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A Quarterly Newsletter for Florida Landowners and Resource Professionals

UF IFAS UNIVERSITY of FLORIDA









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Saturiwa Conservation Area Conserves Florida History, Wildlife

By Renee Bodine, USDA Natural Resources Conservation Service

You can see it all in Saturiwa Conservation Area, a property teeming with wildlife, including many rare and protected species, and rich in ecological diversity and artifacts illustrating Florida's dramatic history. Mike Adams acquired this 94-acre family homestead on the St. Johns River in southwest St. Johns County in 1989 and named the property Saturiwa after a powerful Indian chief of the now extinct Timucua Tribe. Since then he has worked diligently to restore the former longleaf pine forest, and in the process has become a dedicated conservation advocate to community members, forest owners and schoolchildren.

A biologist by trade, Adams began giving ecological field tours on Saturiwa in the early 1990s to groups such as the local Audubon Society, a local garden club and civic groups. But it was taking his son's fourthgrade science class on a night-time astronomy field trip in 2010 that awakened a passion for teaching about the beauty and benefits of north Florida's diverse ecosystems. Now he routinely conducts tours of Saturiwa throughout the year, sharing his knowledge of its history, science and regional natural and cultural resources to various groups.

A 30-minute trek through Saturiwa begins in a former pine plantation that transitions into natural pine flatwoods, where Adams discovered and protects relic longleaf pine trees for natural regeneration seed stock. He has built brush piles from selective thinning slash and debris to create wildlife concealment habitat, built bird boxes that dot random trees, and a small area remains blackened by a recent prescribed burn he did himself. A state of Florida certified burner, he frequently uses prescribed burns to eliminate invasive plants, reduce the understory, and allow the fire-dependent ecosystem to regenerate. "The native tribes burned it all the time; as did the European settlers," he said.

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Pitcher plants at Saturiwa Conservation Area

Saturiwa Conservation Area Conserves Florida History, Wildlife....continued from previous page

Remnants of the naval stores industry are also preserved on the property. Clay Herty cups, artifacts from 19th century turpentine camps established to collect sap from the longleaf pine trees, are maintained attached to trees. Visitors can see water oaks. longleaf pine, sweet gum and red maple before stepping onto an elevated boardwalk wandering through a hardwood swamp with massive cypress, black gum, hickory and ash. The edge of his property opens onto the St. Johns River, designated an American Heritage River in 2003. The tour concludes on a small dock, where in the summer you can spot manatees near the shoreline at the edge of the lush eel grass beds, American river otters swimming and Osprey diving for fish. In the wintertime bald eagles are nesting and hundreds of migrating ducks and coots can be seen floating in large groups on the river surface. Colonial naturalist William Bartram explored this river and chronicled the resources he encountered in 1774. Pioneer ornithologist, John James Audubon, drew birds he collected in this area in 1831-32.

Mike Joined Florida's Forest Stewardship Program in 1995 and, with that assistance, implemented prescribed fire and other multiple use



USDA NRCS District Conservationist George Johnson assisting Michael Adams at Saturiwa.

management activities on the property. Much of Adams' work has been accomplished through technical and financial assistance from USDA's **Natural Resources Conservation** Service (NRCS). In 2010 he began participating in the Conservation Stewardship Program, which helped him undertake restoration activities such as prescribed burns, forest thinning and creating wildlife habitat. NRCS District Conservationist George Johnson said that Adams conservation practices goes far beyond his property boundaries. "Everyone in this area benefits from what he

does: from developing and restoring wildlife habitat to improving air and water quality, particularly adjacent to the St. Johns River," he said.

Adams' success can be seen as the animals and plants return that make these ecosystems home. The deer, wild turkey and quail populations flourish while many species of woodpeckers and birds of prey fly through the now-open understory. The rare carnivorous pitcher plants cluster in recently prescribed burned areas and gopher tortoise burrows are tucked away into the forest floor.

In 2012 Adams completed a 23-year research project with self-publication of an ecological field and natural history of Saturiwa, which he provides to visitors as part of his community outreach and education.

"It's another world out here," he said. Adams' favorite tour of all is taking third graders out on field tours. "When I tell them that the Osprey has a special eyelid that closes when it dives into the water to snatch up a fish, then carries the fish in its claws like a torpedo to reduce wind resistance while flying, the wonder can be seen in their eyes, I love it!" he said.

Forestry Best Management Practices Lead the Way to Water Quality Protection

By Roy Lima, Florida Forest Service

Protection of water quality and quantity during forestry operations is a very important aspect of natural resource management in Florida.

