# FLORIDA LAND STEWARD

A Quarterly Newsletter for Florida Landowners and Resource Professionals

SUMMER/FALL 2014 - VOLUME 3, NO. 3

# FLORIDA FILORIDA STEWARD

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## Discover "The Cover": Protecting the Soil with Cover Crops

By Renee Bodine, USDA Natural Resources Conservation Service

In April 2014 landowners, UF/IFAS Extension agents, USDA NRCS conservationists and others had to opportunity to get hands-on experience with cover crops. They visited two Jefferson County farms where cover crop technology is being put to work.

#### Kirk Brock Farm

Mr. Kirk Brock has been using cover crop systems for over ten years. He farms 1,000 acres but most are small acreages, some as small as 10 acres. His crop rotation includes corn, soybeans, peanuts, and occasionally cotton. He had soil pits dug for the group to examine roots at least four feet deep in the soil profile. Soil sampling is a two phase process starting at the surface to 3 inches and then from 3 inches to 8 inches in the soil profile.



Kirk Brock

The primary goal for starting the use of cover crops was to stop the soil from ending up in the creek. He has since learned that he has much better soil water retention along with reducing erosion to near zero.

Kirk has read a great deal and has become proficient at trying to figure out how things work. He has monitored soil temperature within and in areas where there was bare soil. The bare soil temperature was well over 100 degrees F while the cover crop ground was a cool 85 degrees. He said that this was important because plant growth and microbial growth slow above 95 degrees. The foundation of the cover crop are two varieties of rye grain, Wrens Abruzzi that is planted from mid-October into fall and Florida 401 (Florida Black Rye) that is planted no earlier than December 1 due to the aggressive growth of this variety. The rve is planted at 45 pounds/acre with 30 pounds of Nitrogen per acre pre-plant, and another 30 pounds Nitrogren per acre is applied after planting. Ammonium sulfate or ammonium nitrate are used for the nitrogen source to avoid the volatility problems with urea based fertilizers. Applied nutrients are broadcast due to very little runoff and excellent water infiltration.

The biomass yield goal is between 9 and 10 tons/acre. He does not want to see the ground through the rolled

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Discover "The Cover": Protecting the Soil with Cover Crops....continued from previous page

down biomass after it dries. Other varieties of cover crops that are being evaluated are Bitter Blue Lupine, Tillage Radishes, and Sun Hemp.

#### **Fulford Farms**

The second location was at the fourth generation Fulford farms, where cover crops have been used for several years. This farm has experienced some failures with cover crops as does anyone learning something new, but they would not return to conventional farming now that they see what cover crops can do.

The cover crop is terminated prior to planting with a roller-chopper combined with an herbicide spray boom. The results of using cover crops on both farms are reduced erosion, increased water infiltration, decreased



Fulford Family Farm

soil temperature, reduced risk of crop failure, reduced weed competition, and nutrient retention in the field due to uptake by the cover crop.

The cover crop is normally terminated prior to planting. The rolling process is important so that the

material is oriented in the same direction that the crop will be planted to limit material from building up on the planting machinery. Modifications of equipment have to be employed to get the proper seeding depth and for planting in the cover crop.

Overall this was a good learning experience and it was agreed that we have a long way to go to understand and facilitate the maximum potential of cover crops. For more information about cover crops see http://edis.ifas.ufl.edu/topic\_cover\_crops where you can find some publications on this topic.

#### **A Biomass Harvesting Case Study**

By Jon Gould, Florida Tree Farmer

A recent edition of this newsletter included an article entitled "Biomass Harvesting as a Restoration Tool". The article discussed how biomass harvesting can help landowners restore forestland that is overgrown with thick low quality woody vegetation. This forestland is usually cutover land that has reforested naturally and contains few merchantable pines and hardwoods, or forestland that was planted with pines without adequate site preparation or followup control of competing vegetation. The result is land that has very little timber or wildlife value. Even if there are enough merchantable pines and hardwoods to harvest for sale, the stumpage prices paid to the landowner will be very low because of the low density and difficulty of harvesting the trees. Such a harvest

would also leave the remaining thick growth of vegetation and harvest debris.

