FLORIDA LAND STEWARD

A Quarterly Newsletter for Florida Landowners and Resource Professionals **WINTER/SPRING 2014 – VOLUME 3, NO. 1**

IN THIS ISSUE

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Dedication to Courtney Tye

It is with great sadness and heavy hearts that we report the passing of Mrs. Courtney Tye over the weekend of February 1, due to complications during childbirth. Courtney started with the Florida Fish and Wildlife Conservation Commission (FWC) in 2006, where she served as a laboratory/field assistant. She then joined the Office of Conservation Planning Services, Landowner Assistance Program for the North Central Region, and then promoted up to, and had currently served as a Biological Scientist III. Her professional knowledge, contagious enthusiasm, and genuine love for all things outdoors inspired everyone who knew her and positively influenced wildlife habitat management and conservation efforts on thousands of acres, both public and private, statewide.

While working full time with FWC, Courtney also was completing her graduate work as a student at the University of Florida's Department of Wildlife Ecology and Conservation. Her research focused on the Sherman's and Big Cypress fox squirrel distributions and habitat preferences in Florida. Her research has been used to help fill data gaps documented in Biological Status Reviews; contributed to fox squirrel Imperiled Species Management Plans; and greatly increased our knowledge of all 3 fox squirrel subspecies occurring in Florida. She developed FWC's online fox squirrel database in support of those efforts and was maintaining the database as she neared graduation this spring. Courtney was the lead author on the feature article on biomass harvesting in this issue.

We dedicate this issue of the Florida Land Steward to Courtney for her devoted and enthusiastic service to Florida and its natural resources. Our thoughts and prayers go out to her husband, Mr. Barry Tye, their newborn son, Carter Wayne, their families, and many friends, during this difficult time.

Courtney Tye with a rare indigo snake. Photo by FWC

Biomass Harvesting as a Restoration Tool

By Courtney Tye, Dave Conser, and Joe Vaughn

Many land managers struggle with a lack of funding for their restoration efforts. Restoring a landscape to its natural/historic condition is a daunting and expensive task and the economic return can be minimal, or far off in the future. These facts have stalled many private and public efforts at restoration. With the introduction of biomass harvesting in North Central Florida, conservationists in this region now have a new tool in the struggle to restore Florida's imperiled ecosystems.

What is Biomass?

Upland communities which have long been deprived of the natural management provided by frequent fire, present the ideal scenario for using biomass harvesting as a restoration tool. Biomass harvesting removes low quality woody material from a forested site, eventually to be used for energy production. Currently, the Gainesville Renewable Energy Center is receiving wood chips at the power plant in Gainesville for electricity production. In regard to forested sites, they are purchasing chips from eight biomass harvesters in an approximate 70 mile radius from the power plant in north Gainesville. Typically, poor quality hardwood or pine is harvested by feller bunchers, skidded to a ramp, and chipped on site into semi trucks.

Trees harvested for biomass are not suited for traditional forest products such as pulpwood, chip-n-saw or sawtimber. The price paid to landowners for this material is much lower than for traditional forest products. Indeed, more often than not, the harvesters are getting the material for free. At this time, biomass harvesters are concentrating on tracts with at least 40 to 50 loads. In most cases this represents a minimum of at least 30 to 40 acres of fairly dense woody material, or a higher minimum acreage if the trees are more sparsely distributed.

Forest Stand before (L) and after (R). Photos by Courtney Tye.

Leave Some Hardwoods

Hardwoods play an important role in Florida's fire dependent upland communities, especially for wildlife such as fox squirrel and deer as a source of food and cover. When land has been left unmanaged, however, hardwoods often become so dense that they crowd out the grasses and flowers that native wildlife are dependent on, resulting in a forest that is out-of-balance. Therefore the first issue to deal with when restoring upland pine habitat is to reduce the density of hardwoods, which is where biomass harvesting comes in. When planning the biomass harvest, select several mature (mast producing) hardwoods per acre to remain unharvested. Your local Florida Forest Service county forester or Fish and Wildlife Conservation Commission private lands biologist can provide assistance with the planning and selection of hardwood trees to leave.

Photo by Courtney Tye

After the Harvest

Following a biomass harvest, the landscape may have a barren appearance not visually appealing to most people, but not to worry, Florida vegetation recovers quickly. While the biomass harvest results in a clean landscape for establishing longleaf pine seedlings, it's important to take the necessary steps to control the resprouting hardwoods that will eventually dominate the landscape. Apply some combination of mechanical, burning and herbicide treatments appropriate for your site.