Toward that end, the Florida Forest Service (FFS) has demonstrated that when silviculture Best Management Practices (BMPs) are implemented, the state's water resources are well protected. In addition, protecting water resources remains a high priority for loggers, foresters, land managers,

and silviculture contractors according to the most recent statewide BMP Survey that showed a 98% implementation rate for BMPs.

Implementation of silviculture BMPs in Florida is primarily done through an education and demonstration format, designed to transfer BMP technology to forest practitioners through workshops and field demonstration. The BMP

implementation program is on-going, with workshops routinely provided upon request, or as deemed necessary based on BMP Survey results. Currently, FFS personnel conduct 15 to 20 workshops and/or demonstrations annually, involving approximately 500 participants.

Key to these workshops is the participation by organizations such

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Forestry Best Management Practices Lead the Way to Water Quality Protection....continued from previous page

as the Florida Forestry Association Master Logger Program. Since its inception, the Master Logger Program has partnered with the Florida Forest Service to provide BMP training for loggers in Florida. Loggers in south Alabama and south Georgia also benefit from such training because of regulatory differences between these states, as well as differences in actual BMPs. Since loggers in this region often cross state boundaries, it has become increasingly important for them to be well versed on Florida BMPs.

Of particular importance are the requirements that are unique to Florida for certain logging related activities. These are referred to as the No-fee Noticed Exemption. This exemption applies when logging operations include such activities as

road construction, stream crossings and ditching, and provides criteria and performance standards for the activities. The Noticed Exemption can be easily acquired without any waiting period. Understanding the process for acquiring and adhering to the Noticed Exemption when working in Florida is an important part of the logger training that is offered through workshops sponsored by the Florida Forest Service.

The partnership between FFS and the Florida Forestry Association continues to offer opportunities for professional loggers to keep abreast of the latest rules and regulations that affect their business. The Florida Forest Service is proud to be a part of this effort and to support the logging profession that is so important to the forestry community in our state.



A Special Management Zone (SMZ) protects water quality during forestry operations. The SMZ (tree canopy) provides water quality protection by maintaining proper water temperature, soil stability to prevent erosion, and ground vegetation to filter pollutants from surface water runoff. Photo by Roy Lima.

The Arbor Day Foundation: A true "Friend" of Florida State Forests

By Doug Ott, Friends of Florida State Forests

Partnerships with individuals and organizations are vital to reforestation efforts on Florida's State Forests. Partner contributions help increase longleaf pine plantings in Florida while restoring our natural ecosystems. The longleaf pine/wiregrass ecosystem once covered more than 90 million acres in the southeastern United States. Fewer than 4 million acres remain today.

The Florida Forest Service is making a concerted effort on state forestland to rebuild Florida's longleaf pine forests. Since 2001, the Florida Forest Service has reforested more than 52,000 acres in longleaf pine. One organization that remains a true friend, and the Florida Forest Service's largest reforestation partner, is the Arbor Day Foundation.

Since 2009, the Arbor Day Foundation has contributed approximately \$610,000 toward purchasing nursery stock. This has aided reforestation efforts on 16 state forests including Belmore, Blackwater River, Cary, Four Creeks, Goethe, Jennings, Lake George, Indian Lake, John M. Bethea, Myakka, Okaloacoochee Slough, Point Washington, Seminole, Tate's Hell, Tiger Bay and Welaka.

Continued on next page

Trying to cut down on paper mail?

The Florida Land Steward newsletter is available online from floridalandsteward.org and the link to the current and back issues is included in each weekly email update. If you would like to discontinue the hard copy delivery of each issue to your mailbox and access the newsletter electronically, contact Chris Demers at (352) 846-2375 or cdemers@ufl.edu to request that. Your mailing status won't be changed unless you request it.

The Arbor Day Foundation: A true "Friend" of Florida State Forests....continued from previous page

The Arbor Day Foundation, established in 1972, is dedicated to planting trees, with more than 1 million members, supporters and valued partners. The Florida Forest Service and Friends of Florida State Forests partner with individuals and organizations like the Arbor Day Foundation to help reestablish longleaf pine in the Southeast by continuing reforestation efforts on state forestland.

The Florida Forest Service recognizes the benefits of replanting longleaf pine and restoring these unique landscapes, and continues this vital effort as part of its ongoing mission. The Florida Forest Service will continue to protect and manage the forest resources through a stewardship ethic to assure they are available for future generations.