Trying to reduce the vegetation with prescribed fire is also a real challenge because there is usually not enough fuel on the ground to carry a fire during winter burns and the wind and humidity have to be just right for a good burn. Spring and summer burns can be risky because of the potential for fire getting in the higher vegetation and causing a raging wildfire. Alternative measures of vegetation reduction, such as mechanical (shearing, mulching, etc.) or treatment with herbicides, are usually cost prohibitive.

In 2001 my wife and I purchased a 290 acre tract of forestland in

Washington County, Florida that had been owned by a family since the 1930s when it was part of a 2,000 acre purchase from a lumber company. At the time of their purchase most of the mature natural timber had been harvested. For several decades the new owners raised cattle on the land and burned much of it every year. During the soybean boom of the 1970s they cleared large areas and planted them in soybeans. Soon afterwards the soybean market collapsed and the owners nearly went bankrupt. They planted most of the idle soybean fields with slash and loblolly pine seedlings and eventually sold much of their land. The remaining planted pine fields were thinned several years later. At that time most of the mature pines and marketable hardwoods in the natural mixed pine

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A Biomass Harvesting Case Study....continued from previous page

and hardwood stands were also harvested. By 2001 these stands were heavily vegetated with a thick growth of immature hardwoods, underbrush, and scattered mature hardwoods and pines. A large percentage of the hardwoods were live oaks, and the pines were mostly longleaf with some loblolly.

Soon after our land purchase we developed a forest management plan that included future plans for the planted pine stands and most of the natural stands. However, what to do with the thick natural stands was a big question. Prescribed fire or mechanical or herbicide site preparation of these stands was not feasible. In early 2011 a forester familiar with our forestland mentioned that he knew of a logging and site preparation contractor that had expanded his business to include biomass harvesting. I contacted the contractor and he seemed interested, so we scheduled a meeting at our land. After looking at the 50 acres of thick natural stands, he agreed to harvest all of the standing hardwood trees, underbrush, and non-merchantable pine trees. In addition to leaving the merchantable pines, he agreed to leave two to four large acorn bearing hardwood trees per acre for the wildlife. A large percentage of the remaining hardwood trees were live oaks, which are great acorn producers. The agreed upon arrangement was that there would be no income or cost to us for clearing this acreage. The contractor's payment was the biomass that he would harvest, chip on site, and haul to the pellet plant, about 40 miles away, for sale.

It took about a year for the contractor to mobilize to our land for various reasons, but when he did mobilize the work progressed rapidly. His equipment included a feller-buncher, two log skidders, a trackhoe, a large state-of-the-art chipper that could produce small chips for use by the pellet plant, and three tractor-trailer chip hauling trucks. Even though most of the 50 acres was high and dry, well drained sandy soils, we started getting heavy rains every couple of days soon after the contractor mobilized. The haul road to the third stand became impassable for the 18 wheeler chip trucks, so no clearing and chipping was accomplished on that stand. The two stands that were harvested total 38 acres.

With timber prices finally improving, we decided to sell 22 acres of 25 year old planted slash pines (previously over-thinned by the original owner) adjacent to the two stands we had cleared and chipped a few weeks earlier. This worked out well in that it gave us the opportunity to also harvest all of the scattered pines that were left after the biomass harvest and prior to site preparation of the stands.

The cleared stands, except for the scattered hardwood trees, have ideal soil and moisture conditions for long-leaf pines, so we decided to reforest them with container longleaf seed-lings planted at 500 trees per acre. Our consulting foresters handled the reforestation for us, including selecting the various subcontractors and scheduling and overseeing their work.

