicing Visible Stewardship](#)
- [Forest Resource Information on the Internet: Connecting to Today's Online Resources](#)
- [Genetically Improved Pines for Reforesting Florida's Timberlands](#)
- [Improving, Restoring, and Managing Natural Resources on Rural Properties in Florida: Sources of Financial Assistance](#)
- [Improving, Restoring, and Managing Wildlife Habitat in Florida: Sources of Technical Assistance for Rural Landowners](#)
- [Longleaf Pine Regeneration](#)
- [Making the Most of Your Mast](#)
- [Management Practices to Support Increased Biodiversity in Managed Loblolly Pine Plantations](#)
- [Marking First Thinnings in Pine Plantations: Potential for Increased Economic Returns](#)
- [Opportunities for Uneven-Aged Management in Second Growth Longleaf Pine Stands in Florida](#)
- [Ownership Succession: Plan Now for the Future of Your Land](#)
- [Selecting a Consulting Forester](#)
- [Steps to Marketing Timber](#)
- [Stewardship Ecosystem Services Study Series: Assessing Forest Water Yield and Regulation Ecosystem Services in the Lower Suwannee River Watershed, Florida](#)
- [Ten Tips for Encouraging the Use of Your Pine Plantations by Game Species](#)
- [Ten Tips for Increasing Wildlife Biodiversity in Your Pine Plantations](#)
- [Thinning Southern Pines—A Key to Greater Returns](#)
- [Tips for Integrating Land and Wildlife Management: Deer in Forests](#)
- [Tips for Integrating Land and Wildlife Management: Quail and Timber](#)
- [What is in a Natural Resource Management Plan?](#)
- [What to Expect in a Forest Inventory](#)



NOTES

Lined writing area for notes





# THANKS to our SPONSORS for their support of 2019 Florida Forest Stewardship and Tree Farm Program Events

## Sustaining Steward Sponsor

### Sustainable Forestry Initiative



## Longleaf Pine Sponsor

### RFM Farms

Robert and Frances McGranahan

## Magnolia Sponsors

### Forest Environmental Solutions, LLC



Joseph Gocsik  
(352) 206-8776  
[Joe@FESFL.com](mailto:Joe@FESFL.com)



### Florida Tree Farm Program



[www.treefarmssystem.org/florida](http://www.treefarmssystem.org/florida)



Jesse Roberts  
(318) 401-1558  
[Jesse.roberts@rrsi.com](mailto:Jesse.roberts@rrsi.com)



[www.floridafarmbureau.org/](http://www.floridafarmbureau.org/)

## Cypress Sponsors



AMERICAN FOREST  
MANAGEMENT

Alachua, FL: (386) 518-6344  
Marianna, FL: (850) 526-5110  
[americanforestmanagement.com](http://americanforestmanagement.com)



(850) 222-5646  
[FloridaForest.org](http://FloridaForest.org)  
[info@forestfla.org](mailto:info@forestfla.org)

### A.W. Powers Forestry

2800 SE 26th Place  
Trenton, FL 32693  
Office (352) 463-1300