Help us plant more trees! I would be glad to meet you or schedule a time to call you or your organization to join these reforestation efforts in a



Since 2009, the Arbor Day Foundation has contributed approximately \$610,000 toward purchasing nursery stock for tree planting projects on Florida's State Forests. Photo courtesy of Florida Forest Service.

state forest near you, or if you want to contribute to other needs. You may email me at Doug.Ott@ FreshFromFlorida.com or visit www.FloridaStateForests.org. With your help, we can make the forests better for everyone!

The Friends of Florida State Forests is a direct-support organization of the Florida Forest Service dedicated

to ensuring Florida's state forests are available for future generations to enjoy. Make a difference by joining today to help protect Florida's forests. Membership dues go to the forests for conservation and improvement projects, and contributions can be matched to a specific state forest of your choice.

Plants Behaving Badly: Torpedograss

By Alicia Campanella

Torpedograss, *Panicum repens*, is a perennial grass native to Asia and Africa. It grows naturally in tropical and subtropical ecosystems, making Florida's vast system of marshes and waterways ideal habitats. As with other plants that have become a problem, it was introduced in the early 1900's with hopes that it would be useful as a livestock forage.

Demonstrating its extreme invasive behavior, it had already invaded over 70% of public waters in the state of Florida by the mid 1990's. The most striking example of this is evident at Lake Okeechobee where 7,000-acre monocultures of the plant choke up the waterway, restricting the ability of other plants and wildlife to thrive.

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Torpedograss (Panicum repens), photo by Ann Murray

Plants Behaving Badly: Torpedograss....continued from previous page



Torpedograss flower, photo by Ann Murray

Additionally, the obstruction of water flow in rivers, lakes, and canals further complicates major difficulties in a state that is already suffering from serious water management issues.

An Exotic Takes Off!

Torpedograss is so named because its rhizome, or root, is a hard, pointed, torpedo-shaped spike which pushes its way through the soil and allows it to spread quickly. Because it does not grow well from seed in Florida, rhizome growth is its primary means of expansion. It can reach a depth of over a foot easily. In fact, this rhizome grows over a centimeter per day! The grass can reach a height of over three feet, and the upper margin of the blade is covered with characteristic fine, white hair like structures. Its flowers are tiny, pale, and yellow in

color and grow on stalk-like appendages at the top of the plant, flowering almost year round. It forms dense mats and effectively crowds out other species. It can endure long periods of drought or flooding- an adaptation that, like most invasive species, renders it highly opportunistic and enables it to survive and proliferate in a variety of conditions. Its main limiting factor is low temperatures, which confines it to the southern states. Control and mitigation is an expensive undertaking, costing millions of dollars per year in Florida alone.

Treatment and Prevention

Prevention is our first line of defense. In order to prevent an infestation, be sure to clean any equipment used in soil tilling or plant management. Plows, mowers, or any other form

of mechanical management can all carry root fragments and begin or extend an existing infestation. While mechanical treatments are partially effective, these treatments often carry with them the risk of spreading the rhizome. As is the case with most exotics, disturbed sites (sites which have been cleared or burned) are most vulnerable. Early treatment of the plant when it is found is the best strategy, and multiple treatments are often needed. While biological controls are being researched, currently chemical control is the most effective. As always, take care not to allow herbicides to come into contact with other plant species as many of these chemicals have the ability to destroy non-target species. Glyphosate-based herbicides can be used in a solution up to 3% in strength while imazapyr can be used in a solution of up to 1% in strength with a non-ionic surfactant up to 10mL per gallon of prepared solution. Always wear personal protective equipment when handling herbicides and follow all product label instructions.

For more information about this plant, other invasive exotic species, funding, and regional efforts to prevent and control infestations see the Florida Invasive Species Partnership web site at http://www.floridainvasives.org/

Get Email Updates!

Don't miss out on upcoming events and news! Send an email to cdemers@ufl.edu to be added to the Stewardship listserv. Updates are sent every week or two.

TIMBER PRICE UPDATE

The timber pricing information below is useful for observing trends over time, but does not reflect current conditions at a particular location. Landowners considering a timber sale are advised to solicit the services of a consulting forester to obtain current local market conditions.