In late July 2013 a site preparation ground application of herbicide was sprayed with skidder mounted sprayers. Our foresters spray painted boundaries on the vegetation around the drip line of the remaining oak trees to define the limits of herbicide treatment and planting. Then in late November our foresters burned the stands. Late in January 2014 the stands were hand planted.

Finally, after owning this property for over 12 years, biomass harvesting has allowed us to put 38 acres of unproductive overgrown land into eventual income producing reforested stands that are also much better for the wildlife and aesthetically pleasing. Already we have seen gopher tortoise borrows increasing in these open areas where sunlight will now allow the growth of natural grasses and other ground cover that the tortoises depend on. Also, land that was originally covered with natural longleaf pines has now been reforested with longleaf seedlings. We were also able to get substantial financial assistance through the USDA Natural Resources Conservation Service's Environmental Quality Incentives Program (EQIP) for the cost of reforesting the stands with longleaf pines.

## **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.

#### Florida Panthers and Private Land Partners

By Dr. Jennifer Korn, Florida Fish and Wildlife Conservation Commission

The current population estimate for endangered Florida panthers (Puma concolor coryi) in Florida is between 100-160 individuals. This is an increase from the precarious low of 30 individuals estimated in the early 1990s. While this is a success story, all current evidence indicates that breeding only occurs south of the Caloosahatchee River in areas such as Big Cypress National Preserve, Fakahatchee Strand Preserve State Park. Florida Panther National Wildlife Refuge, Okaloacoochee Slough State Forest and many privately-owned lands. Female panthers have not been confirmed north of the Caloosahatchee River since the early 1970s, when one individual was treed by biologists on private property near Lakeport in Glades County.

Historically, the Florida panther ranged across 8 southeastern states (Florida, Georgia, Alabama, Mississippi, Louisiana, South Carolina, Tennessee and Arkansas). Though they have been primarily restricted to southern Florida since the 1970s, males do disperse north of the Caloosahatchee River, occasionally reaching as far as Jacksonville (road kill identified in 2005) and southern Georgia (shot by hunter in 2008). Long-term research and monitoring of the Florida panther has mainly focused on the breeding population in South Florida, where ~70% of potential panther habitat occurs on public lands.

Monitoring the presence and absence of panthers north of the Caloosahatchee River has been a challenge because potential panther habitat in this area is  $\sim\!60\%$  privately owned, more fragmented, and has a high density of roads. Dr. Jennifer Korn, Florida Panther Specialist in the Landowner Assistance Program of

the Florida Fish and Wildlife Conservation Commission (FWC), works with landowners north of the Caloosahatchee River with a focus on panthers. Dr. Korn conducts public outreach, works with private landowners to develop new incentive programs, and monitors the presence of panthers in the expansion area north of the Caloosahatchee River through remote cameras.



Setting a remote camera on a private property adjacent to the Caloosahatchee River.

Since January 2014, 15 remote cameras have been placed on public and private lands in Glades, Highlands, Charlotte, Sarasota, and Polk counties, with future sites planned in additional counties. Remote cameras are a valuable non-invasive tool for monitoring the presence of panthers, especially in areas outside of the known breeding population. Information from the cameras will help FWC biologists better assess panther numbers, identify areas of use, and hopefully verify the presence of females and if breeding (i.e. kittens) occurs north of the Caloosahatchee River. Additionally, conducting the camera survey on both public and private lands builds strong relationships between agencies and private landowners.



A male panther walks by a remote camera on Platt Branch WEA, Highlands County.

If you have or think you have Florida panther on your property and would like to confirm their presence through photographic monitoring, please contact Jennifer Korn at (813) 417-6165 or jennifer.korn@myfwc. com. Target areas are Glades, Highlands, Desoto, Hardee, Charlotte, Sarasota, Manatee, Polk, Osceola and Okeechobee counties. Other locations may be considered. Your own panther sightings (photos, tracks, etc.) may also be uploaded to http://www.myfwc.com/panthersightings



100% of panther monitoring and research is funded by the panther license plate. We thank you for your support!