Big Savings

While a biomass harvest may not result in significant revenue to the landowner, it can greatly reduce the site preparation costs associated with reestablishing longleaf pine. Also, landowners that are certified Forest Stewardship landowners can receive a $0.50/ton incentive directly from the biomass plant. To receive this incentive, contact Brian Condon or Ryan Sims at the Gainesville Renewable Energy Center (386) 315-8025 or (386) 315-8023 to complete the necessary paperwork prior to initiating the biomass harvest.

Bob Lusnia, of Big Dog Ranch, had this to say about the biomass harvest on his 120 acre restoration project, south of "beautiful Archer, Florida", "If I had to pay to get all that clearing done, it would have been a $100,000.

Continued on next page

I'm excited to see some pine trees growing."

To initiate a biomass harvest, contact Brian Condon (contact info above) for a list of vendors with the necessary equipment.

About the authors:

Courtney Tye, Former Landowner Assistance Biologist, Florida Fish and Wildlife Conservation Commission (FWC); Dave Conser, Senior Forester, Florida Forest Service; Joe Vaughn, Landowner Assistance Biologist, FWC

Plants Behaving Badly: Air Potato Vine

By Alicia Campanella

One of the most invasive and damaging exotic plant species in Florida continues to choke out native vegetation, with growth habits that make it one of the most tenacious and problematic of all the exotic plants we battle today. *Dioscorea bulbifera*, more commonly known as air potato, is native to Asia and Africa, where several varieties of this plant exist, some of them cultivated and farmed as a food crop.

Perhaps this is what the USDA had in mind when they shipped specimens of air potato to horticulturist Henry Nehrling of Naples, Florida, in 1905. Earlier sightings of this troublesome vine were noted in Mobile, Alabama in 1777, and are thought to be remnants of the slave trade.

Air potato never made it as a food crop, as the variety found growing in Florida is known to be toxic to humans. However, historically it was used in traditional herbal medicine to treat dysentery and other maladies affecting the stomach. It also contains a steroid-like substance called diosgenin, which is used in the production of synthetic hormones, such as those in birth control pills. Despite this, the plant is now deemed to have no real commercial value, and thousands of dollars every year are spent in an attempt to reduce its growth and spread.

Identifying the Culprit

Air potato is a distinctive looking vine. It produces large, heart shaped leaves, with veins that run parallel to the leaf margins. It is said that these leaves effectively serve the plant as solar panels, because air potato can grow a startling eight inches per day, and can measure in excess of 150 feet tall! It grows in thick, heavy mats, and effortlessly out-competes native plants by robbing them of sunlight, soil nutrients, and water. It produces tiny white flowers but these are seldom visible. And, contributing to its invasiveness, its "potatoes," (called bulbils) are capable of sprouting many roots, even in the smallest of specimens.

Air Potato vine. Photo by Ann Murray.

Air Potato bulbil. Photo by Vic Ramey.

The life cycle of the air potato starts in the spring. Bulbils which fell from plants during the previous growing season begin to send out stems. These stems grow upwards, wrapping around nearby plants and trees, producing enormous vines. The vines produce more bulbils, which store energy for the next growing season. The bulbils appear in early to midsummer and grow until the stems die back in winter. The potatoes then fall to the ground and sprout again the following spring.

Control with Herbicides

Various means of control can be implemented to address an air potato infestation. Careful collection and removal of bulbils is paramount, as they are the primary method by which the vine proliferates. Herbicide can also be effective, especially if used during the growing season, in spring and summer. In order to minimize damage to non-target plants, it is recommended that the vines be cut and pulled down before treatment. The base of the plant at ground level can then be treated, which will result in the herbicide being carried down into the underground tuber and root system. The site usually requires retreatment during subsequent growing seasons to ensure complete removal. The recommended

Continued on next page

Plants Behaving Badly: Air Potato Vine....continued from previous page

herbicide is a solution of water with 2% triclopyr, and .25% non-ionic surfactant, sprayed directly on the leaves. Always wear personal protective equipment and follow all manufacturers' safety instructions when using herbicides.

Biological Control

Lilioceris cheni, otherwise known as the air potato beetle, was introduced in 2012 in Florida. The US Department of Agriculture has teamed up with the state of Florida, and 30,000 of these insects have been released in over 16 counties. This beetle aggressively feeds on the leaves and bulbils of the air potato vine, and may dramatically decrease its growth. A female beetle can produce up to 1,200 eggs during its lifespan! As with most biological controls, many different factors determine the success of the program, but current studies indicate promising results.

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/

Air Potato beetle. Photo by Jim Damaskse.

Thanks 2014 Florida Forest Stewardship Program Sponsors

Each year forestry and natural resource related organizations and businesses provide support for Florida's Forest Stewardship Program events offered across the state each year.