Average stumpage prices for the three major products in Florida, as reported in the $\mathbf{1}^{\text{st}}$ Quarter 2015 Timber Mart-South report were:

Florida Stumpage Prices

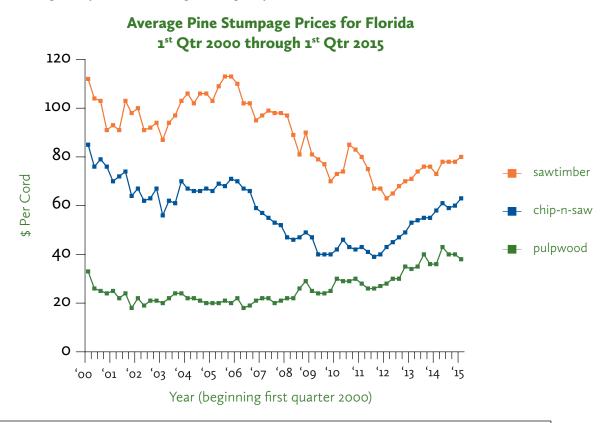
Pine pulpwood: \$38/cord (\$14/ton), ↓ from as 4th Qtr 2014

Pine C-N-S: \$63/cord (\$23/ton), ↑

Pine sawtimber: \$80/cord (\$30/ton), ↑

Trend Report

Average pine sawtimber and chip-n-saw stumpage prices continue their slow but steady rise in Florida, but they are still short of where they were 10 years ago. Pine pulpwood prices, on average, continue to be competitive. U.S. manufacturing, building construction and employment grew in the 1st quarter 2015 as economic recovery continues. With demand steady or on the increase, some expansion has been reported in both the wood products and pulp and paper sectors. A noteworthy change in the southern wood industry has been increased investment by Canadian-based companies. By the end of 2014, three Canadian companies were running 34 southern mills, producing nearly 30% of this region's capacity.



Timber Mart-South is compiled and produced at the Center for Forest Business, Warnell School of Forest Resources, University of Georgia, under contract with the Frank W. Norris Foundation, a non-profit corporation serving the forest products industry. See http://www.tmart-south.com/ for information on subscriptions.

CONGRATULATIONS

CERTIFIED FOREST STEWARDS AND TREE FARMERS

For more information about becoming a Certified Forest Steward or Tree Farmer, contact your Florida Forest Service County Forester, consultant or learn about it at:

http://www. freshfromflorida.com/ Divisions-Offices/ Florida-Forest-Service/ For-Landowners/ Programs/

or

http://www. floridaforest.org These landowners have a current Forest Stewardship and/or Tree Farm management plan for their property and have demonstrated excellent stewardship of their land resources.



Alex Madyda (R) with Jay Tucker, Union County



Garry Walker, Polk County



Kenneth Madyda (R) with Jay Tucker, Union County



Joseph Black, Polk County



George McGovern, Hillsborough County



Linda Basford (L) with Jay Tucker, Union County



Butch Harden (R) with Ariel Sewell, Washington County



Joe Collins, Washington County



Maurice and Judy Langston, Liberty County



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Upcoming Stewardship, Small Farm and Other Events	
Date	Event, Location, Contact
May 13-14	43 rd Annual Spring Symposium: Innovations in Timber Harvesting and Utilization. UF Austin Cary Forest Learning Center, Gainesville, FL. Presented by the UF/IFAS School of Forest Resources and Conservation, Society of American Foresters, Association of Consulting Foresters, and Southern Regional Council on Forest Engineering. Separate registration may be made for a tour of the Gainesville Renewable Energy Center. To register and for details: https://eventbrite.com/event/15880282352/
May 14	Forest Stewardship Tour at Spencer Family Property, Santa Rosa County, FL. 9 am to 2 pm CT. \$10 fee, lunch included. Join us to learn about pine timber management and wildlife habitat improvements for species such as bobwhite quail and white-tailed deer; Best Management Practices, available assistance and more. <i>Register at https://fsp-tour051415.eventbrite.com/ or contact UF/IFAS Extension Santa Rosa County at (850) 623-3868.</i>
June 2	Longleaf Pine Forest Restoration and Management Workshop, St. Marks Wildlife Refuge Visitor and Environmental Education Center. Provided by Apalachicola Regional Stewardship Alliance and Florida Forest Stewardship Program with support from the National Fish and Wildlife Foundation. \$5 fee. <i>Contact UF/IFAS Extension Wakulla County at (850) 926-3931 to register.</i>
June 6	FAMU Spring Agri-Showcase, FAMU Farm in Quincy, FL. Provided by FAMU Cooperative Extension Program. For information contact Angela Jakes, (850) 875-8552.
June 16-18	Conference on Laurel Wilt Disease and Natural Ecosystems: Impacts, Mitigation and the Future, Coral Springs Marriott, 11775 Heron Bay Blvd. Coral Springs, FL. Foresters, SAF CFEs pending approval. Contact Dr. Jason A. Smith, (352) 846-0843, jasons@ufl.edu

For many more events and information see: floridalandsteward.org

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