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#### Mr. Ralph Ward: Exemplary Forest Steward and Patriot

By Ariel Sewell, Senior Forester serving Washington County, Florida Forest Service

The Washington County property of Ralph Odell Ward was recently accepted into the American Tree Farm system and is also a Certified Stewardship Forest. He is recognized



Pictured from left to right: Jon Gould, Ralph Ward, and Ariel Sewell

here for exemplary stewardship of his forest land. Mr. Ward cares deeply for his property and is dedicated to its proper management by managing the timber resources, water and soil management and promoting wildlife habitat. The property has been in Mr. Ward's family since the early 1800s. Despite Mr. Ward's almost 90 years, he still enjoys getting out on his property to look over his trees or feed the fish in his pond.

Mr. Ward has a rich and fascinating history. He grew up during the depression when life wasn't always easy. Nevertheless, he looks back on his childhood with great fondness and wouldn't trade it for anything.

Mr. Ward has a unique military history in which he served in three major conflicts and in three different military branches. He joined the U.S. Coast Guard in 1942 and served in

WWII as a Seaman First Class Gunner's Mate. After WWII, he joined the US Army Air Corps which became the US Air Force in 1947. He also served in the Korean War and Vietnam War. and retired in 1967 as a Senior Master Sergeant.

Mr. Ward had a renewed interest in the Tree Farm program after being involved with it in the past. He is active in managing his forestland seeking assistance from the Florida Forest Service and his friend and neighbor, Jon Gould. Mr. Gould is a very involved landowner who is an active Tree Farmer and a member of the Florida Forestry Association Tree Farm committee. The Florida Forest Service is very happy and honored to work with individuals who show the long term dedication and enthusiasm that Mr. Ward demonstrates toward forest stewardship.

### **COYOTES NEEDED!**



The University of Florida is conducting a study of coyote dietary habits in Florida and needs YOU to donate your catch! We are especially interested in how coyotes are affecting white-tailed deer, turkeys, bobwhite quail, livestock, and pets!

**YOUR** help is needed to obtain legally acquired coyote carcasses, with or without pelts. We will also accept coyote stomachs and intestines if you cannot store the whole carcass. Carcasses or stomachs and intestines should be fro**zen** in a suitable bag or container, and include the name of contributor, animal weight/sex, date harvested/obtained, and location harvested/obtained.

Arrangements can be made to get carcasses from you at the University or combine your animals with others in your area for a pickup. We have obtained a **permit** from the Florida Fish and Wildlife Conservation Commission for this project, and will keep information provided by you for this project anonymous to the extent possible by law. We greatly appreciate your help with this valuable study! Contact Lauren N. Watine & Bill Giuliano, lnwatine@ufl.edu, (352) 846-0575.

## 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  $2^{nd}$  Quarter 2014 Timber Mart-South report were:

#### Florida Stumpage Prices

Pine pulpwood: \$43/cord (\$16/ton), ↑ from 1st Qtr 2014

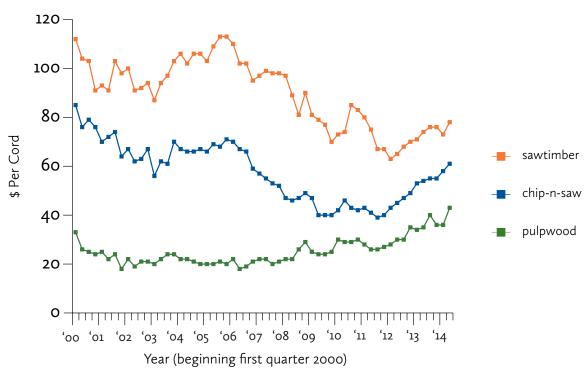
**Pine C-N-S:** \$61/cord (\$23/ton), ↑

Pine sawtimber: \$78/cord (\$29/ton), ↑

#### **Trend Report**

Average stumpage prices were up for almost all timber products in Florida this quarter, with pulpwood prices stronger than they have been for more than a decade. Higher prices were attributable, at least in part, to continued wet weather in most areas, which limits supply. Employment and manufacturing continued modest growth in second quarter as well. Domestic and international demand for hardwood lumber continues to boost prices for oak and mixed hardwood sawtimber.