We thank these organizations and businesses for their support of the 2014 Forest Stewardship Program:

Blanton's Longleaf Container Nursery
F&W Forestry Services
Farm Credit Associations of Florida
Florida Farm Bureau
Florida Forestry Association
Forest Environmental Solutions
Forestland Management
Green Circle Bio Energy
International Forest Company
McGowan Forestry
National Wild Turkey Federation
Southern Forestry Consultants

If your organization or business would like to support the Forest Stewardship Program contact Chris Demers, cdemers@ufl.edu, (352) 846-2375.

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.

Celebrating 100 Years of the Cooperative Extension Service

100th Anniversary of FLORIDA EXTENSION

A CENTURY OF SERVING FLORIDA

Photos by UF/IFAS.

In 2014, UF/IFAS Extension celebrates the 100th anniversary of the Smith-Lever Act, which established the Cooperative Extension Service, a state-by-state national network of educators who extend university-based knowledge to the people. In Florida, Extension allows us all to benefit from the research and education of our land-grant universities, the University of Florida and Florida A&M University.

UF/IFAS Extension has improved the lives of Floridians in many ways. For those reading this newsletter, UF/IFAS Extension has likely helped you in managing your land resources such as timber, wildlife, livestock and row crops. If you've learned about conserving water, saving money, or gardening, chances are you learned it from Extension. If you've ever been to a 4-H camp or gotten help from a Master Gardener or Master Naturalist, you know Extension.

We, the Extension faculty and staff in the UF/IFAS in the School of Forest Resources and Conservation and Department of Wildlife Ecology and Conservation, are proud of our accomplishments on this 100th anniversary, and we look continuously toward the future, finding solutions to the challenges we Floridians will face over the next 100 years and sharing them to make life healthier, happier, and more prosperous for you.

Photo by UF/IFAS.

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.

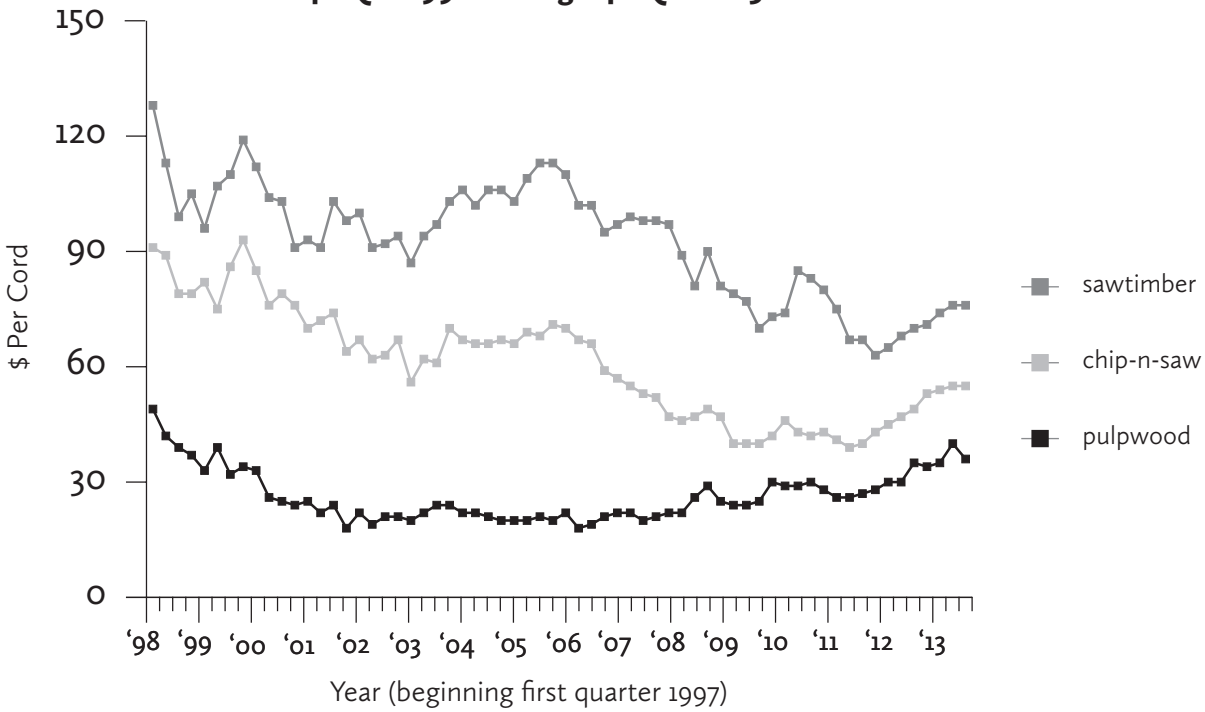
Average stumpage prices for the three major products in Florida, as reported in the **4th Quarter 2013** Timber Mart-South report were:

Florida Stumpage Prices
Pine pulpwood: $36/cord ($13/ton), ↓ from 3rd Qtr 2013
Pine C-N-S: $55/cord ($20/ton), ~ same
Pine sawtimber: $76/cord ($28/ton), ~ same

Trend Report

South-wide average stumpage prices for all products increased in the 4th quarter of 2013. Wet weather likely played a role in this as access to some stands was limited. Price changes for specific products were mixed across the region. Economic indicators such as construction and manufacturing have been moderately strong. Manufacturers reported production of softwood lumber and OSB panels increased compared to 2012 but pulpwood production remained about the same. The major news at the start of 2014 is paper manufacturers have reduced freesheet paper capacity by about 1 million tons.

Average Pine Stumpage Prices for Florida
4th Qtr 1998 through 4th Qtr 2013



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/Forest-Stewardship-Program

or

http://www.floridaforest.org/tree_farm.php

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.

Bill Arnold (R) with Greg Marshall, Levy County

Hunter Brant (L) with Andy Lamborn, Baker County

David Richardson, Baker County

Donald Kelter, Walton County

Bill Pattison, Madison County

Doyle and Jan Peel, Washington County

Glen Suber, Gadsden County


Alto Smith Family, Walton County

Carl Green with Cathy Hardin, Gadsden County

Dale and Melinda Williams, Madison County

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Upcoming Stewardship, Small Farm and Other Events

Date	Event, Location, Contact
Feb 24–Mar 18	**2014 UF/IFAS Basic Beekeeping School,** FL Pandhandle, Classes will be offered via interactive video conferencing at UF/IFAS Extension Offices across the Panhandle. The cost for all five classes is $25 per person or $40 for a family, *See link for details: http://nwdistrict.ifas.ufl.edu/phag/2014/01/11/2014-ufifas-basic-beekeeping-school/*
Feb 28	**Forest Stewardship Workshop: Longleaf Pine Forest Restoration & Management in the Santa Fe River Springshed**, 8:30 am – 3:00 pm, O'Leno State Park, 410 S.E. O'Leno Park Road, High Springs, FL 32643. Free, lunch included. *Details and registration at http://fsp-workshop022814.eventbrite.com/ or contact Chris Demers, cdemers@ufl.edu, (352) 846-2375.*
Mar 13	**Forest Stewardship Tour at Rocky Creek Timber,** property of Jim and Mary Helmers, Levy County. *Details and registration online: http://fsp-tour031314.eventbrite.com/ or contact Chris Demers, cdemers@ufl.edu, (352) 846-2375*
Mar 15	**Wildlife Food Plot & Forages Field Day**, 10 am – 2 pm, CGQ Ranch. 44003 Artesian Blvd, Callahan, FL 32011-4131. Presented by UF/IFAS Extension Nassau County. Foresters, approved for 3 SAF Cat 1 CFEs. Fee is $15 a person to cover cost of materials. Lunch will be provided by Callahan BBQ and sponsored by Lake Butler Farm Center. *Call to Register by March 12: Amanda Burnett, (904) 879-1019, mandab@ufl.edu*
Mar 17–18 or Mar 21–22	**Starting a Successful Hyrdoponic Business Short Course,** UF/IFAS Suwannee Valley Agricultural Extension Center, Live Oak, FL. $295 registration by Feb. 28. *More details and registration at http://smallfarmsacademy.eventbrite.com. For more info, call Sarah White or Karen Hancock at (386) 362-1725.*
Mar 24	**2014 Winter Forage Food Plot Field Day,** starts at 5:30 pm, Bradford High School FFA Farm, Starke, FL. *Contact the Bradford County Office at (904) 966-6224 to register. Registration deadline is March 21, 2014.*
May 5–8	**2014 Aquatic Weed Short Course** to be held May 5-8, 2014 at the Ft. Lauderdale Coral Springs Marriott Coral Springs, FL. Earn 20+ Florida Pesticide Applicator CEUs. Register by February 28th and save $50! Early Rate: $240. *Details and registration at http://conference.ifas.ufl.edu/aw/*
May 7–9	**Florida Beef Cattle Short Course: "Manage Your Enterprise, Manage Your Herd",** Alto and Patricia Straughn UF/IFAS Extension Professional Development Center, Gainesville, FL. *Details at: http://conference.ifas.ufl.edu/beef/index.htm.*

For many more events and information see: floridalandsteward.org

The Florida Land Steward Newsletter is a University of Florida/IFAS Extension Service, Florida Forest Service, Florida Fish & Wildlife Conservation Commission, USDA Natural Resources Conservation Service and Florida Tree Farm joint project:

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