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 <a href="http://www.tmart-south.com/">http://www.tmart-south.com/</a> 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/ 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.



Lee and Don Condon with Dave Poletti (center), Jefferson County



Gayle Bower (center) with Jim Robertson (L) and Barry Stafford (R), Jackson County



Dana Green of Hendricks Property with Dave Holley, Nassau County



Keith Wingate (R) with Dave Holley, Nassau County



Hal McCord (L) with Jim Robertson and Barry Stafford (R), Jackson County



Sid Allen (L) with Brian Cobble, Suwannee County



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Upcoming Stewardship, Small Farm and Other Events		
Date	Event, Location, Contact	
Aug 26-28	Florida Forestry Association Annual Meeting: "Communication is Key", Sawgrass Marriott, Ponte Vedre Beach, FL. SAF CFEs approved. For details see http://floridaforest.org/annual-meeting/	
Sept 4	Forest Stewardship/Heartland CISMA Workshop: Invasive Exotic Species and Management, 9 am to 3 pm ET, UF/IFAS Extension Okeechobee County Office, 458 Highway 98 North, Okeechobee, FL 34972. Pesticide applicator CEUs and SAF CFEs approved. \$15 fee if registered by August 25. \$20 fee after August 25. Please register on-line at http://fsp-workshop090414.eventbrite.com/	
Sept 18	Forest Stewardship Mill Tour: Green Circle Bio Energy, 9:30 am to 2 pm CT, Green Circle Bio Energy, 2500 Green Circle Pkwy, Cottondale, Florida 32431. Tour will be followed by lunch and energy wood presentation at the UF/IFAS Extension Jackson County Office. 2.5 Cat 1 SAF CFEs approved. \$10 fee, lunch included. Details and registration at: http://fsp-tour091814.eventbrite.com/	
Sept 24	<b>Keeping Your Land Productive through Conservation Easements Workshop</b> , 9:30 am to 3:30 pm ET. UF Austin Cary Forest Learning Center, Gainesville, FL. Sponsored by Conservation Trust of Florida, FL SAF Suwannee Chapter, UF/IFAS School of Forest Resources and Conservation. \$15 fee. <i>Contact Lyndall Brezina</i> , (352) 375-1473, Lyndall@columbiatimber.com	
Sept 29-30	Forest Stewardship/Southwest FL CISMA Workshop: Invasive Exotic Grass ID and Management, UF/IFAS Southwest FL Research and Education Center, 2685 SR 29 North Immokalee, FL 34142. More details to come. Contact Erin Myers, (239) 353-8442 ext. 232, Erin_Myers@fws.gov	
Oct 23	Forest Stewardship/North Central FL CISMA Workshop: Invasive Exotic Species and Management, 9 am to 3 pm ET, UF Austin Cary Forest Learning Center. Pesticide applicator CEUs and SAF CFEs pending. \$15 fee, lunch included. Please register on-line at http://fsp-workshop102314.eventbrite.com	
Oct 30	Forest Stewardship Tree/Plant ID Field Day, 9 am to 3 pm ET, Morningside Nature Center, 3540 East University Avenue, Gainesville, FL 32641. \$10 fee covers lunch and materials. Details and registration at https://fsp-workshop103014.eventbrite.com/	
Oct 31	<b>Forest Stewardship Tour at Cumberland Plantation and Riverview Farms</b> , Madison County, 9 am - 2 pm ET. Details to be posted on email updates. Contact Chris for more information, cdemers@ufl.edu, (352) 846-2375.	

#### 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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